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INVESTIGATING THE IMPACT OF POSITIVE LEADERSHIP AND IDENTIFICATION ON EMPLOYEE WELLBEING

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Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in the Division of Human and Social Sciences at the University of Kent, Canterbury March 2022, funded by the Vice Chancellor's Research Scholarship from the School of Psychology at the University of Kent.

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Abstract

Workplace stress, depression and anxiety has been increasing steadily in recent years and the COVID pandemic has accelerated this growth drastically (Health & Safety Executive, 2020). Consequently, the focus on employee wellbeing in organisations has been increased (CIPD, 2021). One key influencer of employee wellbeing is leadership and specifically, positive leadership (Cameron, 2012; 2013) which has been recently associated with employee wellbeing and mediated by identification variables (Marsh et al., in prep).

This thesis extends on these initial findings by widening the focus of employee wellbeing to include multiple indicators, explores other potential mediating variables and considers other factors which might heighten or dampen the impact of positive leadership on employee wellbeing. Across eight studies (N = 1863), there is clear empirical evidence for the impact of positive leadership on a wide variety of employee wellbeing indicators which incorporate both hedonic and eudemonic indicators and both positive and negative indicators. There is also clear support for the role of identification variables as significant mediators in the relationship between positive leadership and employee wellbeing. Results also showed the potential for perceived organisational support and LMX as mediating mechanisms. There is also evidence from this thesis that positive leadership does show unique effects when taking into account other leadership styles associated with wellbeing. Additionally, positive leaders received better evaluations of their leadership than other leaders and the beneficial impact of positive leaders was not limited by the characteristics of the leader.

Overall, this thesis adds to the literature on positive leadership by examining the why and how this style of leadership has beneficial impacts on employee wellbeing. The thesis concludes with a discussion of the theoretical and applied implications, limitations and future research avenues.

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Chapter 1 – Introduction and Literature Review

Chapter Overview

In this introductory chapter, I outline the theoretical background for my thesis and highlight the research gaps to be addressed. I begin this chapter by describing the impact of workplace stress and employee wellbeing on the workforce. I then provide a summary of how employee wellbeing has been conceptualised and operationalised in previous research and make a case for the importance of using different indicators in employee wellbeing research. I then summarise the Positive Psychology approach to the workplace and the theory of positive leadership. Next, I explore the influence of leadership on employees and specifically the impact of positive leadership on employee wellbeing. I posit a potential mediation process in the relationship between positive leadership and employee wellbeing which examines the role of identification, LMX, and perceived organisational support. Additionally, I examine potential boundary conditions of the beneficial impact of positive leadership including leader gender, age and group membership. After considering the influence of other leadership styles on employee wellbeing and the importance of determining the unique contribution of positive leadership for employee wellbeing, I move on to consider the potential of positive leadership styles in fostering employee wellbeing during macro-level change using a contemporary social event – the COVID19 pandemic. Finally, I present a detailed overview of each chapter in this thesis and how each will address the research aims I have identified.

Employee Wellbeing – The State of the UK workforce

Employee wellbeing is increasingly recognised as important. Every year the UK government issues the Labour Force survey which examines the employment conditions of the UK population and includes questions about employee stress. The results from this report have shown a steady increase in cases of work-related stress, depression, and anxiety. In 2019-2020, there were 828,000 cases of workplace stress, depression, or anxiety (Health & Safety Executive, 2020). This was a steep increase (37.5%) from the previous year which reported 602,000 cases (Health & Safety Executive 2019), which was to be expected considering the impact of the COVID-19 pandemic but even before this the cases were steadily increasing (Health & Safety Executive, 2020). The COVID-19 pandemic has had a clear psychological impact on people worldwide (World Health Organization, 2020) and has had a detrimental impact on the workplace. Indeed, research studies showed that the pandemic was associated with higher stress and lower wellbeing in the workplace (Galanti et al., 2021; Trougakos et al., 2020; Yu et al., 2021). This is not surprising considering the increased pressures placed on employees and organisations as a result of increased remote working (Office for National Statistics, 2020) and learning new technology to adapt work to enable employees to work from home, alongside the uncertainty of the pandemic and increased social isolation.

There are clear implications of workplace stress for both organisations and employees. Specifically, prolonged employee stress leads to poorer physical and psychological health (Cohen et al., 2007; Kalimo et al., 2000; Melamed et al., 2006; Wirtz & von Kanel, 2017) and has been associated with destructive employee behaviours such as drug and alcohol abuse (Frone, 2008), workplace accidents (Martin-Fernandez et al., 2009; Murphy et al., 1986) and burnout (Kula, 2016; Maslach & Jackson, 1981). For organisations, stress presents challenges such as decreased job performance (Gilboa et al., 2008) and

increased withdrawal and turnover (Griffeth et al., 2000). While workplace stress has negative consequences for the workplace and individual employees, wellbeing has many *positive* implications. For example, employee wellbeing is positively associated with increased job performance (Judge et al., 2001; Wright & Cropanzano, 2000), discretionary effort (Spector, 1997), and organisational citizenship behaviours (Podsakoff et al., 2000). The implications of both workplace stress and employee wellbeing highlights the need to find ways in which stress can be minimised and wellbeing can be enhanced in the workplace.

Conceptualisation of Employee Wellbeing

Wellbeing is a broad concept and it gained prominence with the increased popularity of Positive Psychology. Positive Psychology approach is focused on analysing both the positive and negative aspects of our lives. As Seligman and Csikszentmihalyi (2000, p.3) pointed out "Psychology is not just the study of pathology, weakness and damage; it is also the study of strength and virtue". Consequently, Positive Psychology then emerged from a dissatisfaction with the focus of applied psychology on simply healing what is broken, rather than a focus on developing an understanding of how individuals flourish and developing interventions to aid thriving environments..

Positive psychology researchers have proposed that wellbeing is best captured by a collection of indicators from multiple domains rather than by single indicators (e.g., Forgeard et al., 2011; Keyes, 2007; Ryff & Keyes, 1995). One key conceptualisation of wellbeing divides it into two elements: hedonic and eudemonic (Robertson & Flint-Taylor, 2008). The hedonic element refers to the emotional and affective element of wellbeing such as the experience of positive moods. The eudemonic element is the purposive element, that is, it encompasses having a sense of purpose and meaning. Another key conceptualisation is Seligman's (2011) PERMA model. This model proposes that wellbeing has five key components: positive emotions, engagement, relationships, meaning, and accomplishments.

Positive emotions are similar to Robertson and Flint Taylor's hedonic element of wellbeing, and are described as the hedonic feelings of happiness. *Engagement* is the psychological investment or involvement in tasks or even organisations. *Positive relationships* are about developing social connections, so people feel cared for and supported. The *meaning* component refers to believing that one's life is valuable and has a greater connection than oneself. Finally, *accomplishment* means striving to achieve goals, being motivated, and feeling accomplished in everyday tasks or activities. These are just two of the ways wellbeing has been conceptualised but they both clearly highlight the use of multiple indicators in wellbeing research to fully encapsulate this concept.

Overall, research has included many different aspects of wellbeing when investigating this concept such as work engagement, emotional exhaustion, life satisfaction, job satisfaction, positive and negative affect, general employee health, psychosomatic complaints, depression, anxiety, resilience and workplace stress (Gregersen et al., 2014; Hsieh et al., 2019; Kelloway et al., 2013; Milner et al., 2015; Ogbonnaya et al., 2018; Page & Vella-Brodrick, 2013; Rivers et al., 2018; van Dick et al., 2017b; Winkler et al., 2014). While there is a broad conceptualisation of employee wellbeing, the majority of these focus on hedonic elements of wellbeing and usually with a narrow focus on job satisfaction (Inceoglu et al., 2018). Inceoglu and colleagues (2018) reviewed research on leadership and employee wellbeing and concluded that there needed to be more research examining the influence of leadership on eudemonic, negative, and physical indicators of wellbeing. Furthermore, it is important to assess the influence of more than one wellbeing indicator because different forms of wellbeing can co-exist (e.g. Warr, 2013). For example, an employee could feel very engaged and draw a high sense of meaning from a challenging task in their work but also exhausted from working considerably more hours to achieve these challenging goals. Therefore, there is a need to have a more comprehensive analysis of wellbeing and its

different indicators. The research in this thesis addresses this gap by incorporating more than one indicator of wellbeing with both positive and negative indicators in every empirical chapter (*Chapters 2, 3, 4, 5* and *6*). In addition, *Chapter 5* of this thesis, examines 10 indicators of wellbeing and incorporates hedonic, eudemonic, and negative indicators of wellbeing.

> ***Research Aim 1:*** *To incorporate more than one aspect of employee wellbeing and expand beyond the sole use of hedonic (i.e. mainly job satisfaction).*

Positive Psychology Approach to the Workplace

The positive psychology approach to the workplace takes into account that the workplace is not inherently good or bad, but has the potential to be both (Cameron et al., 2003). As such, it is important to investigate how to help organisations achieve their full potential. Gittell and colleagues (2006) examined the differences between US airlines following the 9/11 crisis. They compared companies that were considered exceptional (i.e., those that achieve outcomes which exceed expected performance) with their competitors in terms of their precrisis resources, their response to the crisis and the recovery from the crisis. The results showed that the exceptional organisations behaved differently from their competitors. Specifically, exceptional organisations responding by investing in the human capital of the business rather than laying off its staff. While in the short-run this might have been more costly, this helped to strengthen relationships at work and provided coping resources for staff. As a result, staff responded more innovatively to the crisis and organisational performance returned more quickly to pre-crisis levels.

Other research has highlighted the implementation of positive practices in organisations and their influence on organisational effectiveness (Cameron et al., 2011). The positive practices which were examined in this study were: positive deviance, affirmative bias and virtuous practice. Positive deviance is the aim to go beyond a normal standard and

organisations value employees and their contribution. This means that the focus is not on narrowing a deficit gap but growing further towards exceptional performance. Virtuous practice refers to actions that positively impact others without expecting a return on those behaviours. For example, helping a colleague with a task regardless of whether they would return the favour. This helps to create a cooperative culture which is built on benevolence and forgiveness and allows people to be able to be themselves. Finally, affirmative bias means focusing on the positives such as strengths, capabilities, and possibilities rather than threats, problems, and weaknesses.

Cameron and colleagues (2011) provided evidence for the use of these positive practices in the workplace by conducting two studies. One study was conducted in businesses in the financial services industry and the other study collected data from nursing units in the health care industry. The organisations from both industries implemented positive practices and then employees completed measures on a variety of outcomes including employee turnover, financial performance, organisational climate, and expert ratings of organisational effectiveness and employee engagement. Specifically, the results demonstrated that implementing these positive practices in both a financial services and the health care industry led to improved financial performance, lower employee turnover, improvements in patient satisfaction (healthcare industry) and general improvements in organisational climate (i.e. employees' perceptions of how the organisation functions). The results from Study 2 also emphasised that the positive practices which promoted respect, integrity, compassion, forgiveness, inspiration, and meaningful work were the most predictive of these beneficial workplace outcomes.

Cameron's Theory of Positive Leadership

Leaders play a key role in implementing strategies which define organisational culture, and these are likely to include developing positive practices in the workplace. The

theory of positive leadership (Cameron, 2012; 2013) encompasses four key strategies: positive climate, positive relationships, positive communication, and positive meaning. Leaders implementing these strategies facilitate the development of the positive practices (i.e., positive deviance, affirmative bias and virtuous practices) and help to enhance workplace and employee flourishing. This means that it encourages the best of the organisation and of the individual - so it brings out the overall potential for good outcomes. Importantly, these four strategies of positive leadership are not separate, but they tend to overlap and influence each other. For example, enhancing positive communication in the workplace will help to develop positive relationships between members of the organisation.

Specifically, positive climate (Cameron, 2012; 2013) is about fostering a culture of compassion, promoting forgiveness and emphasising appreciation between employees and within the organisation. This means that there is a focus on noticing others in the workplace and helping those who are struggling. This help can be offered without expecting it in return so doing it because they care about the individual and the organisation and wanting to ensure that everyone has the opportunity to flourish. It is also about forgiving people for mistakes by providing ways to move forward and using language which does not place blame but shows care and reconciliation. Also demonstrating gratitude for the help received which can be as simple as using thank you notes.

Experimental research has demonstrated that workers who received a brief written message of gratitude motivated them to help other people (i.e., not just the person who thanked them but others at work) and increased general work productivity compared to a control condition where there was no gratitude expressed (Grant & Gino, 2010). This effect was mediated by perceptions of self-worth so those who received a gratitude note felt more valued and as a result put in higher effort in terms of both prosocial behaviours and productivity. Other research has demonstrated the importance of forgiveness in fostering

strong work relationships and improving employee wellbeing (e.g., Cao et al., 2021; Thompson & Korsgaard, 2019) but also service recover performance (i.e. employee actions taken to make up for a failure in service, Guchait et al., 2019). Guchait and colleagues examined the effects of a forgiveness climate on service recovery performance with a sample of dealers from a casino. The results showed that employees who worked in an organisation with a forgiving climate were more likely to provide better service recovery performance because this working climate encourages higher perceptions of psychological safety and was perceived as fair.

The positive meaning component of Positive Leadership (Cameron, 2012; 2013) refers to building a community within and outside the organisation, highlighting the impact of individuals' roles on the wider community, and linking organisational values with personal values. This means presenting employees with a clear meaning for their job such as viewing their jobs as a calling. Research has shown that viewing a job as a calling is a significant positive predictor of many positive individual and workplace outcomes such as wellbeing, organisational commitment, vocational clarity, and career planning (Duffy & Sedlacek, 2007; Duffy et al., 2011; Duffy et al., 2012; Hirschi & Hermann, 2013; Hirschi et al., 2018). Leaders can achieve this sense of meaning by understanding the extended impact of their work on the wellbeing of others or being associated with a personal virtue or even the impact their role could have on the future such as helping to reduce environmental impact. This also helps to identify their impact on other people in their community and helps to foster relationships both within and outside the organisation.

Similarly, the third strategy is fostering positive relationships (Cameron, 2012; 2013) which is about building networks between employees. Part of this strategy is about identifying energy networks within the organisation and highlighting positive and negative energizers. Positive energizers are individuals who are uplifting and boost people; they are

optimistic, enthusiastic, honourable, and selfless. They tend to establish and encourage vitality in the working environment. Whereas negative energizers are those who deplete energy within the environment because they tend to be critical, self-centred, and uncompromising. And being a positive energizer can be learnt and in some cases, it can be as simple as moving people around an organisation because some people are only negative energizers when around certain other people. Therefore, this strategy is about identifying ways to enhance the positive energy within the organisation by ensuring positive energizers are spread throughout the organisation and building networks appropriately to maximise their ability. The second aspect of this strategy is to reinforce individual and organisational strengths. This is about highlighting the strengths and capabilities of employees and using them to enhance organisational performance. Displaying individual strengths shows the value of the employee's work but it also helps others to learn from these positive demonstrations.

There was a growing interest in energizers in the workplace (e.g., Baker et al., 2003; Cross & Parker, 2004), and one review has examined the influence of de-energizers in particular (e.g., Parker et al., 2013). Specifically, the detrimental influence of de-energizers in organisations which at an individual level include decreased motivation or organisational isolation and at the team level can cause conflict, lower cohesion, less trust, and in general lower team performance. The link between de-energising relationships and performance has been examined empirically (Gerbasi et al., 2015). Gerbasi and colleagues (2015) conducted field research in two organisations and showed that de-energising relationships were associated with lower individual performance. These findings emphasise the impact of energizers in the workplace and as outlined in the positive relationships component of Cameron's theory of positive leadership (2012; 2013), positive leaders are integral in identifying these energizers within the workplace.

Finally, the fourth strategy of positive leadership is positive communication. This involves giving and receiving the best-self feedback which can be achieve by using more positive statements than negative statements, balancing enquiry and advocacy statements and balancing the focus of self and other statements. It does not ignore the need to address limitations, but it is focused on doing this in a supportive and positive manner. To achieve this when delivering negative messages, it is necessary to describe the situation rather than evaluate it, and rather than placing blame, identifying the objective consequences of the action and suggesting acceptable alternatives. This provides individuals with a clear understanding of what happened, why it is a problem, and how this can be improved in the future.

Providing feedback has been shown to be an important driver for improvements in performance and motivation (e.g., Murphy & Cleveland, 1991). Research has demonstrated the importance of the quality of feedback received and performance. For example, Drouvelis and Paiardini (2021) conducted an experiment which manipulated the quality of feedback so participants either received high quality feedback, low quality feedback, or no feedback. For the high-quality feedback condition, participants were told their ranking on the task relative to their group members. For the low-quality feedback condition, they were always told they were doing well in their group with no specific ranking. The results showed that participants in the high-quality feedback condition had significantly higher average performance than the low-quality or no feedback conditions. These findings highlight the positive impact of feedback on performance although, it is important to note that the feedback in this study was not from a leader but a computer generated message.

The key components of positive leadership (Cameron, 2012; 2013) were drawn from a positive psychology approach, and there is some evidence on its individual components suggested. However, there is a lack of empirical evidence testing the overall theory of

positive leadership more broadly. There is some initial evidence for the link between positive leadership and employee wellbeing based Cameron's theory of positive leadership (Marsh et al., in prep), but this thesis expands that and will provide further empirical evidence to test and expand the theory.

The Influence of Leaders on their Followers

Leaders have an influence on employee attitudes and behaviouts in the workplace in a variety of ways, for example, performance (e.g., Dvir et al., 2002; Walumbwa et al., 2011; Wang et al., 2011); employee motivation (e.g., Basford et al., 2012; Gupta, 2020; Ouakouak et al., 2020) innovative behaviour (e.g., de Jong & Den Hartog, 2007; Iqbal et al., 2020; Kang et al., 2015); employee readiness for change (e.g., Al-Hussami et al., 2018; Gelaidan et al., 2018); shaping employee moral cognition and misconduct (e.g., Moore et al., 2019); and employee mood (e.g., Bono et al., 2007; Sy et al., 2005).

A particular area of interest regarding the influence of leadership on employee behaviour is on employee turnover. Research has emphasised that leadership styles can increase or decrease employees' turnover intentions (Bycio et al., 1995; Demirtas & Akdogan, 2015; Khan et al., 2010; Martin & Epitropaki, 2001; Palanski et al., 2014; Sun & Wang, 2017; Tepper, 2000; Tse et al., 2013). For example, abusive supervision has been associated with increased turnover intentions (Khan et al., 2010; Palanski et al., 2014; Tepper, 2000) whereas transformational leadership (i.e., charismatic leaders who inspire followers to strive beyond what they thought was achievable) has been associated with decreased turnover intentions (Bycio et al., 1995; Martin & Epitropaki, 2001; Sun & Wang, 2017; Tse et al., 2013). Specifically, Sun and Wang (2017) demonstrated that the transformational leaders decrease turnover intentions by creating a collaborative culture.

Moreover, and for specific relevance to this thesis, leadership has been shown to have a clear impact on workplace stress and employee wellbeing (e.g., Arnold et al., 2007; Harms

et al., 2017; Liu et al., 2010; Mackey et al., 2017; Men, 2014; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020). For instance, a meta-analysis from Mackey and colleagues (2017) demonstrated that abusive supervision was associated with numerous organisational and personal outcomes. In terms of wellbeing outcomes, the results showed that abusive supervision was positively associated with depression, emotional exhaustion, and job tension and negatively associated with job satisfaction.

Other research has investigated participatory management in local government agencies and its relationship with job satisfaction (Kim, 2002), which can be considered as a form of wellbeing (Inceoglu et al., 2018). The results indicated that there was a positive relationship between employees' perceptions of participatory management and increased job satisfaction. Additionally, the results highlighted the importance of good supervisory communication and increased job satisfaction. Another research study examined the influence of leader humility on employee wellbeing in 13 organisations in China (Zhong et al., 2020). Participants completed a series of measures and the results indicated that leader humility was significantly positively related to job satisfaction and work engagement and negatively related to emotional exhaustion. These findings show clear links between leadership styles and behaviours and employee wellbeing. Similarly, research has shown the links between positive leadership and employee wellbeing (Kelloway et al., 2013; Marsh et al., in prep).

Positive Leadership and Employee Wellbeing

Kelloway and colleagues (2013) showed that positive leadership was associated with both context-specific mental health (i.e., affective organisational commitment and job satisfaction) and context-free mental health (i.e., positive affective wellbeing). The results also distinguished these effects of positive leadership from transformational leadership.

While these initial findings provide support for the link between positive leadership and employee wellbeing, Kelloway and colleagues' conceptualisation of positive leadership was focused more on instilling positive emotions.

My own previous research has examined this link and the conceptualisation of positive leadership based on Cameron's theory (2012; 2013). Two studies were conducted where participants were recruited using online crowdsourcing methods and asked to complete a series of measures testing their perceptions of their leader (i.e. positive leadership) and their employee wellbeing (i.e. job satisfaction, employee mental health and workplace stress). The results replicated Kelloway et al.'s (2013) initial findings, as positive leadership was significantly positively related with higher job satisfaction and employee mental health and negatively related with workplace stress. And further examined the underlying mechanisms that underlie the above associations.

Examining Mediating Processes

Alongside considering the impact of positive leadership and employee wellbeing, it is also important to investigate the mediating processes to provide a theoretical explanation of the underlying mechanisms (i.e., the why). Based on a review of research on leadership and employee wellbeing, Inceoglu and colleagues (2018) identified that less than 20% of the original research articles analysed included an exploration of the mediating processes. This highlights the clear need for more research to examine the underlying mechanisms through which leadership impacts employee wellbeing. In my previous research, the role of identification variables (i.e., identification with the leader and organisational identification) were examined as mediators in the relationship between positive leadership and employee wellbeing (Marsh et al., in prep).

Identification

Social Identity Theory (Tajfel & Turner, 1986) asserts that people derive part of the self-concept from group memberships, this is known as social identity. This is important because people are motivated to ensure they have a positive self-concept and they derive their self-esteem from both personal and social identity (Hogg & Abrams, 1998). As a result, individuals are motivated to ensure that they have a positive social identity which means that they tend to favour their own social groups (ingroups) over other groups (outgroups). Organisations are one social group which impact on social identity and on individuals' self-concept (Ashford & Mael, 1989; Haslam, 2004; Mael & Ashforth, 1992). Numerous positive workplace outcomes such as motivation (van Knippenberg, 2000), job satisfaction (van Knippenberg & van Schie, 2000), and turnover intentions (Randsley de Moura et al., 2009) have been associated with high organisational identification. Moreover, it has been positively related to employee wellbeing (Jetten et al., 2017; Steffens et al., 2017; van Dick et al., 2017a; van Dick et al., 2017b). For instance, higher organisational identification has been demonstrated to be negatively linked with health complaints, burnout, and positively linked with job satisfaction (Wegge et al., 2006).

Nevertheless, there are different foci of identification within the workplace (Edwards & Peccei, 2010; Epitropaki et al., 2017). Within the working environment, there are many different sources and targets of identification (Ashforth et al., 2008; Ashforth & Johnson, 2001; Lavelle et al., 2007). An important focus of identification in the workplace is identification with the leader (Ashforth et al., 2016; Kark & Shamir, 2002). This is a relational form of social identity where to an extent there is an overlap between the self and the leader's attributes (Ashforth et al., 2016; Kark & Shamir, 2002). Similar to general organisational identification, identification with the leader has been associated with lower stress (Slater et al., 2017) and higher job satisfaction (Hobman et al., 2011; Lian et al., 2011).

Moreover leaders can act as are “entrepreneurs of identity”, shaping the group and its role (Reicher et al., 2005; Reicher & Hopkins, 2001; Reicher & Hopkins, 2003) and as such leaders can play an essential role in determining organisational identity. Therefore, higher identification with the leader would likely result in higher organisational identification.

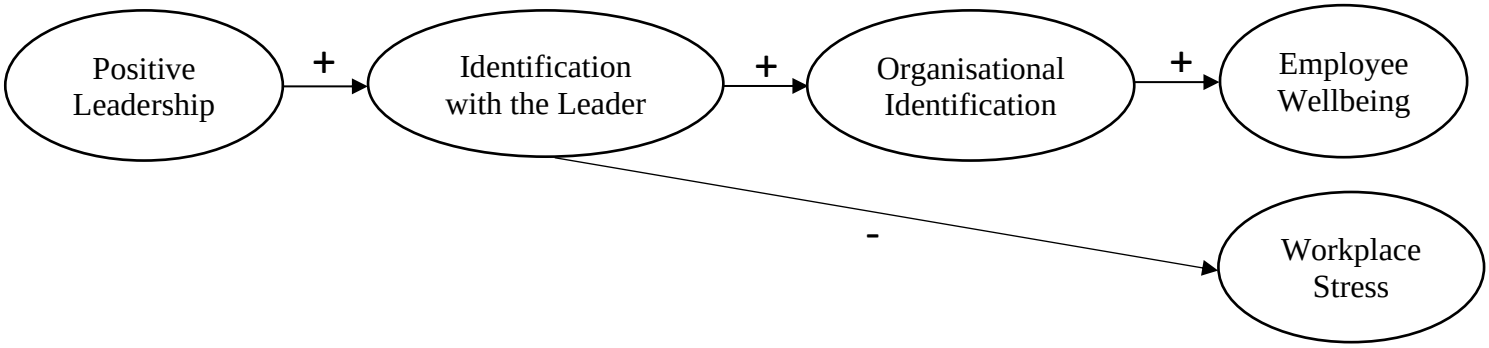
Research has also found that leadership styles can have a positive effect on employee identification with the leader and the organisation (Kark & Shamir, 2002; 2013). To the best of my knowledge, no studies to date have investigated the effects of positive leadership on identification in the workplace. However, there is indirect support to the proposition that positive leaders increase organisational identification and identification with the leader. For example, it has been demonstrated that individualised support from the leader (a key aspect of supportive leadership styles such as positive leadership) was associated with higher identification with the leader (Lord & Brown, 2003; Lord et al., 1999). Theoretically, there is a potential for identification variables to mediate the relationship between positive leadership and employee wellbeing. One aspect of positive leadership (Cameron, 2012; 2013) is positive meaning which is partly defined as linking organisational values with personal values. This focus of sharing values is apparent in identification with both the leader and the organisation. Similarly, positive leadership fosters strong relationships which would provide a clear sense of both relational identity and a sense of belonging to the organisation.

Preliminary findings in my own previous research (Marsh et al., in prep) provided support to the mediating effects of identification variables. In two correlational cross-sectional studies, we showed that positive leadership was positively associated with identification with the leader and organisational identification which in turn were associated positively with employee wellbeing (Marsh et al., in prep). Specifically, positive leadership was associated with higher job satisfaction and better employee mental health through increased identification with the leader and organisational identification individually and in

sequence. And the association between positive leadership and workplace stress was significantly mediated by identification with the leader only. Therefore, the following conceptual model was proposed based on these findings (see Figure 1):

Figure 1

Proposed Conceptual Model showing the links between Positive Leadership, Identification with the Leader and Organisation, Employee Wellbeing and Workplace Stress



The results from previous studies offered limited preliminary evidence based only on correlational findings from two studies. The role of identification variables in the relationship between positive leadership and indicators of employee wellbeing will be re-examined throughout this thesis using a variety of research designs. Additionally, other potential mediators will be examined to help explain the underlying mechanisms for this association and compare the effects of different mediators and explore the potential unique contribution of identification on different indicators of wellbeing. Previous studies have compared different mediating processes and have shown some key differences (e.g., Nielsen et al., 2008; Liu et al., 2010). For example, Nielsen and colleagues (2008) examined the influence of transformational leadership on both hedonic and eudemonic indicators of wellbeing through both motivational and identification-related mediators. The results showed that transformational leadership was associated with hedonic indicators through identification-related mediators but was associated with eudemonic indicators through motivational mediators. These findings indicate the importance of investigating different types of

mediators and examining whether they have differential effects for different indicators of wellbeing. Examining multiple mediators will be considered in *Chapter 4, 5,* and *6* of this thesis, and will consider the mediating influence of identification variables, Leader-Member exchange (LMX), and perceived organisational support.

LMX

Leader-Member Exchange (LMX) is a relational construct which focuses on the dyadic relationship between the leader and their employees (Graen & Uhl-Bien, 1995). It emphasises that the relationship between leaders and their individual followers are unique and based on social exchange. The relationships are either classed as low or high quality. Low quality relationships are described as simply fulfilling contractual obligations but high quality relationships involve trust, liking and mutual respect and leaders tend to provide support, opportunities for employees to develop and other benefits. It has been suggested that leaders achieve high quality relationships through the style of leadership (Erdogan & Bauer, 2015). Research has shown that LMX is associated with employee wellbeing (i.e., job satisfaction), stress and turnover (Dulebohn et al., 2012; Gerstner & Day, 1997; Graen et al., 1982; Sparr & Sonnentag, 2008). Moreover, previous research has demonstrated the mediating role LMX has between leadership and employee wellbeing (e.g., Anseel & Lievens, 2007; Liao et al., 2016; Sparr & Sonnetag, 2008). For example, Sparr and Sonnentag (2008) showed that LMX mediated the relationship between fairness perceptions of supervisor feedback and indicators of wellbeing (specifically job depression, job satisfaction, and turnover intentions).

The association between positive leadership and LMX has not been tested but both have shown a clear relationship with employee wellbeing. Theoretically, LMX could mediate the relationship between positive leadership and employee wellbeing for two reasons. Firstly, previous research findings have shown that LMX mediated the relationship between fair

supervisor feedback and employee wellbeing (Anseel & Lievens, 2007; Sparr & Sonnetag, 2008). One of the key aspects of positive leadership (Cameron, 2012; 2013) is positive communication. This involves ensuring the best self-feedback and delivering negative feedback in a supportive and positive manner and this is similar to the fair supervisor feedback seen in previous research. Secondly, another key aspect of positive leadership is positive relationships. LMX has been characterised as a relational mediator (Inceoglu et al., 2018) and by definition LMX is based on developing dyadic relationship between leaders and their followers. Therefore, it is proposed that LMX is another potential mediator in the relationship between positive leadership and employee wellbeing and this will be tested in *Chapters 5* and *6*.

Perceived Organisational Support

Another potential mediator considered in this thesis is perceived organisational support (POS). POS is defined as the extent to which employees believe that the organisation they work for appreciates their input and is concerned about their wellbeing (Eisenberger et al., 1986). It has been shown to have clear links with employee stress and wellbeing (e.g., Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014). Some research suggests that POS acts as a mediator between leadership and organisational attitudes and behaviours (e.g., DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019). For instance, research by DeConinck and colleagues (2018) demonstrated that the association between servant leadership and performance and turnover intentions was mediated by perceived organisational support.

Moreover, it has been shown that leadership styles which show a degree of support leads to a perception of organisational support because leaders act as representatives of the organisation (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Although the

relationship between positive leadership and perceived organisational support has not been examined, theoretically, it is proposed that these variables are linked. Specifically, a key aspect of positive leadership (Cameron, 2012; 2013) is positive climate which fosters a culture of compassion, forgiveness and emphasising appreciation for employees. By creating this culture there is the potential for employees to perceive that leaders care about their wellbeing also fostering appreciation for employees demonstrates that the value employees work. Similarly, a key part of the positive relationships aspect of positive leadership is highlighting strengths and capabilities of employees which can also demonstrate that the leader values the employees input.

However, the research on the role of perceived organisational support is mixed. Other research has identified POS as a potential moderator in the link between leadership and employee attitudes and behaviours (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019). For example, Wang and Xu (2019) examined the link between leadership and employee wellbeing and investigated the moderating effect of POS. Specifically, the results of a moderated mediation demonstrated that the indirect relationship between ethical leadership and job satisfaction through work meaningfulness was moderated by perceived organisational support. This suggests that POS could act as an independent factor which moderates the relationship between positive leadership and employee wellbeing. As a result, POS could be a boundary condition instead of an explanatory variable so that when POS is high the relationship between positive leadership and employee wellbeing is lessened. The role of perceived organisational support will be examined in *Chapter 4* of this thesis and will be tested as both a potential mediator and moderator in the relationship between positive leadership and employee wellbeing.

Research Aim 2: *To investigate the influence of different mediating processes in the link between positive leadership and indicators of employee wellbeing*

Examining Boundary Conditions

As previously highlighted, leaders have an important impact on employee experiences at work (Ouakouak et al., 2020; Al-Hussami et al., 2018; Bono et al., 2007; Dvir et al., 2002; Iqbal et al., 2020; Kang et al., 2015; Moore et al., 2019; Sy et al., 2005; Wang et al., 2011), but leaders' behaviours also have an influence on employees' perceptions of their leaders and responses to them (e.g., Chou, 2018; Jaussi & Dionne, 2004; Lewis, 2000). For instance, Chou (2018) also investigated the influence of negativity from leaders and followers' perceptions of their effectiveness and willingness to support them. In a series of studies, Chou (2018) demonstrated that naysaying and negativity from leaders leads to perceptions that the leader is more powerful and this was explained by a higher perceived agency of these leaders and participants were more willing to vote for them in a presidential election scenario. This highlights the importance of leadership behaviours and emotions on their followers and more specifically, the way in which they are perceived by their followers.

Additionally, research has examined the influence of different leadership styles on followers' evaluations of leader effectiveness (e.g., Abrell et al., 2011; Copeland, 2016; Walumbwa et al., 2004). Specifically, Copeland (2016) investigated perceptions of leader effectiveness based on leadership style using a sample of employed participants from a variety of different industries. They asked participants to complete measures assessing transformational, ethical and authentic leadership as well as leader effectiveness. The correlational findings showed that all three leadership styles were significantly positively associated with leader effectiveness, but the regression analysis revealed that ethical leadership was the strongest predictor of leader effectiveness followed by transformational and then authentic leadership. These findings demonstrated the influence leadership behaviours and leadership styles have on employees' evaluations of their leaders. The results also showed that perceptions of leaders influence followers' behaviours in terms of whether

they will exert extra effort and willingness to support them. Leader evaluations may act as a boundary condition whereby positive leaders may not get the support they need from followers as they are evaluated as less effective leaders. Consequently, it is important to ascertain whether positive leaders are seen as effective by their followers and whether their followers are willing to work and support them.

Although, leadership style has been shown to have an influence on evaluations of leaders, there is also evidence which suggests that the way people evaluate leaders may also be subject to bias (e.g. Blau & DeVaro, 2007; Eagly & Karau, 1991; Giessner & van Knippenberg, 2008; Hains et al., 1997; Heilman, 2001; Heilman & Eagly, 2008; Hirschfeld & Thomas, 2011; Hogg et al., 2006; Koenig et al., 2011; Moss-Racusin et al., 2012; Steeden, 2021; Sun et al., 2015). Specifically, this thesis will be focused on examining the influence of leader gender, leader age and leader group membership as potential boundary conditions of positive leadership.

Leader Gender

One important characteristic which has been examined frequently in the leadership literature is gender of the leader. Research has indicated that gender does have an influence on promotional opportunities and leadership selection and males are more likely to be chosen for promotions and leadership positions (e.g., Blau & DeVaro, 2007; Eagly & Karau, 1991; Heilman, 2001; Heilman & Eagly, 2008; Koenig et al., 2011; Moss-Racusin et al., 2012). This reflects the perceived fit from Leadership Categorisation Theory which posits that some leaders may benefit from matching the observers' schema of leadership and others may be disadvantaged because they do not match this schema (Calder, 1977; Eden & Leviatan, 1975; Rush et al., 1977) as stereotypes of women tend to be in opposition with stereotypes related to the workplace (e.g., Heilman, 1983; Lyness & Heilman, 2006) and this conflict is exacerbated with lower levels of managerial experience (Schein, 1975). Role Congruity

Theory (Eagly & Karau, 2002) proposes that perceived suitability for leadership roles is influenced by the gender of the leader and the stereotypes associated with the different genders. Agentic characteristics are associated more with men and are seen as vital for leadership roles and therefore, these leadership characteristics are more congruous with the male gender stereotype than the female gender stereotype. Research has demonstrated that individuals who do not conform to gender stereotypes or deviate from stereotypical roles can experience backlash (e.g., Berdahl & Moon, 2013; Cialdini & Trost, 1998; Cuddy et al., 2004; Heilman & Wallen, 2010; Rudman & Glick, 2001; Williams & Tiedens, 2016).

However, is the pro-male bias apparent for all types of leaders? Some research has indicated that there are gender differences in leadership behaviours and leadership styles (Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019). For instance, a meta-analysis from Eagly and Johnson (1990) has shown that females are more inclined to adopt a democratic, participative style of leadership whereas males were more inclined to take on a more autocratic style. This is supported by other research where participants identified leaders who displayed communal qualities and more interpersonally oriented leadership style as female and leaders who displayed agentic qualities and more task-oriented leadership style as male (Embry et al., 2008). Moreover, research has demonstrated that female leaders are better at fostering growth in others (Cavallo & Brienza, 2002) and exceed at establishing relationships and collaborations and motivating others (Zenger & Folkman, 2019). This suggests that while leadership in general may be more aligned with the male gender stereotype (Eagly & Karau, 2002), certain leadership behaviours and styles may be more appropriate for female and male leaders.

Positive leadership (Cameron, 2012; 2013) is a more relational style of leadership which focuses on fostering interpersonal relationships and community within the workplace, developing potential in employees and promoting a culture of forgiveness, consideration of

others and gratitude. This seems more congruent with the typically described female displays of leadership presented in previous research (Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019) so therefore, female positive leaders may receive more favourable evaluations from followers than male positive leaders and negative leaders because they are not deviating from their stereotypically female characteristics and so they will not be subject to the backlash identified in previous research (e.g., Berdahl & Moon, 2013; Cialdini & Trost, 1998; Cuddy et al., 2004; Heilman & Wallen, 2010; Rudman & Glick, 2001; Williams & Tiedens, 2016).

Leader Age

Gender may not be the only bias in leadership evaluations. Research has identified age biases in hiring and leadership evaluations. (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015). Specifically, research demonstrates that older workers are less likely to be selected for a job than younger workers (Abrams et al., 2016). Similarly to the research on a gender bias in leadership potential, there is also evidence for a pro-youth bias in leadership potential (Hirschfeld & Thomas, 2011; Sun et al., 2015) and research has shown that these pro-youth biases in hiring and leadership potential are driven by stereotypes associated with different age groups (Abrams et al., 2016; Steeden, 2021). The Stereotype Content Model (Fiske et al., 2002) indicates that younger people are associated with high competence but low warmth whereas older people are associated with high warmth but low competence. Specifically, Abrams and colleagues (2016) research highlighted that the lower chance of older workers being selected for a job was a result of the perception of older workers being lower in competence.

Similar to research examining gender differences in leadership styles (Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019), there is also research that suggests the leadership style adopted is determined by the age of the

leader (e.g., Korac-Kakabadse et al., 1998; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988). Specifically, Oshagbemi (2004) showed that older leaders favoured a more participatory style of leadership whereby they consult their employees and gain others opinions more than younger leaders. Oshagbemi proposed that this is due to older leaders allocating more time to fostering growth in others and instead younger leaders are focused on their own growth and development. As previously mentioned, positive leadership (Cameron, 2012; 2013) is a more relational style of leadership which focuses on fostering interpersonal relationships and community within the workplace, developing potential in employees and promoting a culture of forgiveness, consideration of others and gratitude. This suggests that stereotypes of older leaders (Fiske et al., 2002) and the positive leadership style of leadership are more congruent so older, positive leaders may be evaluated more favourably for being consistent with their stereotypical characteristics and behaviours and not facing backlash for deviating from their stereotypical role.

Group Membership

Another characteristic focused on in this thesis is the concept of group membership. As previously explored in the mediating processes section of this chapter, Social Identity Theory (Tajfel & Turner, 1986) proposes that individuals are motivated to maintain a positive social identity (i.e. part of our self-concept is derived from our group memberships) as it boosts our own self-esteem. One way this is achieved is by favouring the ingroup and denigrating the outgroup and research has supported this ingroup bias (e.g., Abbink & Harris, 2019; Buttelmann & Bohm, 2014; Platow et al., 1990; Tajfel, 1970; Wann & Grieve, 2005). Also, through the process of social categorisation (Turner, 1985; Turner et al., 1987), we depersonalise individuals. This means instead of focusing on individualised information about the person to judge how they should act or the views they should hold, it is more about their representations (i.e. prototypes) of the ingroup or outgroup (Abrams & Hogg, 2004;

Hogg, 2003). In terms of leadership, we then create prototypes of how leaders are expected to behave and endorse the group goals and consequently people who match this expectation are more likely to be endorsed and lead effectively (Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006). Therefore, we would support and evaluate an ingroup leader more positively than an outgroup leader.

One study from Hogg et al. (2006) suggested that differences in evaluations of leadership effectiveness is influenced more by stereotype based impressions of the leader being prototypical than the gender of the leader and role congruity. In Hogg et al's (2006) experimental study, male and female participants believed they were working in interactive groups and were told they would be working on a group decision making task. They were given a mission statement for the group which expressed the norms of the group. These group norms reflected either stereotypically masculine or feminine qualities. Participants were then assigned a fictitious leader who was randomly male or female. The results showed that when leaders identified strongly with their group, they based their evaluations and endorsement of the leader on how well they match the group prototype or group norms irrespective of leader gender. Consequently, the key determinant of leader effectiveness in this study is how well the leader matches the group norms and prototype of what is expected from the leader. Moreover, there is evidence to suggest that perceptions of leadership style and employee behaviour is influence by an interaction between leadership style and group prototypicality (e.g., Geng, 2021; Gerpott et al., 2019; Li et al., 2022; van Knippenberg & van Knippenberg, 2005). Combined the evidence presented here would suggest that positive leaders would benefit from better leadership evaluations when they are ingroup leaders than outgroup leaders because ingroup leaders will match the leader prototype more than outgroup leaders. The influence of leader gender, leader age and leader group membership on evaluations of leaders will be explored in more detail in *Chapter 3* of this thesis.

Research Aim 3: *To examine potential boundary conditions in the influence of leader characteristics (i.e. leader gender, age and group membership) on determining the perceived fit of positive leaders as reflected in evaluations of these leaders.*

Comparing Positive Leadership to Other Leadership Styles

As previously highlighted, research has demonstrated that leaders have a profound impact on employee wellbeing (e.g., Arnold et al., 2007; Liu et al., 2010; Mackey et al., 2017; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020). Specifically, research has demonstrated the link between positive leadership and employee wellbeing (Kelloway et al., 2013; Marsh et al., in prep). However, other scholars have put forward other styles of leadership which research show to be positively associated with employee wellbeing (e.g., Arnold et al., 2007; Chughtai et al., 2015; Jetten et al., 2017).

One of these leadership styles which has also been positively associated with employee wellbeing is transformational leadership (e.g., Arnold et al., 2007; Ahmed et al., 2019; Liu et al., 2010; McMurray et al., 2010; Munir et al., 2012; Nielsen et al., 2008). Transformational leaders are those who exceed simple transactional relationships and inspire others to strive beyond what they thought was achievable (Bass, 1998; Bass & Riggio, 2006). A central conceptualisation of transformational leadership is based on four dimensions: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration (Avolio, 1999; Bass, 1998). Idealised influence is all about leaders doing the "right thing" to foster trust and respect from their followers. Inspirational motivation is setting high expectations which encourage followers to strive beyond what they think is possible. Intellectual stimulation is where leaders urge followers to be curious, find answers and challenge the current way of doing things. Finally, individualised consideration is all

about leaders being understanding towards their followers, spending time to help develop their abilities and appreciating their accomplishments.

Ethical leadership is another style of leadership which has been associated with improved employee wellbeing (e.g., Chughtai, et al., 2015; Kalshoven & Boon, 2012; Rivers et al., 2018; Sarwar et al., 2020). Ethical leadership has two components (Brown et al., 2005). The first involves being a moral individual. This means that through their own actions and in their interpersonal relationships they display moral attributes including being upright, fair and principled (Brown & Trevino, 2006). The second component is focused on the leaders ensuring their followers also meet this standard and act ethically and morally. This involves leaders modelling ethical behaviour, communicating ethical principles and holding their followers accountable for their ethical behaviour.

Finally, identity leadership has also been shown to have links with employee wellbeing (e.g., Fransen et al., 2020; Krug et al., 2021; Steffens et al., 2018). Identity leadership encompasses the influence leaders have through prototypicality, identity entrepreneurship, identity advancement and identity impresarioship. Leader prototypicality means they embody what it is meant to be a member of that group and makes them distinct from outgroups (Rosch, 1978; Turner, 1985; Turner 1991; van Knippenberg & Hogg, 2003). Identity entrepreneurship refers to creating a sense of cohesion within the group and members understanding of group norms and values (Reicher & Hopkins, 1996; Reicher & Hopkins, 2001; Reicher et al., 2005). Identity advancement involves promoting the group (Haslam & Platow, 2001), and identity impresarioship is how leaders actually embed group identity through opportunities and the environment (Haslam et al., 2011).

Some researchers have highlighted that there is a construct proliferation problem in leadership research (Bormann & Rowold, 2018). They advocate that there needs to be more consideration of the discriminant validity of new leadership styles to avoid construct

redundancy. Theoretically speaking comparing positive leadership to other leadership styles shows some potential for overlap. For example, one of the key concepts of transformational leadership is developing full potential of their followers which is similar to the positive relationships strategy of positive leadership which focuses on developing individual strengths and supporting their development. However, theoretically, there are differences between these two theories as the focus of transformational leadership seems to focus more on the relationships between leader and follower whereas the positive leadership approach takes into account the role of leadership in the shape of the whole organisation. For example, the positive climate strategy focuses on leaders influence on fostering compassion, forgiveness and gratitude within the whole organisation not just between leader and follower and the positive meaning strategy is about leaders building a whole community and considering outside forces.

While theoretically, there seems to be differences between the leadership theories, there is still a need to compare these leadership styles empirically. Given that research has demonstrated the potential for each of these four leadership styles in promoting employee wellbeing (e.g., Arnold et al., 2007; Chughtai et al., 2015; Kelloway et al., 2013; Jetten et al., 2017), there is a need to investigate the predictive value of these leadership styles for different aspects of employee wellbeing and whether they are associated with different indicators of wellbeing. Some research has previously examined this. For instance, Kelloway and colleagues (2013) compared positive leadership with transformational leadership and showed that the effects of positive leadership on employee wellbeing held even when taking into account transformational leadership. This suggests that there is something unique about positive leadership which is influential in enhancing employee wellbeing. However, this study focused on comparing only two different leadership styles.

Research Aim 4*: To expand on previous research and determine the unique contribution of positive leadership in fostering employee wellbeing.*

Other research by Gregersen and colleagues (2014) has compared more than two different leadership constructs. They compared leader member exchange, transformational and transactional leadership and consideration and initiating structure leadership behaviours on different aspects of employee wellbeing. The results indicated that leader member exchange best predicted most of the indicators of wellbeing. Apart from this example, most of the research on leadership constructs has not considered comparing several different constructs in one study. There is a need to examine the effects of positive leadership on employee wellbeing while taking into account several other leadership styles. Therefore, Chapter 5 will be examining the relationship between positive leadership and employee wellbeing while controlling for the influence of transformational leadership, ethical leadership and identity leadership.

Leadership during COVID and Employee Wellbeing

Organisations now operate in a VUCA environment (Bennett & Lemoine, 2014). This means they operate in volatile, uncertain, complex and ambiguous conditions so they need to adapt to ongoing change and deal with internal and external pressures. A recent societal external business pressure is the COVID-19 pandemic. As described at the beginning of this chapter, the COVID pandemic has had a detrimental psychological impact on workers (e.g., Health & Safety Executive, 2020) but has also generally led to more stress, depression and loneliness (World Health Organization, 2020). COVID has had devastating social and economic impacts with the healthcare system desperately struggling to deal with the number of cases of COVID in some countries, lockdowns restricting social interaction and there has also been mass unemployment putting further pressure on social security systems (Blustein et al., 2020). Moreover, COVID has had a profound impact on the world of work, with a sharp

increase in the number of employees working from home (Office for National Statistics, 2020), periods of job uncertainty as a result of furlough schemes and companies not enduring the crisis. The influence on the workplace is not limited to the period of time during the lockdowns but has extended beyond this to incorporate adaptations in ways of working in the future. For example, since the pandemic, there has been debates over the importance of the office environment or whether employees should continue to work from home (The Economist, 2020). Another organisational adaptation is the increased consideration of employee wellbeing than in the past (CIPD, 2021a).

The number of cases of workplace stress, depression and anxiety in the UK has been steadily increasing in the last few years (Health & Safety Executive, 2018; 2019), but as highlighted earlier, there has been a sharp increase in the last year (Health & Safety Executive, 2020). Furthermore, COVID generally has created a great deal of uncertainty and research shows that uncertainty is associated with increased stress (Peters et al., 2017). This increase in anxiety is only one way in which COVID has influenced employee wellbeing, but the pandemic has also removed the certain workplace factors which can be used to deal with poor employee wellbeing. For example, with the increase of people working from home (Office for National Statistics, 2020), employees are missing key social aspects of work. This can be as simple as spending time with colleagues in shared office spaces or joining colleagues for lunch or a chat and with the reduction in social contact comes the removal of the ability for colleagues to notice when each other are struggling. The workplace does not only meet employees materials needs but also satisfies social needs through a sense of affiliation and belonging with people outside your usual social groups (Klein & D'Aunno, 1986). Consequently, there has been an increased focus on ways to improve employee wellbeing to help combat the adverse effects of COVID on workers (Agarwal, 2021; Blake et

al., 2020; Malinen et al., 2020). One area that has been addressed by researchers is the role of leadership.

During the pandemic, there were numerous reports and commentaries from both researchers and practitioners which proposed the importance of leadership in helping to deal with the negative impact of COVID on wellbeing (Ahern & Loh, 2020; CIPD, 2021b; Haque, 2021). For instance, Haque (2021) proposed a model emphasising that responsible leadership (i.e. defined as a value-based and principle-driven leadership approach which connects leaders and followers through a shared sense of purpose and meaning; Maak & Pless, 2009) should help to enhance employee wellbeing and organisational sustainability during the pandemic. Additionally, findings from the CIPD's (2021b) report on wellbeing at work indicated management or leadership is still the second most prominent cause of stress at work. This stresses the role leadership plays in not only helping with the problem of employee wellbeing but the adverse impact of the pandemic as well.

The role of leadership could also look different due to the drastic changes to the workplace as a result of COVID. For example, without employees being physically in the office environment, it can make it harder for leaders to help and motivate employees (Dulebohn & Hoch, 2017), so leaders need to adapt their behaviours. My previous research examining the association between positive leadership and employee wellbeing (Marsh et al., in prep) utilised the positive leadership assessment scale (Cameron, 2012) and this measures specific behaviours that are indicative of positive leadership. But, as the workplace changed dramatically because of the pandemic, the behaviours listed in this scale may not capture the response from positive leaders during the pandemic. Therefore, it is important to investigate (1) how leaders have responded to the COVID-19 pandemic (2) the behaviours and characteristics indicative of positive leadership during the pandemic and (3) how their responses related to employee wellbeing and attitudes towards their leader and organisations.

Also, the pandemic may lead to differences in the results on the link between leadership and employee wellbeing as there may be a preference for other types of leaders during this time of uncertainty.

There is some research that suggests authoritative or even narcissistic leaders are preferred during times of uncertainty (Hogg & Adelman, 2013; Nevicka et al., 2013; Rast, 2015; Rast et al., 2013; Schoel et al., 2011). Specifically, Schoel and colleagues (2011), conducted a series of studies where they primed uncertainty in participants and then measured participants perceptions of success of the leader and their valence towards them using both implicit and explicit measures. The results demonstrated that when primed with uncertainty, participants showed a clear preference for the autocratic leader in terms of their ratings of valence and success. It has been argued that the preference for these types of leaders is because they are good at reducing uncertainty (De Hoogh et al., 2015; Rast et al., 2013; Schoel et al., 2011).

While COVID is a time of uncertainty it also a time of uncertainty with a strong focus on employee health and wellbeing (Galanti et al., 2021; Health & Safety Executive, 2020; Trougakos et al., 2020; World Health Organisation, 2020; Yu et al., 2021) and so it is unclear whether employees would still value an autocratic leader at this time. Or would they respond better to a leader who values their wellbeing and fosters relationships within and outside the organisation? Therefore, *Chapter 6* of this thesis will employ and mixed-methods design and explore leadership behaviours during COVID using qualitative data and then testing the impact of these behaviours on employee wellbeing using quantitative data.

Research Aim 5: *To examine leadership responses during COVID and their influence on employee wellbeing*

Thesis Outline

In this chapter, I explored the impact of stress and employee wellbeing on the workplace and employee behaviour and considered different conceptualisations of employee wellbeing. I examined the influence leaders have on their followers and more specifically employee wellbeing. I have also outlined the positive psychology approach to the workplace and Cameron's theory of positive leadership (2012; 2013) and provided an overview of previous research findings on the links between positive leadership and employee wellbeing. This chapter explored research gaps in the current research and outlined where these will be addressed in this thesis.

Chapter 2 of this thesis employs a longitudinal design to investigate the direct and indirect effects of positive leadership on employee wellbeing. Specifically, it will examine whether the positive associations of positive leadership on identification with the leader and organisational identification on the one hand, and whether the effects of the identification variables on the other hand hold over time. Employing a longitudinal design will help to inform the direction of the effects. Additionally, Chapter 2 examines the first research gap identified in this chapter, by measuring multiple indicators of wellbeing, namely job satisfaction, employee mental health and workplace stress. This ensures that both positive and negative indicators of wellbeing are considered in one study.

Chapter 3 examines the boundary conditions of positive leadership by investigating the impact of age, gender and group membership of the leader. Across three experimental studies, this chapter tests the third research gap addressed in this introductory chapter. In particular, *Study 2* investigates the impact of leader age and leadership style on evaluations of leaders and perceptions of wellbeing. *Study 3* assesses the impact of leader age, gender and leadership style on evaluations of leaders and perceptions of wellbeing. *Study 4* examines the impact of the group membership of the leader and leadership style on evaluations of

leadership style and perceptions of wellbeing. This chapter also assesses the mediating role of identification again but using an experimental design.

Chapter 4 investigates the role of perceived organisational support. It aims to clarify whether perceived organisational support acts as a mediator or a moderator in the relationship between positive leadership and employee wellbeing. *Study 5* examines these relationships using a correlational design and *Study 6* aims to replicate the findings with an experimental design. The mediation analysis in both studies, tests the second research gap addressed in this chapter by exploring the potential for perceived organisational support as a mediator.

Chapter 5 addresses research gap 4 with one study (*Study 7*) by comparing positive leadership to other well-known leadership styles. Specifically, it tests the unique effects of positive leadership on 10 indicators of wellbeing and turnover intentions while controlling for transformational, ethical and identity leadership. By including 10 indicators of wellbeing, the chapter addresses research gap 1 and extends on previous chapters as it considers both hedonic and eudemonic indicators as well as positive and negative indicators of employee wellbeing. Moreover, the chapter investigates research gap 2 by exploring the mediating role of LMX in the relationship between positive leadership and indicators of employee wellbeing. This mediator will be tested alongside identification variables to assess the different mediating effects of these variables.

Chapter 6 explores the impact of COVID on leadership behaviours and employee wellbeing to address research gap 5. *Study 8* employs a mixed methods design with qualitative analysis used to draw themes based on the description of leaders responses to the COVID pandemic. The quantitative analysis is used to test whether the different responses from leaders impacted employee wellbeing. Additionally, a mediation analysis was conducted to compare the role of identification variables, LMX and perceived organisational support in a single study readdressing research gap 2.

Chapter 7 provides a summary of key findings, limitations, future research directions and theoretical and applied implications.

Chapter 2 – Longitudinal Analysis of the Positive Leadership and Employee Wellbeing Model

Chapter Overview

Chapter 1 outlined the conceptual model (p. 28) which identifies the mediating role of identification variables in the relationship between positive leadership and employee wellbeing. Previous studies (Marsh et al., in prep) demonstrated the relationship between positive leadership and employee mental health and job satisfaction was mediated by both identification with the leader and organisational identification in sequence. And the relationship between positive leadership and workplace stress was mediated by identification with the leader only.

Study 1 employs a longitudinal design to test these associations over time. The same variables from the previous research were measured at three time points, four months apart. The results from two time-separated models replicated the findings for the relationship between positive leadership and job satisfaction through identification with the leader and organisational identification in sequence and the relationship between positive leadership and workplace stress through identification with the leader only. The mediation results for the relationship between positive leadership and mental health were only significant for identification with the leader in Model 1 which only partially replicates previous findings.

Leadership and Employee Wellbeing

Leadership has been shown to be a key influencer in employee wellbeing (e.g., Arnold et al., 2007; Liu et al., 2010; Naeem & Khurram, 2020; Zhong et al., 2020). For example, research has highlighted that toxic leadership has a negative influence on employee's psychological wellbeing and engagement which in turn leads to higher turnover intentions (Naeem & Khurram, 2020). Conversely, employee wellbeing is enhanced by good communication and direction from supervisors (Barling & Frone, 2017; Kim, 2002; Lobban et al., 1998; Madlock, 2008; Men, 2014) which demonstrates the importance of leadership behaviours and overall leadership style in diminishing or enhancing employee wellbeing.

Positive Leadership and Employee Wellbeing

By definition, positive leaders (Cameron, 2012; 2013) aim to exceed individual and organisational potential and value employee contributions (i.e. positive deviance), promote actions which have a positive impact on others without expecting a return (i.e. virtuous actions) and focus on positives or strengths rather than threats or weaknesses (i.e. affirmative bias). As a result, it is suggested that positive leaders promote flourishing at work, elevate workplace energy, and attain above average achievements (Cameron, 2012; 2013). Therefore, positive leadership has been shown to be associated with enhanced employee wellbeing (Kelloway et al., 2013; Marsh et al., in prep).

Specifically, Kelloway and colleagues (2013) provided empirical evidence for this beneficial impact of positive leadership and employee wellbeing. In their research, they conducted two correlational studies which found that positive leadership was significantly associated with both context-specific (i.e., affective commitment and job satisfaction) and context-free mental health (i.e., positive affective wellbeing). Moreover, the results showed that this link between positive leadership and indicators of employee mental health remained even when taking into account the influence of transformational leaders. However, their

conceptualisation of positive leadership was oversimplified. Their conceptualisation was focused more on leaders instilling positive emotions through displaying gratitude, compliments and cheer. While this reflects part of Cameron's (2012; 2013) conceptualisation of positive leadership, it does not fully encapsulate the theory and therefore its effects on employee wellbeing.

The Mediating Role of Identification

Consequently, I extended on these initial findings in my own research which follows Cameron's (2012; 2013) conceptualisation of positive leadership and investigated the underlying mechanisms for this link (Marsh et al, in prep) and examined identification variables (i.e. identification with the leader and organisational identification) as key mediators. Previous research has emphasised that leadership styles can influence identification with the leader and organisational identification (Kark & Shamir, 2002; 2013). And due to the emphasis in on social interaction and social connections between the leader and employees and even between employees in positive leadership, we theorised that identification variables could be important psychological processes through which positive leadership enhances employee wellbeing. Furthermore, previous research had highlighted both organisational identification (e.g., Jetten et al., 2017; Steffens et al., 2017; van Dick et al., 2017a; van Dick et al., 2017b) and identification with the leader (e.g., Slater et al., 2017) as antecedents of employee wellbeing. And as researchers have suggested leaders are "entrepreneurs of social identity" (Reicher et al., 2005; Reicher & Hopkins, 2001; Reicher & Hopkins, 2003) and play a key role in determining organisational identity so higher identification with the leader and organisational identification should mediate positive leadership and employee wellbeing in sequence.

Across two cross-sectional studies our results replicated the findings from Kelloway and colleagues (2013) and provided support for the role of positive leadership in fostering

employee wellbeing (i.e. employee mental health, job satisfaction and workplace stress were used as indicators of employee wellbeing). Moreover, across the two studies, the link between positive leadership and employee wellbeing indicators (i.e. job satisfaction and employee mental health) was significantly mediated by each of the identification variables individually and through both sequentially. Additionally, the link between positive leadership and workplace stress was tested in the second study only but the mediation analysis showed that it was significantly mediated by identification with the leader only. This provides support for the role of identification variables in mediating the relationship between positive leadership and wellbeing and workplace stress (see Figure 1 for our proposed conceptual model).

Importance of Longitudinal Designs

While my previous research emphasised the underlying mechanisms in the relationship between positive leadership and employee wellbeing, this was correlational data. The majority of research in organisational topics employs cross-sectional designs which make associations between two or more static variables but assume to support causal inferences (Mitchell & James, 2001). However, these do not consider the time elements involved in these links. This can be achieved through the use of longitudinal designs to provide the dynamic nature of these theoretical models. Therefore, this chapter will employ a longitudinal design to test the theoretical model (see Figure 1) that positive leadership leads to higher employee wellbeing through higher identification with the leader and organisation in sequence. And positive leadership leads to lower workplace stress through identification with the leader.

Study 1: Longitudinal Study examining the Positive Leadership and Employee Wellbeing Model

Method

Participants

Three hundred and ninety six completed the study at Time 1, 300 participants completed Time 2 and the final sample size for Time 3 was 235 participants. The difference in the number of participants was due to both natural attrition found in longitudinal designs (Ployhart & Vandenberg, 2010) and due to changes in leadership or organisation for the participants meaning that the comparisons between timepoints could not be made. Of the 235 participants, 167 were female and 68 were male aged between 19 and 68 years old (M = 38.00, SD = 11.15). One hundred and fifty were in full-time employment and 85 were in part-time employment. Participants were recruited using the online crowdsourcing site Prolific and were compensated £1.00 for each of the 10 minute surveys at each timepoint they completed. If they changed organisation or leader when completing the survey, they were still compensated for that timepoint but were not required to complete any further surveys.

Design

A longitudinal correlational design was used to examine the links between positive leadership, identification variables and employee wellbeing overtime. Three timepoints were collected with a four month gap between timepoints. For a longitudinal design it is best to have at least three repeated measurement points (Chan, 1998) to assess true change overtime (Singer & Willett, 2003) and reliability of the results (Willett, 1989).

Procedure and Measures at Time 1[1]

Participants completed a three-part longitudinal study investigating how people perceive leaders in their organisation and how they feel about their own job. They were informed at the start of Time 1 that this study would involve three data collection points and that their participation was anonymous, voluntary and they were free to withdraw at any time during the study. They were also informed that they could contact the researcher to ask any additional questions. After reading through an information sheet, participants gave informed consent and started the survey.

Positive Leadership

To measure positive leadership, the shortened version of the positive leadership assessment scale (Antino et al., 2014) was used. This scale includes 15 items (e.g. "Consistently and continually emphasise continuous improvement and development of strong interpersonal relationships among your direct reports") and asked participants to indicate how often these types of behaviours are displayed by their leader (1 = *never* to 5 = *almost always*). Higher scores indicate stronger displays of positive leadership (see *Table 1* for scale means, standard deviations and Cronbach alphas).

Identification with the Leader[2]

A seven item measure from Shamir et al. (1998) was used to assess identification with and trust in the leader. An example of one of the items is "My values are similar to my supervisor/leader/manager's values" and is measured on a five-point scale (1 = *never* to 5 = *always*). Higher scores indicate higher identification with and trust in the leader.

Organisational Identification

[1] Time 1 was conducted pre-COVID (February 2020), but Time 2 and Time 3 were during COVID (June 2020 and October 2020 respectively).

[2] In the original research paper, this was known as identification with the leader and trust in the leader but in this thesis will be referred to as identification with the leader.

A six item measure of organisational identification was used (Edwards & Peccei, 2007). An example of one of the item is “My employment in my workplace is a big part of who I am” and participants rated their agreement on a seven point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicate higher identification with the organisation.

Wellbeing

The mental health subscale of the short version of the validated Copenhagen Psychosocial Questionnaire (COPSOQ; Kristensen et al., 2005) and a measure of job satisfaction (Warr et al., 1979) were used to assess employee wellbeing

Job Satisfaction. Eleven different aspects of their job (e.g. “Your chances of promotion”) were rated in terms of employee satisfaction on a seven point scale (1 = *extremely dissatisfied* to 7 = *extremely satisfied*). Higher scores indicate higher job satisfaction.

Mental Health. Four items were used to assess the participants general mental health. An example item is “How much of the time during the last four months have you felt so down in the dumps that nothing could cheer you up?”. This was measured on a six-point scale (1 = *all of the time* to 6 = *none of the time*). Some of the items were recoded to ensure that higher scores indicated better mental health.

Stress

The 10 item version of the perceived stress scale (Cohen et al., 1983) was used. An example item is “In the last four months, how often have you felt that you were unable to control the important things in your life?”) and was measured on a five-point scale (1 = *never* to 5 = *very often*). Some items were recoded to ensure that higher scores indicated higher perceived stress.

After completing these measures, participants completed some demographic questions and were thanked for their participation. They were informed that they would be fully debriefed at the end of the final data collection point and if they did not complete the final timepoint then they would be sent a written debrief through Prolific.

Procedure and Measures Time 2 and Time 3

Participants were presented with the same information sheet at Time 2 (four months later) and Time 3 (another four months later) and asked again for their informed consent before taking part in the survey. Once this was obtained, participants completed two questions for an employment check at both Time 2 and Time 3. As this study is interested in investigating the influence of positive leadership on employee wellbeing, it is vital to ensure that participants were answering the surveys based on the same leader from the same organisation each time. Any participants who changed organisation or changed leaders since the last timepoint were thanked, paid for their time and debriefed and were not required to complete the rest of the survey or timepoints. After completing Time 3 of the study, participants were thanked again and fully debriefed. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 201915767077395906).

Results

Correlation Results

Positive leadership at Time 1, Time 2 and Time 3 was significantly positively related with identification with the leader and organisational identification at all three timepoints (see Table 1 for all correlations between all variables at all timepoints).

Positive leadership at Time 1 was significantly associated with job satisfaction at all timepoints, mental health at Time 1, mental health at Time 3, stress at Time 1 and Time 3. However it was marginally related to stress at Time 2. Positive leadership at Time 2 was

significantly correlated with job satisfaction, mental health and stress at all timepoints. Positive leadership at Time 3 was significantly related to job satisfaction at all timepoints, mental health and stress at Times 2 and 3 but marginally related to mental health and stress at Time 1.

Identification with the leader at all timepoints was significantly related to job satisfaction, stress and mental health (except identification with the leader at Time 1 was only marginally related to mental health at Time 2). Organisational Identification at all timepoints was significantly associated with job satisfaction at all timepoints. Organisational Identification at Time 1 was significantly correlated with mental health and stress at Time 1 and marginally related to mental health at Time 3. Organisational Identification at Time 2 was significantly associated with mental health at all time points and stress at Time 1 and 2. Organisational Identification at Time 3 was significantly related to mental health at Time 1 and 3, stress at Time 3 and marginally correlated with stress at Time 1.

Table 1

Correlations, Means, Standard Deviations and Cronbach Alpha's for all variables at all timepoints

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. T1 Positive Leadership																		
2. T2 Positive Leadership	.66***																	
3. T3 Positive Leadership	.62***	.71***																
4. T1Identification with the Leader	.75***	.53***	.53***															
5. T2 Identification with the Leader	.60***	.75***	.56***	.68***														
6. T3 Identification with the Leader	.57***	.62***	.69***	.68***	.78***													
7. T1 Organisational Identification	.51***	.37***	.42***	.58***	.44***	.42***												
8. T2 Organisational Identification	.49***	.50***	.40***	.49***	.54***	.47***	.70***											
9. T3 Organisational Identification	.51***	.48***	.58***	.54***	.52***	.66***	.69***	.70***										
10. T1 Job Satisfaction	.66***	.47***	.50***	.73***	.55***	.53***	.63***	.51***	.54***									
11. T2 Job Satisfaction	.53***	.64***	.54***	.58***	.75***	.62***	.45***	.58***	.54***	.59***								
12. T3 Job Satisfaction	.51***	.60***	.67***	.57***	.64***	.74***	.46***	.46***	.65***	.59***	.70***							
13. T1 Mental Health	.16*	.17*	.12#	.19**	.26***	.18**	.16*	.23***	.17**	.33***	.28***	.22**						
14. T2 Mental Health	.09	.20**	.14*	.12#	.27***	.17**	.10	.18**	.08	.21**	.28***	.25***	.64***					
15. T3 Mental Health	.16*	.25***	.27***	.19**	.26***	.25***	.12#	.16*	.21**	.29***	.29***	.41***	.65***	.74***				
16. T1 Stress	-.18**	-.17**	-.11#	-.19**	-.24***	-.16*	-.13*	-.18**	-.12#	-.36***	-.25***	-.22**	-.80***	-.60***	-.60***			
17. T2 Stress	-.12#	-.18**	-.13*	-.15*	-.23**	-.17*	-.07	-.14*	-.09	-.27***	-.29***	-.28***	-.63***	-.81***	-.73***	.69***		
18 T3 Stress	-.20**	-.25***	-.23***	-.24***	-.29***	-.28***	-.07	-.08	-.17*	-.28***	-.30***	-.44***	-.55***	-.60***	-.79***	.60***	.69***	
Mean	2.79	2.84	2.71	3.35	3.48	3.39	4.73	4.77	4.64	4.90	4.99	4.88	4.14	4.31	4.18	2.83	2.72	2.76
(SD)	(0.95)	(0.95)	(1.04)	(1.00)	(1.04)	(1.13)	(1.46)	(1.58)	(1.63)	(1.09)	(1.12)	(1.16)	(1.04)	(0.99)	(1.11)	(0.66)	(0.66)	(0.68)
Cronbach's Alpha	.95	.95	.96	.96	.97	.97	.94	.96	.96	.89	.91	.91	.84	.85	.88	.89	.89	.90

Notes. # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$, $N = 235$

Time-Separated Model Results

To test the process through which positive leadership is associated with increased wellbeing (i.e. mental health and job satisfaction) and decreased stress over time, two time-separated SEM models were run. Two time-separated models were used as the conceptual model is a four stage model and this longitudinal design only has three timepoints. Both SEM models used latent variables and were tested in AMOS (IBM SPSS Amos 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps). Model 1 tested a serial mediation assessing the impact of positive leadership at Time 1 on wellbeing (i.e. mental health and job satisfaction) and workplace stress at Time 3 through identification with the leader at Time 2 and organisational identification at Time 3. Whereas Model 2 tested a serial mediation assessing the impact of positive leadership at Time 1 on wellbeing (i.e. mental health and job satisfaction) and workplace stress at Time 3 through identification with the leader at Time 1 and organisational identification at Time 2.

Model 1

The chi-square of the model fit was significant, $\chi 2$ (1313, N= 235) = 2406.32, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 1.83. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

As hypothesised, the direct effect results showed that positive leadership at Time 1 was significantly positively associated with identification with the leader at Time 2 which in turn was positively associated with organisational identification at Time 3. Organisational identification at Time 3 was significantly related with job satisfaction at Time 3 but not

mental health or workplace stress at Time 3 (see Figure 2 for direct effects for Longitudinal Model 1). However, there was no significant direct effects of positive leadership at Time 1 on job satisfaction at Time 3 (*b* = .05, *SE* = .06, *95CI*[-.06, .17], *p* = .34), or on mental health at Time 3 (*b* = -.09, *SE* = .12, *95CI*[-.31, .18], *p* = .52) or on workplace stress at Time 3 (*b* = -.02, *SE* = .07, *95CI*[-.17, .12], *p* = .79). The indirect effect results showed positive leadership at Time 1 was significantly positively associated with job satisfaction at Time 3 through both identification with the leader at Time 2 and organisational identification at Time 3 individually and in sequence. Positive leadership at Time 1 was significantly positively associated with mental health at Time 3 through identification with the leader at Time 2 and marginally significant through organisational identification at Time 3 and both identification with the leader at Time 2 and organisational identification at Time 3 in sequence. The link between positive leadership at Time 1 and workplace stress at Time 3 was only significantly mediated by identification with the leader at Time 2 (see Table 2 for the indirect effects for longitudinal Model 1).

Model 2

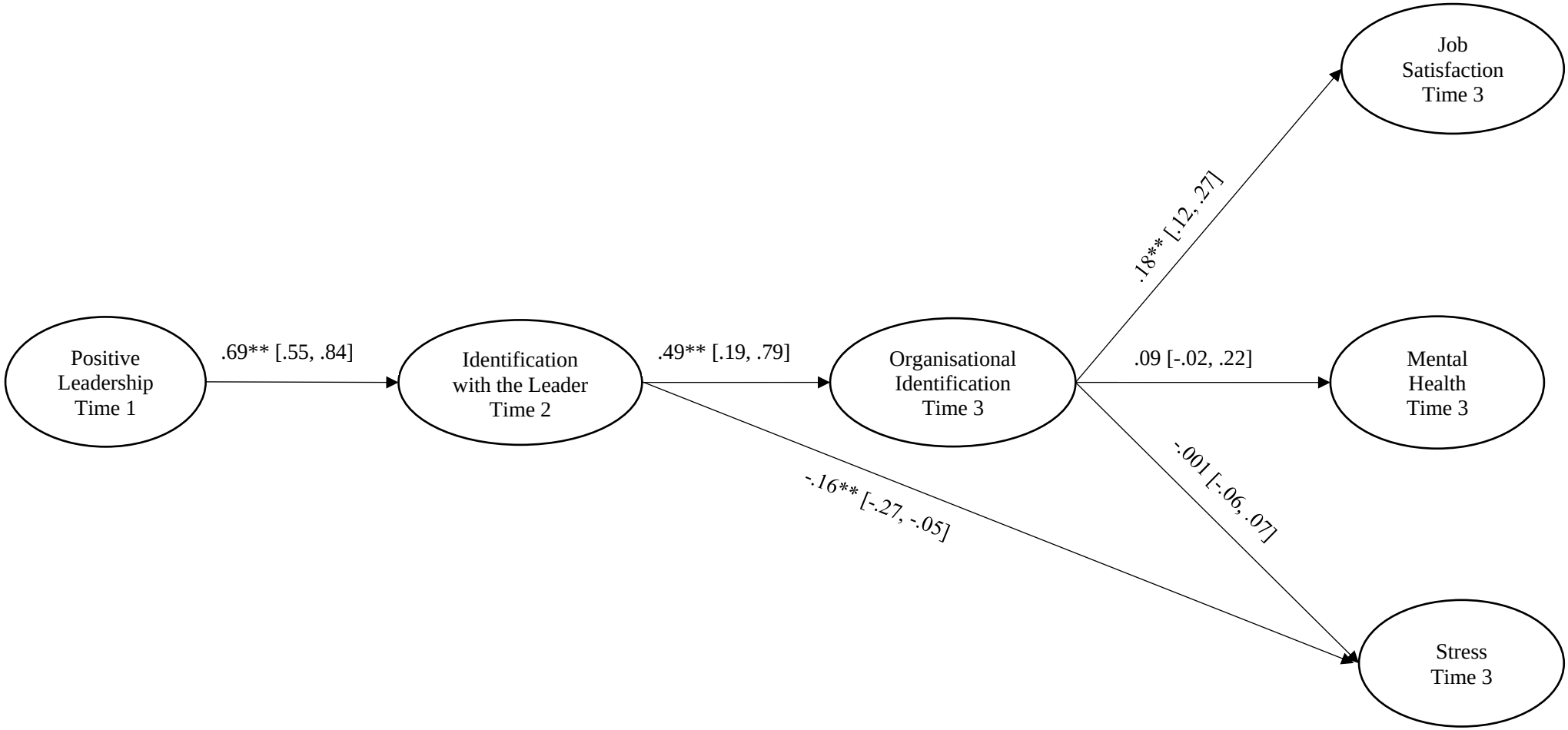
The chi-square of the model fit was significant, $\chi 2$ (1313, N= 235) = 2396.33, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 1.82. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

The direct effect results showed that positive leadership at Time 1 was significantly positively associated with identification with the leader at Time 1. Identification with the leader at Time 1 was significantly positively associated with organisational identification at

Time 2. Organisational identification at Time 2 was significantly related with job satisfaction at Time 3 but not mental health or workplace stress at Time 3 (see Figure 3 for direct effects for Longitudinal Model 2). However, there was no significant direct effects of positive leadership at Time 1 on job satisfaction at Time 3 (b = .09, SE = .09, $95CI$[-.09, .27], p = .32), or on mental health at Time 3 (b = -.04, SE = .17, $95CI$[-.39, .27], p = .83) or on workplace stress at Time 3 (b = -.03, SE = .10, $95CI$[-.21, .17], p = .76). The indirect effect results showed positive leadership at Time 1 was significantly positively associated with job satisfaction at Time 3 through both identification with the leader at Time 1 and organisational identification at Time 2 individually and in sequence. The link between positive leadership at Time 1 and workplace stress at Time 3 was only marginally significantly mediated by identification with the leader at Time 1 (see Table 3 for the indirect effects for longitudinal Model 1).

Figure 2

Mediation analysis (using AMOS) showing the direct paths of the time separated model 1.



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2

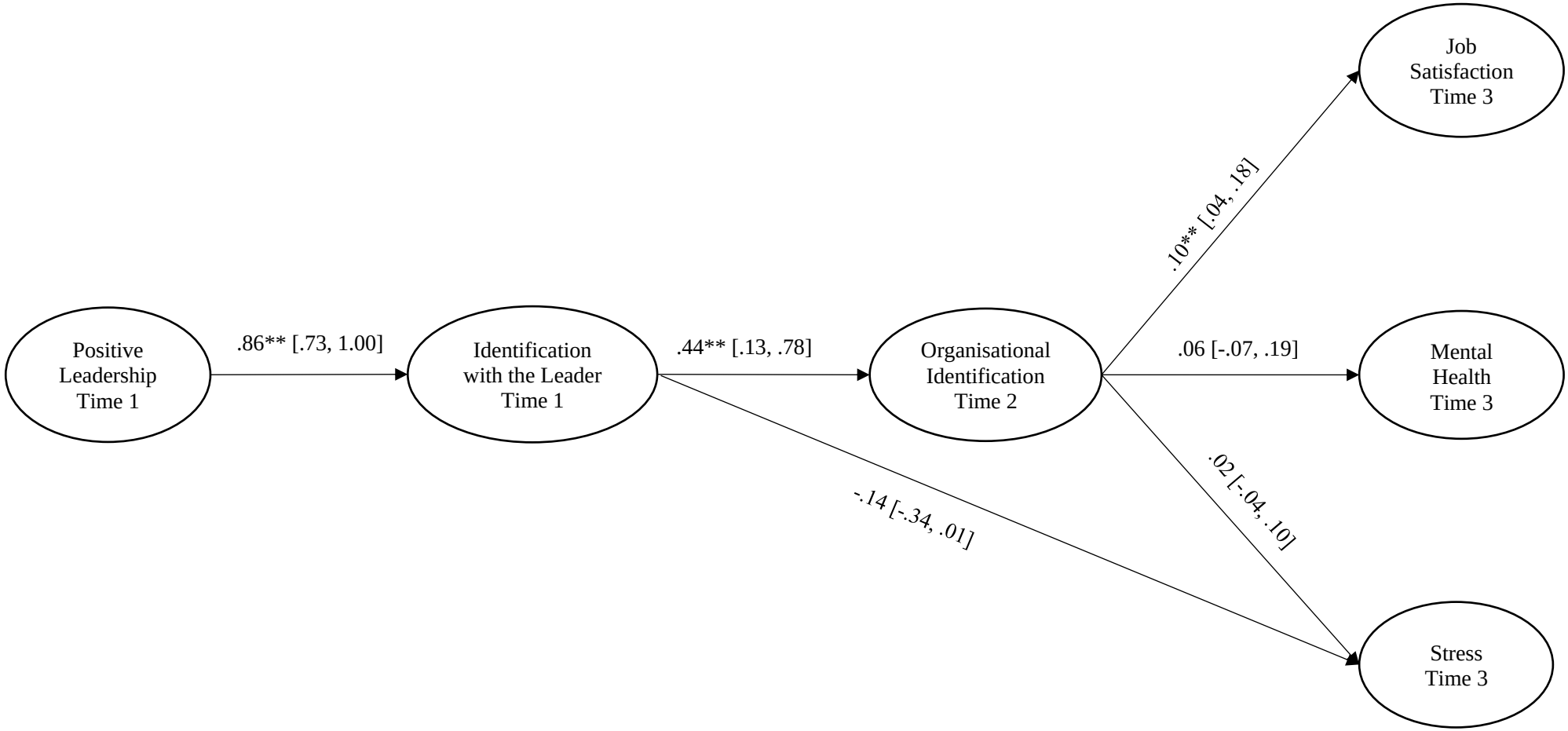
Summary of Indirect Effects for each of the Paths (Model 1)

Path	Indirect effect
Positive leadership T1 > Identification with the Leader T2> Organisational Identification T3	*b* = .34, *SE* = .11, *95CI*[.14, .57], *p* = .001
Positive leadership T1 > Identification with the Leader T2 > Organisational Identification T3 > Job Satisfaction T3	*b* = .06, *SE* = .02, *95CI*[.03, .12], *p* = .001
Positive leadership T1 > Identification with the Leader T2 > Job Satisfaction T3	*b* = .21, *SE* = .05, *95CI*[.13, .33], *p* = .001
Positive leadership T1 > Organisational Identification T3 > Job Satisfaction T3	*b* = .10, *SE* = .04, *95CI*[.05, .19], *p* = .001
Identification with the Leader T2 > Organisational Identification T3 > Job Satisfaction T3	*b* = .09, *SE* = .03, *95CI*[.04, .18], *p* < .001
Positive leadership T1 > Identification with the Leader T2 > Organisational Identification T3 > Mental Health T3	*b* = .03, *SE* = .02, *95CI*[-.002, .09], *p* = .06
Positive leadership T1 > Identification with the Leader T2 > Mental Health T3	*b* = .17, *SE* = .08, *95CI*[.04, .33], *p* = .01
Positive leadership T1 > Organisational Identification T3 > Mental Health T3	*b* = .05, *SE* = .04, *95CI*[-.01, .14], *p* = .08
Identification with the Leader T2 > Organisational Identification T3 > Mental Health T3	*b* = .05, *SE* = .03, *95CI*[-.003, .13], *p* = .07
Positive leadership T1 > Identification with the Leader T2 > Organisational Identification T3 > Stress T3	*b* <.001, *SE* = .01, *95CI*[-.02, .03], *p* = .98
Positive leadership T1 > Identification with the Leader T2 > Stress T3	*b* = -.11, *SE* = .04, *95CI*[-.20, -.03], *p* = .01
Positive leadership T1 > Organisational Identification T3 > Stress T3	*b* = -.001, *SE* = .02, *95CI*[-.04, .04], *p* = .99
Identification with the Leader T2 > Organisational Identification T3 > Stress T3	*b* < .001, *SE* = .02, *95CI*[-.03, .04], *p* = .98

Notes. Bootstrap confidence bias-corrected method was used. Coefficients are unstandardized.

Figure 3

Mediation analysis (using AMOS) showing the direct paths of the time separated model 2.



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3

Summary of Indirect Effects for each of the Paths (Model 2)

Path	Indirect effect
Positive leadership T1 > Identification with the Leader T1> Organisational Identification T2	*b* = .38, *SE* = .15, *95CI*[.12, .69], *p* = .003
Positive leadership T1 > Identification with the Leader T1 > Organisational Identification T2 > Job Satisfaction T3	*b* = .04, *SE* = .02, *95CI*[.01, .10], *p* = .003
Positive leadership T1 > Identification with the Leader T1 > Job Satisfaction T3	*b* = .25, *SE* = .07, *95CI*[.13, .42], *p* = .001
Positive leadership T1 > Organisational Identification T2 > Job Satisfaction T3	*b* = .05, *SE* = .03, *95CI*[.01, .12], *p* = .01
Identification with the Leader T1 > Organisational Identification T2 > Job Satisfaction T3	*b* = .04, *SE* = .02, *95CI*[.01, .11], *p* = .003
Positive leadership T1 > Identification with the Leader T1 > Organisational Identification T2 > Mental Health T3	*b* = .02, *SE* = .03, *95CI*[-.02, .10], *p* = .23
Positive leadership T1 > Identification with the Leader T1 > Mental Health T3	*b* = .16, *SE* = .13, *95CI*[-.08, .44], *p* = .19
Positive leadership T1 > Organisational Identification T2 > Mental Health T3	*b* = .03, *SE* = .04, *95CI*[-.02, .13], *p* = .25
Identification with the Leader T1 > Organisational Identification T2 > Mental Health T3	*b* = .03, *SE* = .03, *95CI*[-.02, .11], *p* = .24
Positive leadership T1 > Identification with the Leader T1 > Organisational Identification T2 > Stress T3	*b* = .01, *SE* = .02, *95CI*[-.01, .05], *p* = .32
Positive leadership T1 > Identification with the Leader T1 > Stress T3	*b* = -.12, *SE* = .07, *95CI*[-.30, .01], *p* = .06
Positive leadership T1 > Organisational Identification T2 > Stress T3	*b* = .01, *SE* = .02, *95CI*[-.02, .06], *p* = .33
Identification with the Leader T1 > Organisational Identification T2 > Stress T3	*b* = .01, *SE* = .02, *95CI*[-.01, .06], *p* = .32

Notes. Bootstrap confidence bias-corrected method was used. Coefficients are unstandardized.

Discussion

Overall, the results from this longitudinal study provide support for the link between positive leadership and employee wellbeing (Kelloway et al., 2013) and for the underlying mechanisms uncovered in my previous research (Marsh et al., in prep). Model 1 investigated the association between positive leadership at Time 1 with wellbeing (i.e. employee mental health and job satisfaction) and workplace stress at Time 3 through identification with the leader at Time 2 and organisational identification at Time 3. Model 2 tested the association between positive leadership at Time 1 with wellbeing (i.e. employee mental health and job satisfaction) and workplace stress at Time 3 through identification with the leader at Time 1 and organisational identification at Time 2. The results from both time separated models are consistent with findings from my previous research (Marsh et al., in prep). Positive leadership was positively associated with job satisfaction through both identification with the leader and organisational identification individually and in sequence. In addition, the models provide support for the link between positive leadership and workplace stress through identification with the leader only. However, the indirect effect results for the link between positive leadership and employee mental health are mixed.

The results from the first time separated model were consistent with my previous findings (Marsh et al., in prep). While some paths were only marginally significant, there was some indication that positive leadership at Time 1 was associated with employee mental health at Time 3 through both Identification with the leader at Time 2 and organisational identification at Time 3 individually and in sequence. However, the results from the second time separated model indicated that the link between positive leadership at Time 1 was not associated with employee mental health at Time 3 through either identification with the leader at Time 1 and organisational identification at Time 3 individually or in sequence.. Generally, the results provide support for the mediating role of identification variables but

there are some inconsistencies as to which type of workplace identification plays an important role in this link.

While, the discrepancy between the longitudinal results and cross-sectional models from my previous research (Marsh et al., in prep) may be due to the design, another potential explanation could be the influence of COVID-19. The first lockdown was in March 2020 and this occurred between Time 1 and Time 2 data collection points. As a result of the lockdown, people were asked to work from home so the role of the organisation may have a less important influence on employee wellbeing. Alternatively, identification with the leader may truly be key for mental health indicator of wellbeing and workplace stress because they are internal individual psychological states instead of subjective workplace wellbeing (i.e., job satisfaction). Therefore, relational identification may be more likely to influence these types of psychological wellbeing.

While employing a longitudinal design has helped to provide a more dynamic understanding of how positive leadership influences employee wellbeing through identification variables over time, there are still questions that remain unanswered. For example, it is important to investigate how these leaders are perceived and what factors affect leader perception. Leadership behaviours and styles can influence the way that followers perceive their leaders (e.g., Chou, 2018; Jaussi & Dionne, 2004; Lewis, 2000) and specifically perceptions of the leaders' effectiveness (e.g., Abrell et al., 2011; Copeland, 2016; Walumbwa et al., 2004). In addition, it is important to examine potential boundary conditions of the beneficial impact of positive leadership. Research on leadership has identified age and gender as important leader demographics that influence how leaders are perceived and evaluated (e.g., Blau & DeVaro, 2007; Eagly & Karau, 1991; Heilman, 2001; Heilman & Eagly, 2008; Koenig et al., 2011; Moss-Racusin et al., 2012). Research also suggests that different leadership styles are preferred by certain leaders or considered

stereotypically appropriate for leaders dependent on their gender or age (e.g., Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Korac-Kakabadse et al., 1998; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988; Zenger & Folkman, 2019). This means that positive leadership may be seen as more appropriate for certain types of leaders or to put differently, it may be that whether or not positive leaders gain trust amongst their followers are able to influence workplace identification and wellbeing depends on leader characteristics such as gender and age. There is also a wealth of research showing that leaders can also benefit from ingroup biases (e.g. Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006; Platow & van Knippenberg, 2001; Ullrich et al., 2009) whereby individuals favour ingroup leaders by awarding them more resources, being more willing to follow them and promote them to higher positions. Therefore, positive leaders may be seen as more effective and are more likely to be supported if they are ingroup members than outgroup members. Consequently, these boundary conditions will be tested in *Chapter 3* of this thesis.

Chapter Summary

This chapter examined the conceptual model proposed based on the findings from previous research. Specifically, it tested the link between positive leadership and indicators of employee wellbeing through identification variables. This extended previous findings by analysing the model using a longitudinal design instead of static cross-sectional models. The results supported previous research and demonstrated that positive leadership is associated with job satisfaction through both identification with the leader and organisational identification individually and in sequence. Additionally, the link between positive leadership and workplace stress is mediated by identification with the leader only which is consistent with previous findings. However, the link between positive leadership and mental health was not as consistent, which may suggest that these associations may fluctuate over time. In the

next chapter, I will investigate evaluations of positive leaders and potential boundary conditions of positive leadership. Specifically, I will examine the role of leader gender, age and group membership.

Chapter 3: Exploring Group Membership, Gender and Age as Boundary Conditions of Positive Leadership

Chapter Overview

Chapter 2 provided support for the hypotheses that positive leadership is significantly related to employee wellbeing and stress and identification variables mediate this relationship. Expanding on this, the current chapter investigates evaluations of leadership abilities alongside wellbeing and stress to examine whether positive leaders are perceived more favourably than negative leaders. Also, the current chapter examines the relationship between positive leadership and employee wellbeing experimentally and considers the role of other leader characteristics (i.e. leader age, gender and group membership) on perceptions of positive leaders. *Study 2* examines the interaction between leader age and leadership style on evaluations of leaders and employee stress and wellbeing. *Study 3* then investigates the interaction between leader age, leader gender and leadership style. And *Study 4* investigates the role of leaders' group membership and its interaction with leadership style. Results from across the three studies revealed that positive leaders have a positive impact on indicators of wellbeing and are evaluated more favourably than negative leaders. The mediation analysis from *Studies 2* and *3* showed that the relationship between leadership style and follower wellbeing and stress were mediated by identification with the leader. Specifically, they showed that positive leadership was associated with higher wellbeing and lower stress through increased identification with the leader. Moreover, the results did not support the influence of leader age (*Studies 2* and *3*), leader gender (*Study 3*) or group membership (*Study 4*) as boundary conditions for the beneficial impact of positive leaders in terms of evaluations of leader.

Leadership and Wellbeing

Leadership is one influential factor in reducing workplace stress and enhancing employee wellbeing (e.g. Arnold et al., 2007; Liu et al., 2010; Mackey et al., 2017; Men, 2014; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020). One particular leadership style which has been shown to be linked with better employee wellbeing is positive leadership (Kelloway et al., 2013; Marsh et al., in prep). Importantly, even when taking into account transformational leadership and other demographic variables, positive leadership was significantly associated with employee wellbeing (Kelloway et al., 2013).

Furthermore, my own research has examined this link further and examined the role of identification variables in the relationship between positive leadership and employee wellbeing (Marsh et al., in prep). This research indicated that identification with the leader and organisational identification mediated the relationship between positive leadership and indicators of employee wellbeing and workplace stress. Specifically, the findings showed that the link between positive leadership and job satisfaction and employee mental health were significantly mediated by each of the identification variables individually and through both in sequence. And the link between positive leadership and workplace stress was significantly mediated by identification with the leader only. These findings were replicated (except for the mental health outcome) in *Chapter 2* of this thesis investigating the links between these variables using a longitudinal design. There have also been calls for more experimental design in organisational research (Thau et al., 2014). This chapter aims to replicate these findings again but using an experimental design manipulating leadership style and will be tested in *Study 2* and *Study 3*.

Leadership Style and Leader Evaluations

Although it is important to examine the effect of positive leadership on wellbeing, it is also important to ascertain how followers view positive leaders more generally. Research has shown that leader behaviour has an influence on followers' evaluations of them and responses to them (e.g. Chou, 2018; Jaussi & Dionne, 2004; Lewis, 2000). For example, Lewis (2000) demonstrated that leaders who expressed negative emotions to their followers led to poorer evaluations of their leader effectiveness by their followers compared to leaders who expressed a neutral emotion. Lewis (2000) showed participants videos of leaders played by professional actors delivering a message for their followers. There were two actors, one male and one female but the script for the scenario was the same and they delivered the message in three different emotional tones (neutral, sad or angry). Participants then completed measures rating the effectiveness of the leader and how they felt while watching the clips. The results demonstrated that the leaders who displayed negative emotions (sad or angry) were seen as less effective than leaders who expressed a neutral tone. There was also an interaction between leader gender and emotional tone of the message which showed that male leaders were perceived as less effective leaders when they expressed sadness compared to being neutral, whereas female leaders received lower ratings of effectiveness when they displayed either negative emotion instead of being neutral. Furthermore, Chou (2018) showed that leader behaviours also influenced endorsement of the leader. These findings emphasise the significance of leadership behaviours and emotions on their followers and the way they are perceived by their followers.

Additionally, research investigating the effects of different leadership styles on followers' evaluations and behaviour have also shown that leadership style can influence perceptions of leader effectiveness (e.g. Abrell et al., 2011; Copeland, 2016; Walumbwa et al., 2004). For example, Walumbwa and colleagues (2004) investigated university students'

perceptions of their instructors as leaders. Participants completed a series of measures determining the leadership style of their instructors and then rated their own willingness to exert extra effort, their perceptions of the effectiveness of their instructor and their satisfaction with their leader. The results revealed that students gave unfavourable ratings for leaders who adopted a passive management by exception style. In particular, students rated them as ineffective and unsatisfactory and they did not prompt extra effort from students. However, the opposite was true for instructors who were perceived as displaying either active management by exception, contingent reward or transformational leadership styles. This suggests that certain leadership styles can be perceived as more effective and these leaders can be evaluated more positively.

Furthermore, leadership styles have an influence on followers' behaviours. An example of this has been demonstrated in the turnover literature which proposes that certain leadership styles can increase or decrease turnover intentions (Bycio et al., 1995; Demirtas & Akdogan, 2014; Khan et al., 2010; Martin & Epitropaki, 2001; Palanski et al., 2014; Tepper, 2000; Tse, 2013). In particular, there has been a negative association between transformational leadership and turnover intentions (Bycio et al., 1995; Martin & Epitropaki, 2001; Tse, 2013). However, other leadership styles such as abusive supervision has been associated with increased turnover intentions (Khan et al., 2010; Palanski et al., 2014; Tepper, 2000). Even though there is no research examining the link specifically between positive leadership and leader evaluations, it is expected based on the research reviewed on other leadership styles that positive leadership will also have an influence on these outcomes. It also highlights the importance of evaluations of leader as a potential boundary condition on their ability to fulfil their role and then have a chance of enhancing employee wellbeing. Consequently, this will tested in this chapter in all three of the studies presented (i.e. *Study 2, 3* and *4*).

Leader Characteristics

There is also a need to consider whether other leader characteristics may moderate the relationship between leadership style and leader evaluations and therefore may be boundary conditions on the positive influence of positive leadership. Specifically, this chapter will consider leader age, leader gender and leader group membership as potential boundary conditions of positive leadership.

Leader Age

Research has demonstrated that age of the job candidates and leaders can bias evaluations (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015). For instance, Hirschfeld and Thomas (2011) demonstrated that older workers were associated with lower leadership potential. Similar to gender, stereotypes of older and younger workers have an effect on perceptions of these workers and their opportunities. One suggestion for this bias is the different stereotypes associated with age groups. The Stereotype Content Model (Fiske et al., 2002) has shown that older people are perceived as being high in warmth but low in competence whereas younger people are perceived as being high in competence but low in warmth. This perception of older workers being lower in competence tends to lead to these workers having a lower chance of being selected (Abrams et al., 2016) and lower perceptions of leadership potential (Steeden, 2021). Overall, this lends support for a pro-youth bias in evaluations of leaders.

Moreover, this is important because individuals generally and specifically leaders can face backlash for deviating from their stereotypical roles or not conforming to stereotypes (e.g. Berdahl & Moon, 2013; Cialdini & Trost, 1998; Cuddy et al., 2004; Heilman & Wallen, 2010; Rudman & Glick, 2001; Williams & Tiedens, 2016). For instance, research by Heilman and Wallen (2010), investigated counter-stereotypical occupations and assessed evaluations of individuals who are successful in these roles. The two occupations that were used were

Financial Advisor (seen as a stereotypically male role) and Employee Relations Counsellor (seen as a stereotypically female role) and they examined the evaluations of males and females in each of these domains. The results showed that when women were successful in stereotypically male roles, they were derogated and disliked and men who were successful in stereotypically female roles were considered ineffectual and less deserving of respect. And both male and females in gender incongruent roles were judged as less desirable as a boss. While this is focused on gender biases, it still highlights the importance of individuals abiding by stereotypical job roles and this can be applied to leader age as well as leader gender. Overall, this emphasises the negative reactions individuals can receive when they do not conform to stereotypes in the workplace. Consequently, if older employees display low warmth or younger employees display high warmth, then they might face backlash for acting in a non-stereotypical way. This is important when considering leadership styles as certain styles of leadership do display more warmth and consideration towards employees than others suggesting they might be more suitable for older leaders.

Leader Age and Leadership Style

Some research has indicated that the age of the leader is associated with the style of leadership adopted (e.g. Korac -Kakabadse et al., 1998; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988). For example, Oshagbemi (2004), investigated the link between leader age and leadership style and behaviours in a sample of UK managers. The findings indicated that older leaders tended to consult their employees more and favour more participation from employees than younger leaders. Oshagbemi (2004) suggested that the findings showed that older leaders would spend more time developing others while younger leaders were more focused on developing themselves. This suggests that a more interpersonally oriented leadership style is more congruent with older leaders than younger leaders. This also matches the stereotypes associated with older and younger individuals (Fiske et al., 2002). As older

leaders are stereotypically perceived as higher in warmth then this may lead to them be more suited to displaying a relational style of leadership than younger leaders.

Therefore, it is possible for older leaders to receive better leader evaluations and endorsement if they display a positive leadership style. As highlighted, key facets of positive leadership are developing positive relationships and promoting a community at work. Also, positive leaders promote cultures of forgiveness, gratitude and compassion and are focused on developing others. These facets seem to overlap with the key features shown in Oshagbemi's (2004) research which suggests that these more relational style of leadership are suited for older leader. So older positive leaders should receive better evaluations than younger positive leaders as they are not deviating from their stereotypical role. However, as discussion in this introduction, other research has demonstrated a pro-youth bias in selection and perceptions of leaders (e.g. Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015), so it is possible that younger positive leaders will receive better evaluations simply because the younger profile fits better with leadership roles. The interaction between leader age and leadership style will be examined in *Study 2* and *3* in this chapter.

Leader Gender

Another leader characteristic that might lead to bias in leadership evaluations is the gender of the leader. According to a recent report from McKinsey (2021), there has been an increase in females in leadership but there is still a clear gender gap. And similarly, statistics from UN Women (2021) shows that women are still underrepresented in political leadership roles worldwide. Research examining the influence of the gender of the leader on promotional opportunities and leadership selection has shown that males are more likely to be selected for advancement and leadership (e.g. Blau & DeVaro, 2007; Eagly & Karau, 1991; Heilman, 2001; Heilman & Eagly, 2008; Koenig et al., 2011; Moss-Racusin et al., 2012).

Perceptions of "fit" (Calder, 1977; Eden & Leviatan, 1975; Rush et al., 1977) are important in understanding these findings as research has shown that stereotypes of women tend to contradict stereotypes associated with the workplace (e.g. Heilman, 1983; Lyness & Heilman, 2006).

Gender stereotypes are defined as widespread beliefs that align certain traits, characteristics or behaviours with each of the two genders (Eagly & Karau, 2002). For example, males are expected to be agentic and show characteristics like confidence, assertiveness and competitiveness whereas females are expected to be communal and display characteristics like supportiveness, helpfulness and sympathy. According to Role Congruity Theory (Eagly & Karau, 2002), the gender of the leader and gender stereotypes can influence their perceived suitability for the role. In this respect, agentic characteristics are seen as important for leadership roles and therefore, these leadership characteristics are more in line with the male gender stereotype than the female gender stereotype. This helps to explain the gender differences that are so apparent in leadership roles (McKinsey, 2021; UN Women, 2021) and suggests a clear preference for male leaders.

Furthermore, research has demonstrated that women do face backlash for not conforming to gender stereotypes and taking on non-stereotypical roles (e.g., Berdahl & Moon, 2013; Cialdini & Trost,1998; Cuddy et al., 2004; Heilman & Wallen, 2010; Rudman & Glick, 2001; Williams & Tiedens, 2016). Specifically, Rudman and Glick (2001) examined backlash for agentic women. In an experimental design, participants were asked to make a hiring decision for either a masculine or feminised managerial job. The candidates for the job were either male or female and participants were shown a videotape of the candidates answering six questions and were given an essay on life philosophy which endorsed either a stereotypically feminine (androgynous condition) or stereotypically masculine characteristics (agentic condition). When the job was for the feminised managerial job, the agentic female

candidate was evaluated as less socially skilled and likable than an agentic male candidate and was perceived as less hireable. Similar to leader age, it is expected that the gender of the leader will influence the style of leadership which is perceived as most appropriate. If there is a mismatch, then these leaders will face backlash.

Leader Gender and Leadership Style

Based on the evidence for gender differences in leadership (McKinsey, 2021; UN Women, 2021) and the male leadership preference due to congruence between stereotypes of males and leader roles (i.e., Role Congruity Theory; Eagly & Karau, 2002) it could be suggested that male, positive leaders should receive better evaluations than female, positive leaders. However, research has also shown that leader behaviours and leadership styles are influenced by the gender of the leader (Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019). For example, Eagly and Johnson's (1990) meta-analysis demonstrated that female leaders are more likely to take on a more interpersonally focused (i.e. democratic, participative style of leadership) whereas male leaders were more likely to take on a more task focused (i.e. autocratic style). Similarly, research has shown that female leaders are better than male leaders in terms of fostering relationships and motivating others (Zenger & Folkman, 2019). This suggests that more relational styles of leadership are more suited for female leaders.

In light of this evidence, and applying the principles of Role Congruity Theory (Eagly & Karau, 2002), this suggests that while leadership might overall be more congruent with the male gender stereotype, certain leadership behaviours and styles might be seen as more stereotypically female or male. Key aspects of positive leadership (Cameron, 2012; 2013) are building positive relationships within and outside the organisation, providing best self-feedback to encourage growth in individuals and promoting a culture of forgiveness, compassion and appreciation. This all appears to be more aligned with an interpersonal

leadership style which is more associated with females leaders (e.g. Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019). As a result, this indicates that leader evaluations will be more positive for female positive leaders because they are not deviating from their stereotypical role. The interaction between leader gender and leadership style will be tested in *Study 3* in this chapter.

Leader Group Membership

While demographic characteristics of the leader may play a role in how they are perceived and how successful they are displaying certain leadership styles, it may be more important for leaders to simply be part of the ingroup. According to Social Identity Theory (Tajfel & Turner, 1986), a key part of an individuals' self-concept comes from their group memberships (i.e., their social identity). Individuals are motivated to maintain a positive social identity which leads to favouring their own groups (i.e., their ingroup) over other groups (i.e., outgroups). For example, research has shown individuals allocate more resources to ingroup members (e.g., Abbink & Harris, 2019; Buttelmann & Bohm, 2014; Tajfel, 1970), and evaluate ingroup members more favourably than outgroup members (e.g., Platow et al., 1990; Wann & Grieve, 2005). Moreover, research in hiring decisions has also indicated a potential for ingroup favouritism (e.g., Finkelstein et al., 1995; Gorman, 2005).

Additionally, as proposed by self-categorisation theory (Turner, 1985; Turner et al., 1987), individuals are depersonalised which means that they are judge based on how they aligned with the representations (i.e. prototypes) of the ingroup or outgroup (Abrams & Hogg, 2004; Hogg, 2003). These prototypes help to define what it means to be a member of that group and group members will differ in the extent to which they embody this prototype. Leaders also differ in terms of how prototypical they are of the group and the extent to which they embody the group has been shown to impact the influence the leader possesses (e.g., Giessner & van Knippenberg, 2008; van Knippenberg & Hogg, 2003).

Research has demonstrated that leader group prototypicality influences perceptions of leadership effectiveness (Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006). For example, Hogg and colleagues (2006) showed that prototypical leaders were considered more effective than less prototypical leaders. Specifically, they manipulated the group norms to reflect either stereotypically masculine or stereotypically feminine qualities and compared perceptions of leader effectiveness for male and female leaders. When the leader gender matched the group prototypes then they were perceived as more effective. Additionally, leader group prototypicality influenced endorsement of the leader (Platow & van Knippenberg, 2001; Ullrich et al., 2009). Overall, this suggests that ingroup leaders will receive better evaluations and more likely to be endorsed because they embody the group prototype more than outgroup leaders

There is also some evidence for differences in employee behaviour and effectiveness of particular leadership styles due to leader group prototypicality (e.g., Geng, 2021; Gerpott et al., 2019; Li et al., 2022; van Knippenberg & van Knippenberg, 2005). For example, Gerpott and colleagues (2019) showed that ethical leadership was positively associated with follower organisational citizenship behaviours through follower moral identity but only when the leader was perceived as highly prototypical. These findings show initial support for the interaction effect of leadership style and leader group membership on employee behaviour and evaluations of the leader. The interaction between leader group membership and leadership style (i.e. high vs. low positive leadership) on employee wellbeing and leader evaluations will be tested in *Study 4* of this chapter.

Study 2: Investigating the Interaction of Leader Age and Positive Leadership on Employee Wellbeing and Evaluations of the Leader

The findings from previous research (i.e. Marsh et al., in prep) and from *Chapter 2* of this thesis indicate that positive leadership is associated with enhanced employee wellbeing,

identification with the leader and organisational identification. Moreover, this research also indicated that identification with the leader and organisational identification mediated the relationship between positive leadership and employee wellbeing. Consequently, the current study aims to replicate these findings but utilising an experimental rather than correlational or longitudinal design. The current study also extends the previous findings by measuring evaluations of leaders alongside measuring employee wellbeing. Although, positive leadership is associated with enhanced employee wellbeing, it is important to ascertain whether they are evaluated better than negative leaders because they will need to be considered successful or have potential to remain in positions to have an effect on employee wellbeing. Based on previous findings (i.e. Marsh et al., in prep; *Chapter 2*), it is hypothesised[3]:

> **Hypothesis 1:** There will be a main effect of leadership style, such that those who encounter a positive leader will have higher wellbeing, lower stress, higher identification with the leader and the ingroup, better leader evaluations and will be more willing to work with them than those who encounter a negative leader.
>
> **Hypothesis 2:** The effect of leadership style on wellbeing indicators will be mediated by identification with the leader and identification with the ingroup

Study 2 will also investigate the role of leader age as a potential boundary condition for the impact positive leadership can have on evaluations of their leadership. As previous research has suggested there seems to be a pro-youth bias (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015) in employee selection and perceptions of leadership potential. Research has determined that the differences in perceptions of

[3] This study was pre-registered on the Open Science Framework (https://osf.io/qyebw). The hypotheses in this thesis have been combined to reduce the number of hypotheses and some of the hypotheses were not included as Study 2 was a collaboration with other researchers and these hypotheses were not the focus of this thesis. Additionally, identification with the ingroup was labelled organisational identification in the OSF pre-registration but as the participants are a student sample this alternative label is more appropriate.

leadership potential and employee selection for individuals of different ages is due to the stereotypes associated with different age groups (Abrams et al., 2016; Steeden, 2021). Therefore, it is hypothesised:

> **Hypothesis 3:** There will be a main effect of leader age, such that those who encounter a younger leader will perceive them as having higher competence, lower warmth, higher leadership potential, higher identification with the leader, evaluate them more positively and be more willing to work with them than older leaders.

Additionally, as previous research has demonstrated age of the leader can determine the type of leadership style they adopt (e.g. Korac-Kakabadse et al., 1998; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988). Overall, this research suggests that older leaders tend to prefer a more collaborative and relational style of leadership suggesting that positive leadership may be more suitable for older leaders. However, as previously mentioned, research supports the idea of a pro-youth bias (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015) and therefore, there is a possibility that younger positive leaders may be evaluated more favourably. As a result, the interaction between leader age and leadership style will be considered in *Study 2*, and it is hypothesised:

> **Hypothesis 4:** There will be an interaction between leader age and leadership style in terms of leader evaluations, identification with the leader and willingness to work with the leader again.

Method

Participants and Design

Two hundred and seventy three UK Psychology university students took part in the study as part of a course requirement. Two participants were excluded for incomplete responses leaving 271 participants in the final analysis (236 female, 35 male). Participants were aged between 18 and 54 years old (M = 19.21, SD = 2.63). The study employed a 2

(leadership style: positive *vs.* negative) x 2 (leader age: young *vs.* old) between-participants design.

Procedure and Ethics[4]

Participants took part in the study online using Qualtrics survey software. After giving informed consent, participants were randomly assigned to one of four conditions: Young positive leader, Old positive leader, Young negative leader, Old negative leader. They were told that the study was investigating experiences of interactions in an online chatroom and were told they would interact with a leader in a chatroom. Before entering the chatroom, they inputted a nickname which would appear with their responses in the chatroom. Within the chatroom, they had a simulated interaction with a leader about an upcoming fictitious presentation. The leader sent them predetermined messages and the participant was able to respond to those with a choice of three options for each message. The choice the participant made always led to the same response from the leader. However, the responses from the leader differed depending on whether the participant was interacting with a positive or negative leader. After leaving the chatroom, they had five minutes to prepare for the fictitious presentation. Once the five minutes was up, they were then able to move on to complete the DVs. The order of the DVs was randomized. Finally, participants completed a couple of demographic questions and were thanked and debriefed. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 201915512699465583).

Manipulations

Age manipulation

The age of the leader was manipulated by showing participants photos of the leader they were interacting with in the chatroom. These photos were displayed with every response

[4] Study 2 was conducted pre-COVID in February 2019.

from the leader in the chatroom scenario (see Appendix A for the leader photos). The photos were people from the same race and gender but of two different ages (one aged 22 and the other aged 61) and were from a face database (Minear & Park, 2004).

Leadership style manipulation

Participants were exposed to either a positive or negative leader and this was manipulated in terms of the written leader briefing message given before entering the chatroom and with regard to the responses the participant received during the chatroom (see Appendix B for the written leader briefing message and a script of the chatroom scenario for each leadership condition). These manipulations were pilot tested to ensure that the briefing and scripts for the chatroom were perceived as realistic and importantly whether the leader in the positive leader condition was perceived as more positive than the leader in the negative leader condition.

Measures

General Wellbeing

A measure of wellbeing based on the WHO-5 Wellbeing Index from Winkler and colleagues (2014) was used. The scale contained five items (e.g. "Did you feel calm and relaxed?") and was measured on a four-point Likert scale (1 = *not at all* to 4 = *very*). Participants were asked to respond in regards to how they were feeling during the chatroom exercise. One of the items was reverse coded so that higher scores indicated higher wellbeing (See Table 4 for Cronbach alphas for all measures).

Stress

The current study used two measures of stress. These measures were chosen over the Perceived Stress Scale using in *Study 1* because they were more appropriate for the setting of the study and the context of the manipulation. The Stress Arousal Checklist was used because previous research using a student presentation scenario used similar scales as subjective

measures of state anxiety or stress (e.g. Azevedo et al., 2017; Witt et al., 2006; Yamane et al., 2021) but other research measuring stress in student samples has used the perceived stress scale alongside the state measures of anxiety or negative affect (e.g. Beekman et al., 2016).

Stress Arousal Checklist. The first measure was the stress subscale of the Stress Arousal Checklist (Mackay et al., 1978). The stress subscale contained 19 adjectives to describe how participants felt at that moment (e.g. Tense, Comfortable). Participants responded on a seven point Likert scale (*1* = not at all to *7* = very much). Higher scores suggested higher stress.

Perceived Stress. The second measure of stress was a two-item measure from Beekman and colleagues (2016). An example of one of the items was "I feel stressed" and participants were asked to respond in terms of how they felt at that moment on a seven-point Likert scale (*1* = not at all to *7* = very much). Higher scores indicated higher perceived stress.

Identification with the leader

Participants rated their agreement with seven statements measuring identification with the leader (e.g. "My values are similar to this leader's values"; Shamir et al., 1998) on a seven-point scale (1 = *never* to 5 = *always*). Participants were asked to answer these questions about their view of the School of Psychology leader they interacted with in the chatroom. Higher scores indicated higher identification with the leader.

Identification with the ingroup

An identification scale from Travaglino and colleagues (2016) was adapted to measure the participants' identification with the School of Psychology following the chatroom experience. This measure contained three statements (e.g. "I am proud I am a School of Psychology student") and participants indicated their agreement on a seven-point Likert scale (1 = *completely disagree* to 7 = *completely agree*). Higher scores demonstrated higher identification with the School of Psychology.

Leadership Potential

Participants were asked to think about their leader in the chatroom and rate their perception of the leader's leadership potential. This was measured using seven items from Tresh et al. (2019). An example of one of the items is "To what extent does the leader have the potential to develop leadership skills) and participants responded on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicated higher leadership potential.

Age Stereotype Endorsement

To assess whether younger and older leaders are subject to age stereotypes, age stereotype endorsement was measured using eight items. This measure was adapted from the original 20 item scale (Marcus et al., 2016) and is similar to the measure used in other research (Tresh et al., 2019). Four items measured leader competency (e.g. "To what extent do you believe that this leader is a better performer) and four items measured leader warmth (e.g. "To what extent do you believe that this leader is likeable"). All items were measured on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). These subscales were separated in analysis so that higher scores in the competency subscale indicated higher competence and higher scores in the warmth subscale indicated higher warmth.

Leadership effectiveness

To understand whether participants thought the leader they interacted with in the chatroom was an effective leader, they were asked to complete a three-item measure of leader effectiveness (Randsley de Moura et al., 2018). An example of one of the items was "How likely do you think it is that this leader will succeed in their position?" and participants answered on a seven-point Likert scale (1 = *not at all* to 7 = *very much*). Higher scores indicated higher ratings of perceived leadership effectiveness.

Willingness to work with the leader

To assess whether participants would want to work with their leader from the chatroom in the future, a single binary question was asked. Participants were simply asked to indicated whether they would be willing to work with this leader in the future by responding yes or no.

Results

Pilot Tests

Leader Age

A pilot study was run with 54 participants. The pictures were pilot tested and the results confirmed that there was a main effect of candidate age, $F(1, 55) = 365.54$, $p < .001$, $\eta^2 = .87$, with the older candidate perceived as older ($M = 6.20$, $SE = 0.11$) than the younger candidate ($M = 2.34$, $SE = 0.13$)[5].

Leadership Style

A pilot study was run with 36 participants where participants viewed either the positive of negative leader and gave ratings on this leader and scenario on 7-point Likert scale which judged the positivity and how easy it is to think of a real-life example of the leader and the realism, believability of the scenario. The results from the pilot confirmed that the leader in the positive leader condition was perceived as significantly more positive ($M = 6.11$, $SD = 1.08$) than the leader in the negative leader ($M = 2.56$, $SD = 1.15$) condition ($t(34) = 9.57$, $p < .001$, Cohen's $d = -3.19$ (95% CI for Cohen's *d:* -4.17, -2.20)). Moreover, there was no significant differences in terms of how easy it was to think of a real-life example of this type of leader ($t(34) = -1.15$, $p = .26$), how realistic ($t(34) = 0.36$, $p = .72$) and how believable the interaction was between the leader and follower ($t(34) = 0.25$, $p = .81$).

[5] The pilot test also investigated differences between the photographs in terms of familiarity and attractiveness and there was a difference between the younger and older candidate. The younger photo was viewed as more familiar and attractive than the older photo. This was not controlled for Study 2 but is addressed in the discussion.

Independent Samples t-test Results

To examine the influence of leadership style on employee wellbeing outcomes, independent samples t-tests were conducted with the general wellbeing, perceived stress scale and stress arousal outcomes.

General Wellbeing

The results showed there was a significant difference in wellbeing between positive and negative leaders conditions ($t(269) = -4.83$, $p < .001$, Cohen's $d = 0.54$, (95% CI for Cohen's *d:* -0.83, -0.34) with wellbeing higher for positive leaders ($M = 2.47$, $SD = 0.56$) than negative leaders ($M = 2.16$, $SD = 0.53$).

Stress

Stress Arousal. The results showed there was a significant difference in stress arousal between positive and negative leaders conditions ($t(269) = 4.76$, $p < .001$, Cohen's $d = 1.11$, (95% CI for Cohen's *d:* 0.34, 0.82) with higher stress arousal for negative leaders ($M = 3.81$, $SD = 1.15$) than positive leaders ($M = 3.17$, $SD = 1.06$).

Perceived Stress Scale. The results showed there was a significant difference in perceived stress between positive and negative leaders conditions ($t(269) = 3.13$, $p < .001$, Cohen's $d = 1.48$, (95% CI for Cohen's *d:* 0.14, 0.62) with higher perceived stress for negative leaders ($M = 3.66$, $SD = 1.53$) than positive leaders ($M = 3.10$, $SD = 1.43$).

2x2 ANOVA Results

General Wellbeing

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 2.49$, $MSE = 0.29$, $p = .12$, $\eta^2 = .01$**.** Similarly, there was not a significant main effect of leader age, $F(1, 267) = 0.65$, $MSE = 0.29$, $p = .42$, $\eta^2 = .002$**.** However, there was a significant main effect of leadership style, $F(1, 267) = 23.71$, $MSE = 0.29$, $p < .001$, $\eta^2 = .08$. Participants who interacted with the positive leader reported higher levels of wellbeing than

participants who interacted with the negative leader (See Table 4 for means and standard deviations for each condition).

Stress

Stress Arousal Checklist. There was not a significant interaction between leader age and leadership style, $F(1, 267) = 2.37$, $MSE = 1.21$, $p = .13$, $\eta^2 = .01$. Also, there was not a significant main effect of leader age, $F(1, 267) = 2.26$, $MSE = 1.21$, $p = .13$, $\eta^2 = .01$. However, there was a significant main effect of leadership style, $F(1, 267) = 23.28$, $MSE = 1.21$, $p < .001$, $\eta^2 = .08$. Participants who interacted with the negative leader reported higher levels of stress arousal than participants who interacted with the positive leader.

Perceived Stress Scale. There was not a significant main effect of leader age, $F(1, 267) = 0.79$, $MSE = 2.16$, $p = .38$, $\eta^2 = .003$. There was a significant main effect of leadership style, $F(1, 267) = 10.18$, $MSE = 2.16$, $p = .002$, $\eta^2 = .04$. Participants who interacted with the negative leader reported higher perceived stress than participants who interacted with the positive leader. This significant main effect was qualified by a significant interaction between leader age and leadership style, $F(1, 267) = 5.14$, $MSE = 2.16$, $p = .02$, $\eta^2 = .02$. Simple effects analysis showed that there was a significant effect of leader age in the negative leadership style condition, $F(1, 267) = 4.85$, $MSE = 2.16$, $p = .03$, $\eta^2 = .02$. This shows that in the negative leadership style condition, participants who interacted with a young negative leader ($M = 3.95$, $SE = .18$) reported being significantly more stressed than participants who interacted with an old negative leader ($M = 3.39$, $SE = .18$). Simple effects demonstrated that there was no significant effect of leader age in the positive leadership style condition, $F(1, 267) = 0.98$, $MSE = 2.16$, $p = .32$, $\eta^2 = .004$. Simple effects showed that there was a significant effect of leadership style, in the young leader condition, $F(1, 267) = 14.71$, $MSE = 2.16$, $p < .001$, $\eta^2 = .05$. This shows that in the young leader condition, participants who interacted with the negative leader ($M = 3.95$, $SE = .18$) reported being significantly more

stressed that participants who interacted with the positive leader (*M* = 2.98, *SE* = .18). There was no significant effect of leadership style in the old leader condition, $F(1, 267) = 0.43$, $MSE = 2.16$, $p = .51$, $\eta^2 = .002$.

Identification with the leader

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 0.49$, $MSE = 1.22$, $p = .48$, $\eta^2 = .002$. Similarly, there was not a significant main effect of leader age, $F(1, 267) = 0.34$, $MSE = 1.22$, $p = .56$, $\eta^2 = .001$. However, there was a significant main effect of leadership style, $F(1, 267) = 163.39$, $MSE = 1.22$, $p < .001$, $\eta^2 = .38$. Participants who interacted with the positive leader reported higher identification with the leader than participants who interacted with the negative leader.

Identification with the Ingroup

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 1.35$, $MSE = 1.57$, $p = .25$, $\eta^2 = .005$**.** Also, there was not a significant main effect of leader age, $F(1, 267) = 1.22$, $MSE = 1.57$, $p = .27$, $\eta^2 = .005$. However, there was a significant main effect of leadership style, $F(1, 267) = 3.89$, $MSE = 1.57$, $p = .05$, $\eta^2 = .01$. Participants who interacted with the positive leader showed higher identification with the School of Psychology than participants who interacted with the negative leader.

Leadership Potential

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 0.17$, $MSE = 1.38$, $p = .68$, $\eta^2 = .00$. Similarly, there was not a significant main effect of leader age, $F(1, 267) = 0.04$, $MSE = 1.38$, $p = .85$, $\eta^2 < .001$. However, there was a significant main effect of leadership style, $F(1, 267) = 169.18$, $MSE = 1.38$, $p < .001$, $\eta^2 = .39$. The positive leader was rated as having more leadership potential than the negative leader.

Leader Competency

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 0.54$, $MSE = 1.09$, $p = .46$, $\eta^2 = .002$. Similarly, there was not a significant main effect of leader age, $F(1, 267) = 0.01$, $MSE = 1.09$, $p = .92$, $\eta^2 < .001$. However, there was a significant main effect of leadership style, $F(1, 267) = 87.58$, $MSE = 1.09$, $p < .001$, $\eta^2 = .25$. The positive leader was rated as being more competent than the negative leader.

Leader Warmth

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 0.19$, $MSE = 1.09$, $p = .66$, $\eta^2 = .001$. However, there was a significant main effect of leader age, $F(1, 267) = 6.80$, $MSE = 1.09$, $p = .01$, $\eta^2 = .03$. The younger leader was rated as warmer than the older leader. Also, there was a significant main effect of leadership style, $F(1, 267) = 521.42$, $MSE = 1.09$, $p < .001$, $\eta^2 = .66$. The positive leader was rated as warmer than the negative leader.

Leader Effectiveness

There was not a significant interaction between leader age and leadership style, $F(1, 267) = 0.23$, $MSE = 1.37$, $p = .62$, $\eta^2 = .001$. Also, there was not a significant main effect of leader age, $F(1, 267) = 0.51$, $MSE = 1.37$, $p = .47$, $\eta^2 = .002$. However, there was a significant main effect of leadership style, $F(1, 267) = 185.27$, $MSE = 1.37$, $p < .001$, $\eta^2 = .41$. The positive leader was rated as being more effective than the negative leader.

Willing to Work with the Leader

The chi-square test of the association of leader age with participants' willingness to work with them again was also non-significant, $\chi^2 (1, N = 271) = 0.01$, $p = .94$. The chi-square test of the association of leadership style with participants' willingness to work with them again was also significant, $\chi^2 (1, N = 271) = 102.99$, $p < .001$. Participants were more likely to say yes to working again with the positive leader (79.59%) than the negative leader (20.41%).

Table 4

Means and Standard Errors per condition and Cronbach Alphas (Study 2)

	Reliability	Leader Age		Leadership Style	
		Young	Old	Positive	Negative
General Wellbeing	.73	2.29	2.34	2.48	2.15
		(0.05)	(0.05)	(0.05) ***	(0.05) ***
Stress arousal	.95	3.60	3.40	3.18	3.82
		(0.10)	(0.09)	(0.09) ***	(0.10) ***
Perceived stress	*r* = .51	3.47	3.31	3.10	3.67
		(0.13)	(0.13)	(0.13) **	(0.13) **
Leader identification	.96	3.48	3.56	4.37	2.66
		(0.10)	(0.09)	(0.09) ***	(0.10) ***
Identification with the ingroup	.85	5.43	5.57	5.63	5.37
		(0.09)	(0.09)	(0.09) *	(0.09) *
Leadership Potential	.97	4.48	4.45	5.39	3.53
		(0.10)	(0.10)	(0.10) ***	(0.10) ***
Leader Competency	.89	4.73	4.74	5.33	4.14
		(0.09)	(0.09)	(0.09) ***	(0.09) ***
Leader Warmth	.98	4.12	3.79	5.40	2.50
		(0.09)*	(0.09) *	(0.09) ***	(0.09) ***
Leader Effectiveness	.96	4.24	4.13	5.15	3.22
		(0.10)	(0.10)	(0.10) ***	(0.10) ***

Notes. Standard errors in brackets. # p < .10, * p < .05, ** p < .01, *** p < .001

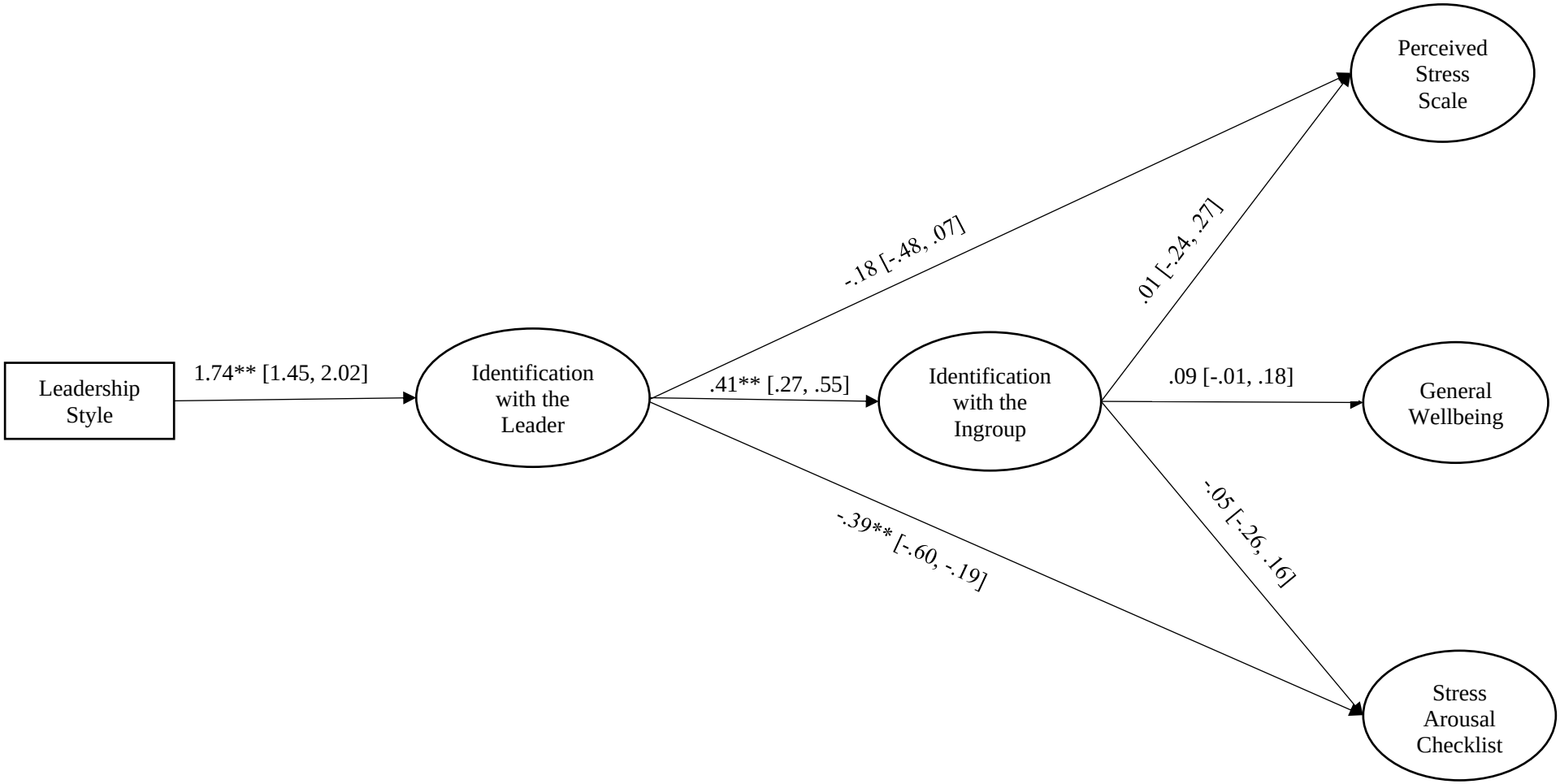
Mediation Analysis

To test the process through which leadership style is associated with wellbeing and stress (perceived stress scale and the stress arousal checklist), SEM models using latent variables in AMOS (IBM SPSS Amos 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps; see Figure 4) were conducted. A serial mediation was tested whereby positive leadership is associated with higher identification with the leader which is then associated with higher levels of organisational identification, which in turn is associated with higher wellbeing and lower workplace stress. The chi-square of the model fit was significant, $\chi 2$ (618, N= 271) = 2509.87, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 4.06. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary

criteria for model fit. Moreover, the CFI of the model was .76 and the RMSEA was .11. The model fit statistics do not indicate a good level of fit so while the indirect effects will be tested, the results will be interpreted with caution. The direct effects showed that leadership style was significantly positively associated with identification with the leader. Identification with the leader was significantly positively associated with identification with the ingroup. Identification with the leader was significantly negatively associated with stress arousal but was not significantly associated with perceived stress scale. Identification with the ingroup was not significantly associated with perceived stress, stress arousal or general wellbeing. Moreover, the direct effects of leadership style on wellbeing (b = .12, SE = .13, $95CI$[-.13, .38], p = .35), perceived stress scale (b = -.29, SE = .30, $95CI$[-.84, .36], p = .32), and stress arousal (b = -.08, SE = .23, $95CI$[-.53, .37], p = .72) were not significant (see Figure 4 for other direct effects and Table 5 for indirect effects).

Figure 4

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model (Study 2).



Notes. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$; Leadership Style coded as 0 = Negative Leadership, 1 = Positive Leadership

Table 5

Summary of Indirect Effects for each of the Paths (Study 2)

Path	Indirect effect
Leadership style > Identification with the Leader > Identification with the Ingroup > General Wellbeing	*b* = .06, *SE* = .04, *95CI*[-.003, .15], *p* = .06
Leadership style > Identification with the Leader > General Wellbeing	*b* = .36, *SE* = .10, *95CI*[.16, .56], *p* = .001
Leadership style > Identification with the Ingroup > General Wellbeing	*b* = -.04, *SE* = .03, *95CI*[-.11, .00], *p* = ..05
Leadership style > Identification with the Leader > Identification with the Ingroup > Perceived Stress Scale	*b* = .01, *SE* = .09, *95CI*[-.17, .20], *p* = .94
Leadership style > Identification with the Leader > Perceived Stress Scale	*b* = -.32, *SE* = .247, *95CI*[-.84, -.12], *p* = .16
Leadership style > Identification with the Ingroup > Perceived Stress Scale	*b* = -.003, *SE* = .06, *95CI*[-.14, .11], *p* = .92
Leadership style > Identification with the Leader > Identification with the Ingroup > Stress Arousal Checklist	*b* = -.03, *SE* = .08, *95CI*[-.19, .13], *p* = .62
Leadership style > Identification with the Leader > Stress Arousal Checklist	*b* = -.68, *SE* = .19, *95CI*[-.1.06, -.33], *p* = .001
Leadership style > Identification with the Ingroup > Stress Arousal Checklist	*b* = .02, *SE* = .05, *95CI*[-.07, .14], *p* = .51
Identification with the Leader > Identification with the Ingroup > General Wellbeing	*b* = .04, *SE* = .02, *95CI*[-.003, .08], *p* = .07
Identification with the Leader > Identification with the Ingroup > Perceived Stress Scale	*b* = .003, *SE* = .05, *95CI*[-.10, .12], *p* = .95
Identification with the Leader > Identification with the Ingroup > Stress Arousal Checklist	*b* = -.02, *SE* = .04, *95CI*[-.11, .07], *p* = .62

Notes. Bootstrap confidence bias-corrected method was used. Coefficients are unstandardized.

Discussion

Consistent with *Hypothesis 1*, participants who interacted with the positive leader reported higher levels of wellbeing, lower stress levels (on both the stress arousal checklist and perceived stress scale), higher identification with the leader and higher identification with their ingroup than those who interacted with the negative leader. This is also consistent with previous research (e.g. Kelloway et al., 2013; Marsh et al., in prep) and the findings from *Chapter 2*. Extending from previous research and examining the influence of leadership style on evaluations of leaders, the results are also consistent with *Hypothesis 1*. The positive leader was rated as having more leadership potential, being more competent, being warmer, and being more effective than the negative leader. Moreover, participants were more willing to work with the positive leader again compared to the negative leader. These findings are in line with previous research which suggests that leadership behaviours can influence evaluations of leaders (Abrell et al., 2011; Lewis, 2000; Walumbwa et al., 2004). It also suggests that positive leaders are subject to better leadership evaluations more generally than negative leaders.

The findings were also partially consistent with Hypothesis 2. On the one hand, both identification with the leader and organisational identification did individually mediate the relationship between leadership style and general wellbeing outcome. The findings with the stress arousal outcome was also consistent with previous research (Marsh et al., in prep) and findings from the previous chapter (*Chapter 2*) but using different measures of stress for a student sample. On the other hand, the relationship between positive leadership and the perceived stress outcome was not significantly mediated by any of the identification variables. The model fit statistics were not good so the results need to be interpreted with caution.

Contrary to *Hypothesis 3*, there was only one significant main effect of leader age. And the finding that the younger leader was perceived as significantly warmer than the older leader is in contradiction to previous research on the stereotype content model (Fiske et al., 2002). On the whole, the results did not suggest that there was a pro-youth bias in terms of leader evaluations as there was no significant difference in competency, leadership potential, leader effectiveness or willingness to work the leader in the future dependent on the age of the leader. This also contradicts previous research which highlighted age differences in selection and perceptions of leadership potential (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015).

Additionally, the results did not support *Hypothesis 4*, there was no significant interaction effect for any of the leader evaluations (i.e. leadership potential, leader effectiveness, competency, warmth or willingness to work with the leader in the future) or identification with the leader. These findings were also inconsistent with research which has demonstrated differences in leadership styles displayed by older and younger leaders (e.g. Korac-Kakabadse et al., 1998; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988). However, this research did not examine perceptions of leaders displaying these leadership styles so while it is possible that older leaders prefer to display a collaborative, relational leadership style, this might not influence the perceptions of them as leaders. These results suggest that age of the leader does not limit the positive effects of positive leaders. A leader of any age can successfully enact a positive leadership style and this will lead to improved wellbeing, positive leaders evaluations and an increased willingness to work with the leader again.

A potential explanation for not finding any differences in terms of the leader age and the interaction between leadership style and leader age could be due to limitations of the manipulation. While participants were shown the image as a profile picture throughout the

chatroom, these were small. The focus was also on reading the incoming messages from the leader and responding which drew more attention to the leadership style manipulation than the leader age manipulation. Moreover, the significant difference in attractiveness and familiarity between the older and younger photos in the pilot were not accounted for in the main study which could have influenced the results. Therefore, to address these concerns in *Study 3*, the profile pictures of the leaders are going to be larger, the participants will be shown a brief bio of the leader which includes their date of birth before entering the chatroom and the profile picture will appear in the centre of the screen to let participants know who they are paired with before entering the chatroom. Also, the photos will be changed and repiloted.

Study 3: Investigating the Interaction of Leader Age, Leader Gender and Positive Leadership on Employee Wellbeing and Evaluations of the Leader

As previously shown in the findings in *Study 2* there was a main effect of leadership style and the mediation results supported previous findings (Marsh et al., in prep; *Chapter 2*). These effects will be tested again in *Study 3* and due to the limitations of the age manipulations, age of the leader will be examined again. Therefore, *Hypotheses 1* to *4* will be tested again in this study.

As highlighted previously, gender is another important demographic characteristic which can influence perceptions of leaders (Eagly & Karau, 2002) and there is also evidence for gender differences in leadership styles (Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Zenger & Folkman, 2019). This means that it is reasonable to expect that positive leadership may be more congruent with female leaders, and whether that has an influence on evaluations of those leaders. For example, Eagly and Johnson's (1990) meta-analysis demonstrated that females are more inclined to take on a more interpersonally focused (i.e. democratic, participative style of leadership) whereas males were more inclined

to take on a more task focused (i.e. autocratic style). Other research has supported this as participants who viewed leaders displaying communal qualities and more interpersonally oriented leadership style identified them as female and those who viewed leaders displaying agentic characteristics and a more task-oriented leadership style identified them as male (Embry et al., 2008). Taking into consideration these findings on gender differences in leadership styles adopted, and the consideration that positive leadership (Cameron, 2012; 2013) is a more relational style of leadership, it is possible that displaying this leadership style would be more consistent with what is stereotypically expected of female leaders than male leaders.

There have also been several calls (e.g. Cole, 2009; Else-Quest & Hyde, 2016; Goff & Kahn, 2013) for more research to take an intersectional approach (i.e. where we examine the interconnected nature of social categorisations) to enrich our understanding of how simultaneous memberships have an influence on inequalities and power relations especially using quantitative methods. For example, research investigating leadership potential has demonstrated intersectional effects when examining gender and age (Tresh et al., 2019). Tresh and colleagues (2019) showed that younger women were less affected by gender stereotypes than older women. This highlights the importance of considering both age and gender of the leader to examine the impact of multiple social categories, and therefore *Study 3* will examine gender of the leader as well as age of the leader, and it is hypothesised[6]:

> **Hypothesis 5:** There will be a main effect of leader gender, such that those who encounter a male leader will have higher identification with the leader, lower organisational identification, better leader evaluations (i.e. higher leadership potential

[6] This study was pre-registered on the Open Science Framework (https://osf.io/z2q5k). Similar to Study 2, there were additional hypotheses in the pre-registration but these were a result of a collaboration between researchers and were not the focus of this thesis.

and more effective), and will be more willing to work with them than those who encounter a female leader. Male leaders will also be evaluated as more competent and agentic than female leaders and female leaders will be seen as more warm and communal than male leaders.

Hypothesis 6: There will be an interaction between leadership style and leader gender on wellbeing, stress, identification with the leader, leader evaluations (i.e. leadership potential and effectiveness), leader stereotype endorsement (i.e. warmth, competence, communality and agency) and willingness to work with the leader.

Hypothesis 7: There will be an interaction between leadership style, leader gender and leader age on wellbeing, stress, identification with the leader, leader evaluations (i.e. leadership potential and effectiveness), stereotype endorsement (i.e. warmth, competence, communality and agency) and willingness to work with the leader.

Method

Participants and Design[7]

Two hundred and twenty eight UK Psychology university students took part in the study as part of a course requirement. Eight participants were excluded as they failed the attention checks leaving 220 participants in the final analysis (177 female, 42 male, 1 transgender). Participants were aged between 18 and 46 years old (M = 19.06, SD = 2.06). The study employed a 2 (leadership style: positive *vs.* negative) x 2 (leader age: young *vs.* old) x 2 (leader gender: male *vs* female) between participants design.

Manipulations

Leader Age Manipulation

Similar to *Study 2*, the age of the leader was manipulated using profile pictures but these pictures were different from the ones used in *Study 2*. The photos were people from the

[7] Study 3 was conducted pre-COVID in February 2020.

same race and from two different ages and were from the same face database (Minear & Park, 2004). To make the manipulation more obvious to the participant, the pictures of the leaders were shown first before entering the chatroom with a message reading "You have now connected. About to enter to chat room, please wait". This was to address a potential limitation of *Study 2* and increase the chance that the participants noticed the leader by showing a larger picture of the leader initially and then continuing to use the same picture with the leader responses. The leader age was also made more salient by adding the date of birth with the initial leader information.

Leader Gender Manipulation

The gender of the leader was also manipulated using profile pictures. In this study we had two different female leaders from different ages and two different male leaders from different ages. The photos were from the same face database used in *Study 2* (Minear & Park, 2004) and were from the same race (see Appendix C for the four images used for leader profiles).

Leadership Style Manipulation

The same manipulation was used as in *Study 2* to manipulation leadership style.

Measures

Attractiveness and Familiarity of the Leader

To control for other extraneous variables which may account for preferences of leaders, attractiveness and familiarity were measured. These were both measured on a seven-point Likert scale where participants responded their agreement (1 = *strongly disagree* to 7 = *strongly agree*) to the extent they thought the leader presented in the chatroom looked attractive or familiar.

Gender Stereotype Endorsement

To assess whether male or female leaders were subject to gender stereotypes, gender stereotype endorsement was measured using eight items. This measure is similar to scales from previous research (e.g. Tresh et al., 2019) and the gender stereotype descriptors were from the existing literature (e.g. Eagly & Karau, 2002; Ridgeway, 2011). Four items measured leader agency (e.g. "To what extent do you believe that this leader is dominant") and four items measured leader communality (e.g. "To what extent do you believe that this leader is nurturing"). All items were measured on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Similar to the age stereotype endorsement from Study 1, these subscales were separated in analysis so that higher scores in the agency subscales indicated higher agency and higher scores in the communality subscale indicated higher communality.

All other measures (i.e. general wellbeing, stress arousal checklist, perceived stress scale, identification with the leader, identification with the ingroup, age stereotype endorsement, leader effectiveness and willingness to work with the leader again) were the same as in *Study 2*. Some other measures were included as part of a wider collaborative research project but they are not the focus of this research project so are not included in this analysis. This study followed the same procedure as Study 2 and abided by the BPS Code of Ethics and Conduct (2021). The ethics application was approved by the University of Kent (Ethics ID: 202015830853856407).

Results

Pilot Results

The four photographs were pilot tested with a sample of 87 participants to check whether there were any significant differences in terms of ratings of attractiveness and familiarity. For attractiveness and familiarity participants were asked to rate the attractiveness

and familiarity on a seven-point Likert scale. They were also checked to see if they accurately depicted the correct experimental condition by asking participants to indicate whether the photograph they saw depicted a male or female, perceptions of age and youth on a seven-point scale (i.e. to what extent do you think they look older/look younger) and to indicate which age group the person in the photograph fell into (i.e. the age category options were 18-29; 30-39; 40-49; 50-59; 60-69; 70-79; and 80+).

Attractiveness

There was a significant difference in ratings of attractiveness dependent on age, $F(1, 83) = 5.30$, $p = .02$, $\eta^2 = .06$, with younger photograph ($M = 3.64$, $SE = 0.20$) being rated more attractive than the older photograph ($M = 2.99$, $SE = 0.20$). There was a significant difference dependent on gender, $F(1, 83) = 5.11$, $p = .03$, $\eta^2 = .06$, with female photograph ($M = 3.63$, $SE = 0.20$) being rated more attractive than the male photograph ($M = 2.99$, $SE = 0.20$). There was no significant interaction between age and gender of the photograph on attractiveness, $F(1, 83) = 0.10$, $p = .75$, $\eta^2 = .001$.

Familiarity

There was a significant difference in ratings of familiarity dependent on gender, $F(1, 83) = 4.40$, $p = .04$, $\eta^2 = .05$, with the male photograph ($M = 3.12$, $SE = 0.23$) rated as more familiar than the female photograph ($M = 2.45$, $SE = 0.22$). There was no significant difference dependent on age, $F(1, 83) = 0.20$, $p = .66$, $\eta^2 = .002$ and there was no significant interaction, $F(1, 83) = 0.08$, $p = .78$, $\eta^2 = .001$.

Perceptions of Age

There was a significant main effect of perceptions of older age between the age conditions, $F(1, 83) = 317.72$, $p < .001$, $\eta^2 = .82$, with older photographs ($M = 6.33$, $SE = 0.14$), being perceived as older than the younger photographs ($M = 2.51$, $SE = 0.14$). There was a marginally significant interaction between age and gender conditions, $F(1, 83) = 2.87$,

$p = .07$, $\eta^2 = .04$. There was a significant main effect of perceptions of younger age between the age conditions, $F(1, 83) = 449.55$, $p < .001$, $\eta^2 = .84$, with younger photographs ($M = 5.59$, $SE = 0.13$) being perceived as younger than the older photographs ($M = 1.69$, $SE = 0.13$).There was a significant interaction between age and gender conditions, $F(1, 83) = 17.14$, $p < .001$, $\eta^2 = .17$. Simple effects analysis showed that there was a significant effect of gender in the younger condition in perceptions of youth, $F(1, 83) = 17.58$, $p < .001$, $\eta^2 = .18$, with the young female photograph ($M = 6.14$, $SE = 0.19$) being perceived as younger than the young male photograph ($M = 5.05$, $SE = 0.18$). In terms of the age grouping manipulation check, a chi-square analysis which assessed the association of the age condition of the photographs and the perceptions of the age group showed a significant association, $\chi^2 (5, N = 87) = 83.13$, $p < .001$ with higher frequencies for the older age groups for the older photograph and higher frequencies for the younger age groups for the younger photograph. A chi-square examining gender association for the younger photographs only with age group showed a significant difference, $\chi^2 (1, N = 43) = 6.24$, $p < .01$, with higher frequencies in the 18-29 age group for the female leader than the 30-39 age group whereas the frequencies for these two age categories was even for the male photographs. There was no significant gender association for the older photographs only with age group, $\chi^2 (1, N = 44) = 3.10$, $p < .54$. While these results suggest a slight difference in the younger male and female photographs in terms of perceptions of age, in the main study, the leaders' date of birth will be show alongside the photographs. This explicitly tells the participants the actual age of the participant.

Perceptions of Sex

A chi-square test showed there was a significant association of gender condition with perceptions of sex, $\chi^2 (1, N = 80) = 61.55$, $p < .001$. Participants were more likely to perceive the male photograph as male (97.6%) and the female photograph as female (89.7%).

Main Analysis

Attractiveness Check

There was a significant effect of leader gender on perceived attractiveness, $F(1, 216) = 22.62$, $p < .001$, $\eta^2 = .10$. Female leaders were viewed as more attractive (M=3.60, SE=0.12) than male leaders (M=2.81, SE=0.12). There was a significant effect of leader age on perceived attractiveness, $F(1, 216) = 26.84$, $p < .001$, $\eta^2 = .11$. Younger leaders were viewed as more attractive (M=3.63, SE=0.12) than older leaders (M=2.77, SE= 0.12). There was no significant interaction between leader gender and leader age, $F(1, 216) = 2.31$, $p = .13$, $\eta^2 = .01$.

Familiarity Check

There was no significant effect of leader gender on perceived familiarity, $F(1, 216) = 1.93$, $p = .17$, $\eta^2 = .01$. There was a significant effect of leader age on perceived familiarity, $F(1, 216) = 10.56$, $p = .001$, $\eta^2 = .05$. Younger leaders were viewed as more familiar (M=3.15, SE= 0.14) than older leaders (M=2.48, SE= 0.15). There was no significant interaction between leader gender and leader age, $F(1, 216) = 1.03$, $p = .31$, $\eta^2 = .01$**.**

Hypothesis Testing

As a result attractiveness and familiarity were used as covariates in the ANOVAs (see Table 6 for means and standard errors by condition).

General Workplace Wellbeing

The results showed there was a significant main effect of leadership style on followers' wellbeing, $F(1, 202) = 30.22$, $p < .001$, $\eta^2 = .13$ such that there were higher levels of wellbeing for followers of positive leaders than followers of negative leaders. There was a marginal effect of leader gender on followers' wellbeing, $F(1, 202) = 3.16$, $p = .08$, $\eta^2 = .02$, such that there were higher levels of wellbeing for followers of male leaders than followers of female leaders. There was no effect of leader age on followers' wellbeing, $F(1, 202) = 0.03$, p

=.86, $\eta^2 < .001$. There was no interaction of leader gender and leader age, $F(1, 202) = 0.01$, p =.94, $\eta^2 < .001$, no interaction between leadership style and leader gender, $F(1, 202) = 1.96$, p =.16, $\eta^2 = .01$ and no interaction between leadership style and leader age, $F(1, 202) = 0.56$, p =.45, $\eta^2 = .003$. There was also no three-way interaction between leader gender, leader age and leadership style on followers' wellbeing, $F(1, 202) = 1.26$, p =.26, $\eta^2 = .01$.

Stress

Stress Arousal Scale. There was a significant effect of leadership style on followers' stress arousal, $F(1, 202) = 4.26$, p =.04, $\eta^2 = .02$ such that there were higher levels of stress for followers of negative leaders than followers of positive leaders. There was no main effect of leader gender, $F(1, 202) = 0.94$, p =.33, $\eta^2 = .01$, or leader age, $F(1, 202) = 0.02$, p =.90, $\eta^2 < .001$ on followers' stress arousal. There was no interaction between leader gender and leader age, $F(1, 202) = 0.01$, p =.93, $\eta^2 < .001$, or between leadership style and leader gender, $F(1, 202) = 0.04$, p =.84, $\eta^2 < .001$ and no significant interaction between leadership style and leader age, $F(1, 202) = 2.67$, p =.10, $\eta^2 = .01$, on followers' stress arousal. There was no three-way interaction between leader gender, leader age and leadership style on followers' stress arousal, $F(1, 202) = 0.60$, p =.44, $\eta^2 = .003$.

Perceived Stress Scale. There was a significant interaction between leader age and leadership style on followers' perceived stress, $F(1, 202) = 3.89$, p =.05, $\eta^2 = .02$. Analysis of the simple effects revealed a significant effect of leader age within the positive leadership style condition, $F(1, 202) = 6.31$, p =.01, $\eta^2 = .03$, so that perceived stress was higher for followers with an old positive leader (M = 3.14, SE = 0.21) than of a young positive leader (M = 2.78, SE = 0.22). The simple main effects showed no significant effect of age within the negative leadership style condition, $F(1, 202) = 0.09$, p =.77, $\eta^2 < .001$, or significant effect of leadership style within the young leader condition, $F(1, 202) = 2.42$, p =.12, $\eta^2 = .01$, or within the old leader condition, $F(1, 202) = 1.42$, p =.24, $\eta^2 = .01$. There was no main effect

of leader gender, $F(1, 202) = 0.13$, $p = .72$, $\eta^2 = .001$ or leader age, $F(1, 202) = 2.09$, $p = .15$, $\eta^2 < .001$, or leadership style, $F(1, 202) = 0.05$, $p = .83$, $\eta^2 < .001$ on followers' perceived stress. There was no interaction between leader gender and leader age, $F(1, 202) = 0.44$, $p = .51$, $\eta^2 = .002$, or leadership style and leader gender, $F(1, 202) = 1.47$, $p = .23$, $\eta^2 = .01$, on followers' perceived stress. There was no three-way interaction between leader gender, leader age and leadership style on followers' perceived stress, $F(1, 202) = 0.21$, $p = .65$, $\eta^2 = .001$.

Identification with the Leader

There was a significant main effect of leadership style on identification with the leader, $F(1, 202) = 148.13$, $p < .001$, $\eta^2 = .42$ such that there were higher levels of leader identification for followers of positive leaders than followers of negative leaders. The results indicated that there was no main effect of leader gender, $F(1, 202) = 2.21$, $p = .14$, $\eta^2 = .01$ or leader age, $F(1, 202) = 0.61$, $p = .44$, $\eta^2 = .003$ on identification with the leader. There was no significant interactions between leader gender and leader age, $F(1, 202) = 0.91$, $p = .34$, $\eta^2 = .004$, or between leadership style and leader gender, $F(1, 202) = 1.17$, $p = .28$, $\eta^2 = .01$ and between leadership style and leader age, $F(1, 202) = 0.21$, $p = .65$, $\eta^2 = .001$, on followers' identification with the leader. There was no three-way interaction between leader gender, leader age and leadership style on identification with the leader, $F(1, 202) = 0.38$, $p = .54$, $\eta^2 = .002$.

Identification with the Ingroup

There was a marginal main effect of leadership style on identification with the ingroup, $F(1, 202) = 3.05$, $p = .08$, $\eta^2 = .02$ so that identification with the School of Psychology (i.e. the ingroup) was higher for those who interacted with the positive leader than those who interacted with the negative leader. There was no main effect of leader gender, $F(1, 202) = 0.19$, $p = .66$, $\eta^2 = .001$ or leader age, $F(1, 202) = 0.95$, $p = .33$, $\eta^2 = .01$ on identification with the ingroup. There was no interaction between leader gender and leader

age, $F(1, 202) = 0.02$, $p = .90$, $\eta^2 < .001$, or between leadership style and leader gender, $F(1, 202) = 0.05$, $p = .83$, $\eta^2 < .001$ or between leadership style and leader age, $F(1, 202) = 0.03$, $p = .86$, $\eta^2 < .001$ on identification with the ingroup. There was no three-way interaction between leader gender, leader age and leadership style, $F(1, 202) = 0.01$, $p = .93$, $\eta^2 < .001$.

Leadership Potential

There was a significant main effect of leadership style on leadership potential, $F(1, 202) = 118.58$, $p < .001$, $\eta^2 = .37$, so that there were higher levels of perceived leadership potential for followers of positive leaders than followers of negative leaders. There was no main effect of leader gender, $F(1, 202) = 0.28$, $p = .60$, $\eta^2 = .001$ or leader age, $F(1, 202) = 2.28$, $p = .13$, $\eta^2 = .01$ on leadership potential. There was no significant interaction between leader gender and leader age, $F(1, 202) = 0.02$, $p = .89$, $\eta^2 < .001$, or between leadership style and leader gender, $F(1, 202) = 0.01$, $p = .98$, $\eta^2 < .001$, or between leadership style and leader age, $F(1, 202) = 1.42$, $p = .24$, $\eta^2 = .01$ on perceptions of leadership potential. There was no three-way interaction between leader gender, leader age and leadership style on perceived leadership potential, $F(1, 202) = 0.37$, $p = .54$, $\eta^2 = .002$.

Stereotype Endorsement

Warmth. There was a significant main effect of leadership style, $F(1, 202) = 469.61$, $p < .001$, $\eta^2 = .70$ so that positive leaders were perceived as warmer than negative leaders. There was marginal main effect of leader age on perceived warmth, $F(1, 202) = 3.14$, $p = .08$, $\eta^2 = .02$, such that younger leaders were rated as warmer than older leaders. There was no main effect of leader gender on perceived warmth, $F(1, 202) = 0.30$, $p = .59$, $\eta^2 = .001$. There was no significant interaction between leader gender and leader age on perceived warmth, $F(1, 202) = 2.80$, $p = .10$, $\eta^2 = .01$, or between leadership style and leader gender, $F(1, 202) = 1.69$, $p = .20$, $\eta^2 = .01$ or between leadership style and leader age, $F(1, 202) = 0.06$, $p = .81$, $\eta^2 < .001$ on perceptions of warmth. There was no significant three-way interaction between

leader gender, leader age and leadership style on perceived warmth, $F(1, 202) = 2.43$, $p = .12$, $\eta^2 = .01$.

Competence. There was a significant main effect of leadership style, $F(1, 202) = 52.68$, $p < .001$, $\eta^2 = .21$ such that positive leaders were perceived as more competent than negative leaders. There was no significant main effects of leader gender, $F(1, 202) = 0.87$, $p = .35$, $\eta^2 = .004$ or leader age, $F(1, 202) = 0.88$, $p = .35$, $\eta^2 = .004$ on perceptions of competence. There was no significant interactions between leader gender and leader age, $F(1, 202) = 1.74$, $p = .19$, $\eta^2 = .01$, or between leadership style and leader gender, $F(1, 202) = 0.56$, $p = .46$, $\eta^2 = .003$ or between leadership style and leader age, $F(1, 202) = 1.01$, $p = .32$, $\eta^2 = .01$ on perceptions of competence. There was no three-way interaction between leader gender, leader age and leadership style on perceived competence, $F(1, 202) = 0.27$, $p = .60$, $\eta^2 = .001$.

Agency. There was a significant main effect of leadership style on perceptions of agency, $F(1, 202) = 168.14$, $p < .001$, $\eta^2 = .45$ so that negative leaders were perceived as having more agency than positive leaders. There was a marginal main effect of leader gender on perceived agency, $F(1, 202) = 3.71$, $p = .06$, $\eta^2 = .02$ such that female leaders were viewed as having higher agency than male leaders. There was no significant main effect of leader age, $F(1, 202) = 0.06$, $p = .81$, $\eta^2 < .001$. There was no significant interactions between leader gender and leader age, $F(1, 202) = 0.58$, $p = .45$, $\eta^2 = .003$, or between leadership style and leader gender, $F(1, 202) = 1.96$, $p = .16$, $\eta^2 = .01$, or between leadership style and leader age, $F(1, 202) = 0.91$, $p = .34$, $\eta^2 = .01$. There was no significant three-way interaction between leadership style, leader gender and leader age on perceptions of leader agency, $F(1, 202) = 1.08$, $p = .30$, $\eta^2 = .01$.

Communality. There was a significant main effect of leadership style on perceived communality, $F(1, 202) = 406.86$, $p < .001$, $\eta^2 = .67$ so that positive leaders were perceived as

being more communal than negative leaders. There was a marginal effect of leader age on perceived communality, $F(1, 202) = 3.09$, $p = .08$, $\eta^2 = .02$ so that younger leaders were rated as more communal than older leaders. There was no main effect of leader gender on communality, $F(1, 202) = 0.60$, $p = .44$, $\eta^2 = .003$. There was no significant interactions between leader gender and leader age, $F(1, 202) = 1.74$, $p = .19$, $\eta^2 = .01$, or between leadership style and leader gender, $F(1, 202) = 0.05$, $p = .83$, $\eta^2 < .001$, or between leadership style and leader age, $F(1, 202) = 0.02$, $p = .90$, $\eta^2 < .001$. There was no significant three-way interaction between leadership style, leader age and leader gender on perceptions of leader communality, $F(1, 202) = 2.29$, $p = .13$, $\eta^2 = .01$.

Leader Effectiveness

The results indicated there was a significant main effect of leadership style, $F(1, 202) = 121.19$, $p < .001$, $\eta^2 = .38$, so that positive leaders were perceived as more effective than negative leaders. There was no significant main effect of leader gender, $F(1, 202) = 0.95$, $p = .33$, $\eta^2 = .01$ or leader age, $F(1, 202) = 0.21$, $p = .65$, $\eta^2 = .001$. There was no significant interactions between leader gender and leader age, $F(1, 202) = 0.002$, $p = .96$, $\eta^2 < .001$, or between leadership style and leader gender, $F(1, 202) < 0.001$, $p = .99$, $\eta^2 < .001$, or between leadership style and leader age, $F(1, 202) = 0.14$, $p = .71$, $\eta^2 = .001$. There was no three-way interaction between leader gender, leader age and leadership style on perceptions of leader effectiveness, $F(1, 202) = 0.60$, $p = .44$, $\eta^2 = .003$.

Willingness to Work with the Leader Again

Chi-Square analysis showed there was a significant association between leadership style and being willing to work that that leader again, $\chi^2 (1, N = 220) = 113.68$, $p < .001$ so that, participants were more likely to want to work with the positive leader (92%) again than the negative leader (19%). There was a significant association between leader age and leadership style, and being willing to work with that leader again, $\chi^2 (3, N = 220) = 119.12$, p

<.001, so participants were most likely to want to work with the young positive leader, then old positive, then old negative and least likely to want to work again with the young negative leader. There was a significant association between leader gender and leadership style, and being willing to work with that leader again, χ^2 (3, N = 220) = 118.77, p <.001, so participants were most likely to want to work with the male positive leader, followed by the female positive leader, then the male negative and least likely to want to work again with the female negative leader. There was no significant association between leader gender and being willing to work with the leader again, χ^2 (1, N = 220) = 0.90, p =.34 or between leader age and willingness to work with the leader age, χ^2 (1, N = 220) = 0.90, p =.34. There was no significant association between leader age and gender, and being willing to work with that leader again, χ^2 (3, N = 220) = 2.14, p =.54.

Table 6

Means and Standard Errors per condition and Scale Means and Cronbach Alphas (Study 3)

	Mean (SD)	Reliability	Leader Age		Leadership Gender		Leadership Style	
			Young	Old	Male	Female	Positive	Negative
General Wellbeing	2.32 (0.60)	.72	2.30 (0.05)	2.32 (0.06)	2.38 (0.05) #	2.24 (0.06) #	2.52 (0.05) ***	2.10 (0.06) ***
Stress arousal	3.03 (1.09)	.94	3.07 (0.11)	3.05 (0.11)	2.98 (0.11)	3.13 (0.11)	2.90 (0.10) *	3.22 (0.11) *
Perceived stress	2.79 (1.50)	r = .47	2.64 (0.15)	2.96 (0.16)	2.84 (0.15)	2.76 (0.15)	2.78 (0.14)	2.82 (0.16)
Leader identification	3.75 (1.44)	.96	3.60 (0.10)	3.72 (0.11)	3.55 (0.10)	3.77 (0.11)	4.57 (0.10) ***	2.75 (0.11) ***
Identification with School of Psychology	5.46 (1.11)	.89	5.54 (0.11)	5.39 (0.11)	5.43 (0.11)	5.50 (0.11)	5.60 (0.10) #	5.33 (0.11) #
Leadership Potential	4.78 (1.36)	.96	4.60 (0.10)	4.83 (0.11)	4.67 (0.10)	4.75 (0.11)	5.52 (0.10) ***	3.90 (0.11) ***
Leader Competency	4.95 (1.05)	.83	4.84 (0.09)	4.97 (0.10)	4.84 (0.09)	4.97 (0.10)	5.39 (0.09) ***	4.42 (0.10) ***
Leader Warmth	4.18 (1.75)	.97	3.91 (0.09) #	4.14 (0.09) #	4.06 (0.09)	3.99 (0.09)	5.42 (0.08) ***	2.63 (0.09) ***
Leader Communality	4.12 (1.55)	.91	3.90 (0.08) #	4.12 (0.09) #	3.96 (0.08)	4.06 (0.09)	5.25 (0.08) ***	2.77 (0.09) ***
Leader Agency	4.31 (1.17)	.74	4.40 (0.09)	4.43 (0.09)	4.29 (0.09) #	4.53 (0.09) #	3.61 (0.08) ***	5.22 (0.09) ***
Leader Effectiveness	4.33 (1.48)	.94	4.22 (0.11)	4.30 (0.12)	4.18 (0.11)	4.34 (0.12)	5.15 (0.11) ***	3.36 (0.12) ***

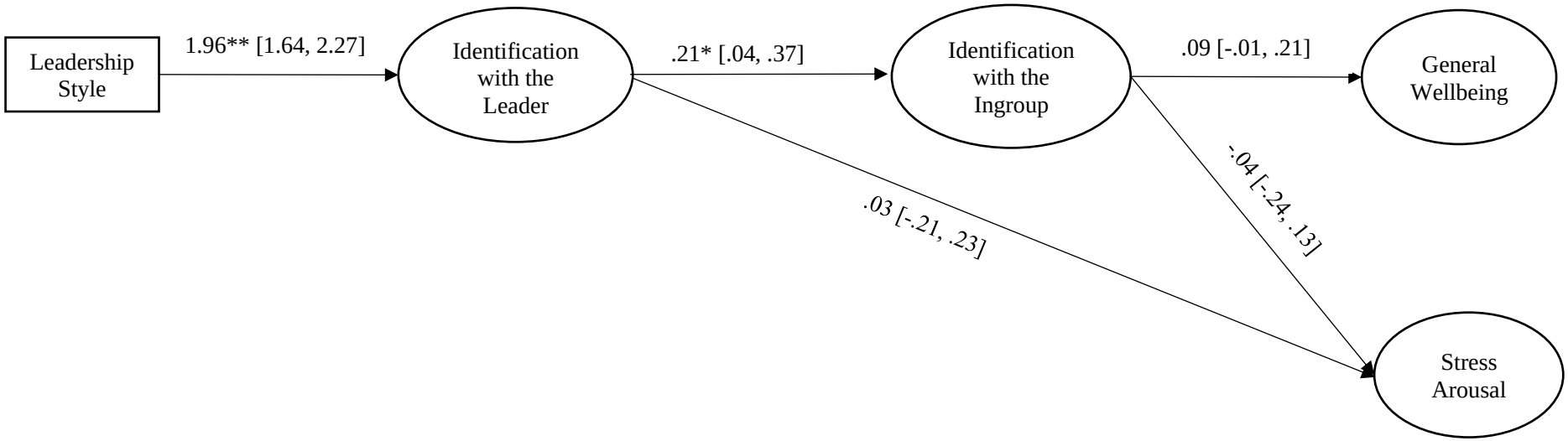
Notes. Standard errors in brackets. # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$, $N = 220$

Hypothesis Testing – Mediation Analysis

To test the process through which positive leadership is associated with increased wellbeing and decreased stress (perceived stress scale and the stress arousal checklist), SEM models using latent variables in AMOS (IBM SPSS Amos 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps; see Figure 5) were conducted. A serial mediation was tested whereby positive leadership is associated with higher identification with the leader which is then associated with higher levels of organisational identification, which in turn is associated with higher wellbeing and lower workplace stress. However, the iteration limit was reached due to a negative variance which meant to run the mediation analysis, the perceived stress scale variable had to be removed. For the remaining model, the chi-square of the model fit was significant, $\chi 2$ (552, N= 220) = 1575.94, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 2.85. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .82 and the RMSEA was .09. The direct effects shows that leadership style was significantly associated with identification with the leader, and identification with the leader was significantly associated with identification with the ingroup. But both identification with the leader and identification with the ingroup were not significantly associated with stress arousal or general wellbeing (see Figure 5 for direct effects and Table 7 for indirect effects). Additionally, the direct effect leadership style on stress arousal (*b* = -.37, *SE* = .30, *95CI*[-.95, .24], *p* = .22) and general wellbeing (*b* = .13, *SE* = .16, *95CI*[-.17, .45], *p* = .41) were not significant. Similar to Study 2, the model fit statistics do not indicate a good level of fit so while the indirect effects will be tested, the results will be interpreted with caution.

Figure 5

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model (Study 3)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$; Leadership Style was coded as 0 = Negative Leadership, 1 = Positive Leadership.

Table 7

Summary of Indirect Effects for each of the Paths (Study 3)

Path	Indirect effect
Leadership Style > Identification with the Leader > Identification with the Ingroup > General Wellbeing	β = .04, *SE* = .03, *95CI*[-.002, .12], *p* = .08
Leadership Style > Identification with the Leader > General Wellbeing	β = .52, *SE* = .13, *95CI*[.26, .79], *p* = .001
Leadership Style > Identification with the Ingroup > General Wellbeing	β = .002, *SE* = .02, *95CI*[-.04, .06], *p* = .74
Identification with the Leader > Identification with the Ingroup > General Workplace Wellbeing	β = .02, *SE* = .02, *95CI*[-.001, .06], *p* = .08
Leadership Style > Identification with the Leader > Identification with the Ingroup > Stress Arousal Checklist	β = -.02, *SE* = .04, *95CI*[-.12, .05], *p* = .55
Leadership Style > Identification with the Leader > Stress Arousal Checklist	β = .05, *SE* = .22, *95CI*[-.39, .46], *p* = .87
Leadership Style > Identification with the Ingroup > Stress Arousal Checklist	β = -.001, *SE* = .02, *95CI*[-.07, .04], *p* = .83
Identification with the Leader > Identification with the Ingroup > Stress Arousal Checklist	β = -.01, *SE* = .02, *95CI*[-.06, .03], *p* = .53

Notes. Bootstrap confidence bias-corrected method was used. Coefficients are unstandardized.

Discussion

The results mainly support *Hypothesis 1.* There were significant main effects of leadership style on all outcomes except for the perceived stress scale. The results showed that participants in the positive leadership condition reported having higher wellbeing, lower stress, higher identification with the leader and the ingroup. These findings are consistent with *Study 1, 2* and previous research (Marsh et al., in prep). Participants also perceived the positive leader as having higher leadership potential, higher warmth, competence, communality, effectiveness and more willing to work with them again than the negative leader. This is consistent with the findings from *Study 2*. However, the positive leader was perceived as having lower agency than the negative leader. Overall, this suggests that positive leaders benefit from better evaluations than negative leaders and it has been consistently shown they have a positive effect on wellbeing and stress.

The mediation analysis do not fully support *Hypothesis 2.* The results revealed that the relationship between positive leadership and general wellbeing through identification with the leader only. This is consistent with the mediation findings from *Study 2*. But none of the mediation paths were significant from the stress arousal outcome and is in contradiction with the findings from *Study 1* and *2.* While the leadership manipulation were pilot tested and accurately depicted either a positive or negative leader, the scenario presented to the participants was still hypothetical and it may not have been stressful enough to elicit stress in the participants. This is reflected in the overall mean for the stress measures in this study as they were quite low for this study. Moreover, as mentioned earlier, the model fit statistics were not good so the results should be interpreted with caution.

The results did not support *Hypothesis 3* and *5.* There were only a few marginally significant main effects of leader age and leader gender. Specifically, these results suggested a main effect of leader age on warmth and communality such that younger leaders were

perceived as warmer and more communal and a main effect of leader gender on agency so that female leaders are perceived as having higher agency. and these suggested differences are in contradiction to findings from previous research (e.g. Abrams et al., 2016; Eagly & Karau, 2002; Fiske et al., 2002; Steeden, 2021; Tresh et al., 2019). Based on the research from gender and age stereotypes, the results should reflect the opposite patterns as older leaders have been perceived as warmer and male leaders have been perceived as having higher agency. This could be due to the sample. The majority of the sample of female and of a younger demographic so they may have displayed an ingroup bias (Tajfel & Turner, 1986) or potentially this sample is skewed in their endorsement of stereotypes of leaders. Another potential limitation of the sample for *Study 2* and *3* is the use of student samples who have limited experience of work. This is a common limitation of experimental work in organisational research (Highhouse, 2009). This will be addressed in *Study 4* as the third experimental study of this chapter will use an employed sample from an online crowdsourcing site.

Hypothesis 4 was only supported in terms of the willingness to work with the leader again. The findings showed that there was a significant interaction between leadership style and gender of the leader so that participants want to work with a male positive leader the most, followed by female positive, then male negative and female negative. This demonstrates an overall preference for positive leadership but between the two genders, male leaders are preferred. Similarly, the results indicated that *Hypothesis 6* was only partially supported in terms of perceived stress and willingness to work with the leader again. There was a significant interaction between age of the leader and leadership style on perceived stress. This was clarified by a significant difference in the positive leader condition with the older positive leader inducing higher stress than the younger positive leader. In terms of willingness to work with the leader again, the interaction between leadership style and age of

the leader demonstrated that participants want to work with the young, positive leader the most, followed by old positive then old negative and young negative. Again, this indicates a preference for positive leadership but also demonstrates the importance of displaying this leadership style for young leaders. Finally, *Hypothesis* 7 was not supported as there was no significant three-way interactions.

Study 4: Investigating the Interaction between Leader Group Identity and Positive Leadership on Employee Wellbeing and Evaluations of the Leader

Overall, the results (i.e. *Study 2* and *3*) show strong support for adopting a positive leadership style as they tend to receive better evaluations and have a strong impact on wellbeing and stress. Moreover, the results did not provide much support for age (i.e. *Study 2* and *3*) or gender (i.e. *Study 3* only) differences impacting evaluations of leaders and leadership style was not considered suitable for only certain types of leaders. While there did not seem to be gender or age biases, some of the results of *Study 3* indicated a potential for in-group bias. Consequently, the success of leaders and acceptance of certain leadership styles may result more from them being an ingroup leader. This is the focus of *Study 4* of this chapter.

As proposed by Social Identity Theory (Tajfel & Turner, 1986), identification with groups becomes a key part of our identity (known as our social identity) and we strive to protect and maintain a positive social identity. One way of achieving this is to favour your own groups (i.e. ingroup) and denigrate other groups (i.e. outgroup). In addition, as a result of the process of social categorisation (Turner, 1985; Turner et al., 1987), we depersonalise individuals and judge them based on how well they fit the group prototype. Leader group prototypicality has been shown to impact assessments of leader effectiveness (Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006) and support for the leader (Platow & van Knippenberg, 2001; Ullrich et al., 2009). This highlights that leaders can

benefit from ingroup bias and receive better evaluations and increased likelihood of being endorsed if they are a member of the ingroup as opposed to the outgroup.

Research has also provided support for interaction effects between leadership styles or behaviours and leader group prototypicality (e.g., Geng, 2021; Gerpott et al., 2019; Li et al., 2022; van Knippenberg & van Knippenberg, 2005). For instance, van Knippenberg and van Knippenberg (2005) showed that the association between self-sacrificing leader behaviour and perceptions of leader effectiveness and performance was moderated by leader group prototypicality. Specifically, this association was stronger when leader prototypicality was low. Therefore, the current study aims to investigate the interaction between leadership style, specifically positive leadership and group membership on evaluations of leaders. Following from the previous two studies in this chapter (i.e. *Study 2* and *3*) and previous research findings (Marsh et al., in prep) we will be testing the main effect of positive leaders again (i.e. *Hypothesis 1*) and we will be testing the impact of group identification[8]:

Hypothesis 8: In-group leaders will have better evaluations and ratings of employee wellbeing than out-group leaders.

Hypothesis 9: There will be an interaction between group membership and leadership style such that positive, in-group leaders will have the best evaluations and ratings of employee wellbeing.

Method

Power Analysis

G-power was used to see how many participants were needed for the study. For the two-way ANOVA analysis, based on the conventional medium effect size (f = 0.25) and 80% power, G-power calculated a total sample size of 128 participants. To ensure that there are

[8] This study was pre-registered on the Open Science Framework (https://osf.io/gfn3m)

enough participants in case of any issues in data collection, the planned sample size was 165 participants.

Participants and Design

A hundred and sixty six participants completed the study and passed the attention check but three were excluded because there were not in either full-time or part-time employment. Only 148 of these participants passed the group membership manipulation check. Of the 148 participants, 25 were males, 122 were females, and one person who did not identify as female, male or transgender. The age of the sample ranged from 19 to 55 years old (M = 30.87, SD = 8.16). Ninety nine participants were in full-time employment and 49 were in part-time employment. Participants were recruited using the online crowdsourcing site Prolific and compensated for the time taken to complete the study (i.e. £1.50 for 15 minute study). The study employed a 2 (leadership style: positive *vs.* negative) x 2 (leader group membership: ingroup *vs* outgroup) between participants design.

Manipulations

Leadership Style Manipulation

Leadership style was manipulated by asking participants to review candidate information from a leadership award process and the employee ratings of the leaders differed in terms of leaderships style. Participants were randomly allocated to either the positive or negative leader conditions. The employee rating was manipulated by using five items from the positive leadership assessment scale (Cameron, 2012) and two sentences of brief comments from the employee. In the positive leader condition, the employee ratings on these items were high and the brief comments from the employee reflected a positive leader. In the negative leader condition, the employee ratings on these items were low and the brief comments from the employee reflected a negative leader (see Appendix D for these manipulations).

Group Membership Manipulation

A minimal groups paradigm was used using the Klee/Kandinsky manipulation (Tajfel, 1970) which has been used in previous research on group identity (e.g. Billig & Tajfel, 1973; Chakravarty & Fonseca, 2017; Petersen & Blank, 2003). Participants reviewed a series of pairs of pictures of art and indicated which of the two pictures they preferred. They are then told that this information can be used to indicate an individual's cognitive processing style. All participants are told their results indicate they are a bottom-up processor forming Group A when in fact cognitive processing style was not calculated. Group A forms the in-group for all participants. They are then randomly assigned to one of two group membership conditions where they are either told the leader they are reviewing is from Group A (in-group) or Group B (out-group).

Measures

Leadership Style Manipulation Check

Although the manipulations were pilot tested, we wanted to ensure that the manipulations were still working correctly. Therefore one item was included as a manipulation check asking participants to indicate how positive they thought the leader was on a scale of 1 to 7 (1 = *extremely negative* to 7 = *extremely positive*).

Group Membership Manipulation Check

Six questions were used to assess participants identification with the ingroup - Group A (e.g. "If someone criticises Group A, it would feel like a personal insult") which is measured on a six-point scale (1 = *strongly disagree* to 6 = *strongly agree).* An additional manipulation check was used at the end of the survey asking participants whether they identify as a bottom-up processor (Group A - ingroup) or a top-down processor (Group B - outgroup).

Job Satisfaction

Job Satisfaction was measured using the Brief Index of Affective Job Satisfaction from Thompson and Phua (2012). This includes four items (e.g., “I would find real enjoyment in my job”; 1 = *strongly disagree,* 5 = *strongly agree*). Participants were asked to think specifically about working for the leader presented in the scenario at the beginning of the study. Higher scores indicated higher job satisfaction (see Table 8 for mean, standard deviations and Cronbach alphas).

Job Appeal

A five item measures adapted from Gaucher et al. (2011) was used to measure job appeal (e.g. "I think I could enjoy working at this organization") and was measured on a seven-point scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicated higher job appeal.

Willingness to Endorse the Candidate

Four questions were used to assess the participants willingness to choose this candidate for the leadership award and recommend or encourage them for future awards (e.g. "Would you encourage Alex Smith to apply for the award again next year?"). All four questions were measured on a five-point Likert scale (1 = *definitely not* to 5 = *definitely yes*).

The same measures of General Wellbeing, Leadership Potential, Effectiveness of the Leader were used from *Study 3* and *Study 4*. Only one measure of stress was included in this study from *Study 3* and *Study 4* and this was the Perceived Stress Scale.

Procedure and Ethics [9]

Participants were asked to take part in a study investigating how people perceive their leaders and jobs. They were asked to imagine that they were on a panel deciding who will receive a leadership award. They were also told that they will experience one of the tests

[9] Study 4 was conducted during COVID in September 2021.

which the leaders were required to complete but this was the group-identity manipulation. Participants were also informed that their responses were anonymous and would only be available to the research team and that they were able to withdraw at any time during the study. Then participants gave informed consent and started the study. Participants were given some basic candidate information and then they completed the minimal groups paradigm and the first manipulation check. Then participants were reminded about some of the key candidate information and given the employee references which were the leadership style manipulation and completed the manipulation check. Participants were randomly allocated into one of four condition where they either reviewed candidate information from an in-group or out-group member and either a positive or negative leader. After, participants were asked to complete a series of measures and then completed the second group membership manipulation check. Finally participants completed some demographic questions and were thanked and debriefed. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 202116269389197253).

Results

Pilot Results for Leadership Style Manipulation

The leadership style manipulation was piloted tested with 20 participants to ensure that they indicated the correct conditions and the results indicated that the leader is the high positive leadership condition (M = 6.60, SE = 0.16) was significantly more positive than the leader in the low positive condition (M = 1.90, SE = 0.46), $t(18) = 9.66$, $p < .001$. The pilot results also showed there was no significant differences in how likely participants thought they would encounter a similar leader, $t(18) = 1.55$, $p = .14$, or whether they have ever encountered a leader like this, $t(18) = 0.91$, $p = .38$, or how believable, $t(18) = -0.26$, $p = .80$

or familiar the employee evaluation was, $t(18) = 1.20$, $p = .25$, dependent on the leadership style participant they viewed.

Main Analysis

Group Membership Manipulation Check

Fifteen participants were excluded from analysis because they identified with the outgroup in the explicit second manipulation check in the study. For the remaining participants, the first manipulation check showed that participants identified with the ingroup ($M = 3.78$, $SD = 0.76$) and this was significantly higher than the mid-point of the in-group identification scale, $t(147) = 4.42$, $p < .001$.

Leadership Style Manipulation Check

An independent samples t-test showed that the leader depicted in the high positive leadership manipulation ($M = 6.31$, $SD = 0.60$) was significantly more positive, $t(146) = 37.49$, $p < .001$ than the leader depicted in the low positive leadership manipulation ($M = 2.05$, $SD = 0.77$).

A series 2x2 between subjects ANOVAs (see Table 8 for means and standard errors by condition) was conducted to examine the effects of leadership style and group membership on indicators of employee wellbeing (i.e. general workplace wellbeing, job satisfaction and stress) and evaluations of leaders (i.e. job appeal, effectiveness of leader scale, leadership potential and willingness to endorse the candidate).

General Workplace Wellbeing

The results showed that there was a significant main effect of leadership style, $F(1, 144) = 455.90$, $MSE = 0.17$, $p < .001$, $\eta^2 = .76$, such that participants who saw the high positive leader perceived themselves as having higher levels of wellbeing when working for them than those who saw the low positive leader (see Table 8 for means and standard deviations). There was also a marginal main effect of group membership, $F(1, 144) = 3.52$,

MSE = 0.17, p = .06, η^2 = .02 such that participants who saw the ingroup leader (*vs.* outgroup leader) tended to self-report better wellbeing. The interaction between leadership style and group membership was not significant, $F(1, 144) = 0.05$, *MSE* = 0.17, p = .83, $\eta^2 < .001$

Job Satisfaction

The results indicated that there was a significant main effect of leadership style, $F(1, 144) = 442.12$, *MSE* = 0.33, $p < .001$, $\eta^2 = .75$, such that participants who saw the high positive leader perceived themselves as having higher levels of job satisfaction if they work for them than those who saw the low positive leader. There was no significant main effect of group membership, $F(1, 144) = 0.77$, *MSE* = 0.33, p = .38, η^2 = .01 and the interaction between leadership style and group membership was not significant, $F(1, 144) = 0.56$, *MSE* = 0.33, p = .46, η^2 = .004

Effectiveness of the Leader

The results showed that there was a significant main effect of leadership style, $F(1, 144) = 750.97$, *MSE* = 0.76, $p < .001$, $\eta^2 = .84$, such that participants who saw the high positive leader perceived them as more effective than those who saw the low positive leader. There was no significant main effect of group membership, $F(1, 144) = 1.36$, *MSE* = 0.76, p = .25, η^2 = .01 and there was no significant interaction, $F(1, 144) = 0.11$, *MSE* = 0.76, p = .74, η^2 = .001

Job Appeal

There was a significant main effect of leadership style, $F(1, 144) = 423.42$, *MSE* = 0.68, $p < .001$, $\eta^2 = .75$, such that participants who saw the high positive leader perceived a job with this leader as more appealing than those who saw the low positive leader. There was no significant main effect of group membership, $F(1, 144) = 0.04$, *MSE* = 0.68, p = .85, $\eta^2 <$ .001 and the interaction between leadership style and group membership was not significant, $F(1, 144) = 0.07$, *MSE* = 0.68, p = .80, $\eta^2 < .001$.

Leadership Potential

The results showed that there was a significant main effect of leadership style, $F(1, 144) = 376.60$, $MSE = 1.11$, $p < .001$, $\eta^2 = .72$, such that participants who saw the high positive leader perceived this leader as having more leadership potential than those who saw the low positive leader. There was no significant main effect of group membership, $F(1, 144) = 1.94$, $MSE = 1.11$, $p = .17$, $\eta^2 = .01$ and the interaction was not significant, $F(1, 144) = 1.40$, $MSE = 1.11$, $p = .24$, $\eta^2 = .01$.

Stress

There was a significant main effect of leadership style, $F(1, 144) = 311.85$, $MSE = 1.28$, $p < .001$, $\eta^2 = .68$, such that participants who saw the high positive leader perceived themselves as having lower levels of stress when working for them than those who saw the low positive leader. There was also a significant main effect of group membership, $F(1, 144) = 5.93$, $MSE = 1.28$, $p = .02$, $\eta^2 = .04$ such that participants who saw an ingroup leader perceived themselves as having lower stress when working for them than those who saw the outgroup leader. There was no significant interaction between leadership style and group membership on perceived stress, $F(1, 144) = 0.42$, $MSE = 1.28$, $p = .52$, $\eta^2 = .003$.

Willingness to Endorse the Candidate

Before conducting the main analysis an exploratory factor analysis with the unweighted least squares extraction method was run to see if the items for this scale loaded onto one factor. The results demonstrated that all four items loaded onto one factor which accounted for 86.2% of the variance. Therefore, the four items were combined into one scale for the rest of the analysis. The results showed that there was a significant main effect of leadership style, $F(1, 144) = 516.64$, $MSE = 0.36$, $p < .001$, $\eta^2 = .78$ such that participants who saw the high positive leader were more willing to endorse the candidate than those who saw the low positive leader. There was also a marginal main effect of group membership,

$F(1, 144) = 3.24$, $MSE = 0.36$, $p = .07$, $\eta^2 = .02$ such that participants who saw the ingroup leader were slightly more willing to endorse the candidate than those who saw the outgroup leader. There was no significant interaction between leadership style and group membership, $F(1, 144) = 0.01$, $MSE = 0.36$, $p = .91$, $\eta^2 < .001$.

Table 8

Means and Standard Errors per condition and Cronbach Alphas (Study 4)

	Cronbach Alpha	Mean (SD)	Leadership Style		Leader Group Membership	
			Low Positive	High Positive	Ingroup	Outgroup
General Workplace Wellbeing	.92	2.42 (0.84)	3.15 (0.05)***	1.68 (0.05)***	2.48 (0.05)#	2.35 (0.05)#
Job Satisfaction	.97	2.90 (1.15)	3.90 (0.07)***	1.90 (0.07)***	2.94 (0.07)	2.86 (0.07)
Effectiveness of Leader	.96	4.33 (2.16)	6.29 (0.10)***	2.36 (0.10)***	4.41 (0.10)	4.24 (0.10)
Job Appeal	.95	4.22 (1.62)	5.62 (0.10)***	2.82 (0.10)***	4.21 (0.10)	4.23 (0.10)
Leadership Potential	.98	4.79 (1.99)	6.47 (0.12)***	3.10 (0.12)***	4.90 (0.12)	4.66 (0.12)
Stress	r = .72	3.75 (2.01)	2.12 (0.13)***	5.40 (0.13)***	3.53 (0.13) *	3.99 (0.13) *
Willingness to Endorse the Candidate	.95	3.17 (1.27)	4.28 (0.07)***	2.05 (0.07)***	3.25 (0.07) #	3.08 (0.07) #

Note. SE in brackets. # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

In line with *Hypothesis 1*, the results showed that participants who reviewed information about the high positive leader, perceived themselves as having higher wellbeing and job satisfaction and lower stress if they worked for them than participants who reviewed information about the low positive leader. This is consistent with previous research which links positive leadership with higher employee wellbeing (Kelloway et al., 2013; Marsh et al, in prep) and with results from the previous chapter in this thesis (*Chapter 2*). Additionally, in line with *Hypothesis 1*, the results indicated that participants who were shown the high positive leader perceived working at the same organisation as more appealing and the leader was perceived as having higher leadership potential and more effective than low positive leaders. Similarly, participants in the high positive leader condition were more willing to endorse this leader than participants in the low positive leader condition. This showed that the positive leaders received better leader evaluations than the negative leaders and is consistent with the findings from *Study 2* and *Study 3*.

The analysis showed that there were some significant differences between ingroup and outgroup leaders. Participants who saw the ingroup leader information, perceived themselves as having significantly lower stress and there were some marginally significant differences in wellbeing and willingness to endorse the candidate. Specifically, participants who saw the ingroup leader information, perceived themselves as having higher wellbeing if they worked for this leader than participants who saw the outgroup leader information. Also, participants who reviewed the ingroup leader information were more willing to endorse this leader than participants who reviewed the outgroup leader. This suggests that there is some ingroup bias which would be consistent with previous literature (e.g. Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006; Platow & van Knippenberg, 2001; Ullrich et al., 2009). However, the results on the other measures did not show significant

differences between ingroup and outgroup leaders. Consequently, *Hypothesis 8* was only partially supported. A potential explanation for this could be the group membership manipulation. While the ingroup identification was significantly higher than the mid-point of the scale, the mean value was still quite low. Another manipulation of group membership may help to create a stronger sense of identity which then may lead to different results.

Interestingly, there were no significant interactions between group membership and leadership style and therefore *Hypothesis 9* was not supported. Moreover, these findings were not in line with previous research findings suggesting an interaction between leadership style and group membership (e.g., Geng, 2021; Gerpott et al., 2019; Li et al., 2022; van Knippenberg & van Knippenberg, 2005). This suggests that high positive leaders were not benefitted or disadvantaged by being either ingroup or an outgroup member. The significant main effects of leadership style on favourable leadership evaluations was not impact by the group membership of the leader. Therefore, it does not seem to matter whether a leader high in positive leadership is part of the ingroup or the outgroup as they are still seen as an effective leader and likely to be endorsed.

General Discussion

Overview of Results

Consistently across all three studies presented in this chapter, there was a main effect of leadership style on indicators of wellbeing, identification variables and leadership evaluations. Specifically, the results indicated that participants in the positive leader conditions (or high positive leadership condition in *Study 4*), has higher wellbeing and lower stress (*Studies 2, 3* and *4*) and higher job satisfaction (*Study 4* only) than participants in the negative leader conditions (or low positive leadership condition in *Study 4*). Identification with the leader (*Studies 2*, and *3*) and identification with the ingroup (*Study 2* and *Study 3[marginal]*) was significantly higher in the positive leadership conditions than the negative

leader conditions. In addition, the results for the leader evaluations showed that participants who viewed the positive leader perceived them as more effective and as having higher leadership potential (*Studies 2, 3,* and *4*), more competent and warm (*Studies 2* and *3*), more communal and agentic (*Study 3*) and the job working for the leader is more appealing (*Study 4*) than the negative leader. Across all three studies, participants were more willing to work with or endorse the positive leader than the negative leader. These results combined suggest that positive leaders are perceived as good, effective leaders.

The mediation analysis from *Study 2* and *3* showed that the association between leadership style and wellbeing was mediated by identification with the leader. This showed that positive leadership has a positive impact on wellbeing through increase identification with the leader. Additionally, the relationship between leadership style and wellbeing was significantly mediated by identification with the ingroup but this was only in *Study 2*. Also, consistent with previous findings (Marsh et al., in prep; *Chapter 2*) but using a different measures of stress, *Study 2* demonstrated that the link between leadership style and stress arousal was significantly mediated by identification with the leader. This means that positive leadership was associated with lower stress through higher identification with the leader.

Across the first two studies, the influence of age and gender of the leader was minimal except for a couple of significant interaction with leadership style on willingness to work with the leader age. Similarly, in *Study 4* the effects of group membership are also minimal with no significant interaction effects and only one significant main effect on follower stress with stress being lower for those who viewed the information about the ingroup leader.

Theoretical and Applied Implications

This chapter provides further support for the influence of leadership style on employee wellbeing using an experimental design. This is consistent with the findings shown

in previous research (Marsh et al., in prep) and in *Chapter 2* of this thesis. Additionally, the mediation results are in line with previous findings (Marsh et al., in prep; *Chapter 2*) which demonstrated the role of identification with the leader in the relationship between positive leadership and stress. Expanding on this, the mediations showed the link between leadership style and general wellbeing through identification with the leader and some support for the mediation through identification with the leader and identification with the ingroup in sequence.

Secondly, the results from this chapter provide novel insights into the influence of positive leadership on evaluations of the leader. This is consistent with previous research which highlights that leadership behaviours and styles have an influence on employee perceptions of the leader (e.g. Abrell et al., 2011; Chou, 2018; Copeland, 2016; Jaussi & Dionne, 2004; Lewis, 2000; Walumbwa et al., 2004). The results also showed that positive leaders do benefit from more favourable evaluations of their leadership abilities and this is beneficial for these leaders because if they are seen as more effective leaders then they will be more likely to get into leadership positions and have a positive impact on followers wellbeing.

Thirdly, this chapter empirically tested potential moderating factors which might influence the perceptions of positive leaders. Specifically, investigating the influence of leader age, gender and group membership. The results demonstrated that these factors did not influence the favourable evaluations of positive leaders ability which is inconsistent with previous research showing differences in leadership based on age, gender and group membership (e.g. Cavallo & Brienza, 2002; Eagly & Johnson, 1990; Embry et al., 2008; Geng, 2021; Gerpott et al., 2019; Korac-Kakabadse et al., 1998; Li et al., 2022; Sessa et al., 2007; Oshagbemi, 2004; Schubert, 1988; van Knippenberg & van Knippenberg, 2005;

Zenger & Folkman, 2019). This indicates that the influence of positive leadership should not be limited to certain leaders who match the stereotypical behaviours expected of them.

Future Directions

While the current findings investigated the influence of leader characteristics, there could be potential organisational variables which influence the impact of positive leadership on employee wellbeing. One organisational factor which has been linked with employee wellbeing is perceived organisational support (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014). Research is mixed on the role of perceived organisational support on the relationship between leadership and employee attitudes and wellbeing. Some indicate it is a moderator (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019) while other findings suggest it is a mediator (e.g. DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019). Consequently, it is important to investigate whether the effects of positive leadership is still important if employees feel valued and supported by the organisation in general. Or is it possible that leaders impact on the organisation means that employees feel more valued and supported which then helps to explain the relationship between positive leadership and employee wellbeing.

Chapter Summary and Conclusion

This chapter is the first to empirically examine perceptions of positive leaders in terms of their leadership abilities compared to negative leaders. Moreover, it also investigates potential boundary conditions of the positive influence of positive leadership on wellbeing by exploring the influence of leader age, gender and group membership on leadership evaluations. The results demonstrated that there was a significant difference in wellbeing and leadership evaluations between the two leadership styles. Specifically, viewing or interacting with positive leaders lead to increase follower wellbeing and lower follower stress and

positive leaders also received more favourable evaluations of their leadership abilities than participants viewing or interacting with negative leaders. The mediation analysis showed that both the relationship between leadership style and wellbeing and stress was significantly mediated by identification with the leader. However, the effect of leadership style on wellbeing and leader evaluations was not moderated by leader age, gender, or group membership. Overall, the results supported the beneficial effects of positive leaders on both wellbeing indicators and evaluations of the leader abilities, and these were not influenced by leader age, gender or group membership. In the next chapter, I will explore the role of perceived organisational support on the relationship between positive leadership and employee wellbeing.

Chapter 4 – The Role of Perceived Organisational Support

Chapter Overview

As indicated by the previous findings from *Chapters 2* and *3* of this thesis, positive leadership is associated with better employee wellbeing and mediated by identification with the leader and organisational identification. Expanding on this, the current chapter investigates the role of perceived organisational support. Previous research examining the role of perceived organisational support on the relationship between leadership and employee wellbeing is mixed, with some research suggesting it plays a moderating role and other suggesting it plays a mediating role. *Study 5* in this chapter will be testing perceived organisational support as both a mediator and a moderator using a correlational design. The results from this study demonstrated that perceived organisational support did mediate and not moderate the relationship between positive leadership and employee wellbeing indicators (i.e. job satisfaction, general workplace wellbeing, employee anxiety and depression). *Study 6* extended on this and employed an experimental design which manipulated leadership style and aimed to replicate the mediation results from the correlational design. The results from *Study 6* did not support the findings from *Study 5* as the mediation results showed that perceived organisational support did not significantly mediate the relationship between positive leadership and wellbeing indicators (i.e. job satisfaction and general workplace wellbeing).

Positive Leadership and Employee Wellbeing

Leadership plays a crucial role in employee wellbeing. This is apparent in the breadth of literature examining the links between leadership and employee wellbeing (e.g. Arnold et al., 2007; Liu et al., 2010; Mackey et al., 2017; Men, 2014; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020). One example of a leadership style which is associated with employee wellbeing is positive leadership (Cameron, 2012; 2013). Previous research has demonstrated that positive leadership is associated with increased employee wellbeing even when controlling for the influence of transformational leadership (Kelloway et al., 2013). Moreover, our previous research has demonstrated that positive leadership replicated these earlier findings and also demonstrated that identification variables mediate the relationship between positive leadership and indicators of employee wellbeing (Marsh et al., in prep). Specifically, our results showed that positive leadership was positively associated with both employee mental health and job satisfaction through both identification with the leader and organisational identification individually and in sequence. And the relationship between positive leadership and workplace stress was mediated by identification with the leader only (Marsh et al., in prep).

This thesis has continued to investigate the links between positive leadership and indicators of employee wellbeing through these identification variables. *Chapter 2* replicated these findings in a longitudinal study showing that the relationship between positive leadership and job satisfaction was mediated by both identification with the leader and organisational identification individually and in sequence and the relationship between positive leadership and workplace stress was mediated by identification with the leader only. *Chapter 3* extended this analysis by investigating different indicators of wellbeing and using different measures of stress which were more appropriate for a student sample. The results

from this chapter showed the relationship between positive leadership and general workplace wellbeing was mediated by identification with the leader only. And the relationship between positive leadership and the stress arousal measure was consistent with previous findings (i.e. Marsh et al., in prep; *Chapter 2*) as it was only significantly mediated by identification with the leader. This chapter presents two studies (i.e. *Study 5* and *6*) aiming to replicate these initial findings and examining identification variables as mediators in the relationship between positive leadership and employee wellbeing.

As highlighted in *Chapter 1* of this thesis, a previous review of research on leadership and employee wellbeing demonstrated that the majority of research examining the links between leadership and employee wellbeing have utilised job satisfaction or other hedonic indicators of wellbeing only (Inceoglu et al., 2018). In the previous chapters of this thesis (i.e. *Chapter 2* and *3*), workplace stress, mental health and general workplace wellbeing were examined alongside job satisfaction. This was to allow for both positive and negative indicators of wellbeing to be investigated. *Study 5* and *6* of this chapter will again consider job satisfaction and general workplace wellbeing as key indicators of wellbeing but *Study 5* will expand on the negative indicators of wellbeing by considering employee ratings of depression and anxiety.

While it is clear from previous research that leadership (e.g. Arnold et al., 2007; Liu et al., 2010; Naeem & Khurram, 2020; Zhong et al., 2020), and more specifically positive leadership (Kelloway et al., 2013; Marsh et al., in prep; *Chapters 2* and *3*), has an impact on employee wellbeing it is vital to ascertain whether this still holds true when introducing other wider organisational factors. A review by Diener and colleagues (2006), emphasised that wellbeing can change and context is a key influencer. This suggests that other situational variables may have an impact on the relationship between leadership and employee wellbeing such that other organisational factors may have a strong influence in determining the context

in which leaders and followers operate. There has been little research examining the wider organisational context in the examination of leadership and employee wellbeing but some have indicated that other organisational factors do play a part (e.g. Li et al., 2014). Therefore, in *Study 5* of this chapter, we examine the influence of perceived organisational support on the relationship between positive leadership and employee wellbeing.

Perceived Organisational Support

Perceived Organisational Support (POS) is defined as the extent to which employees believe that the organisation they work for appreciates their input and is concerned about their wellbeing (Eisenberger et al., 1986). Research has shown that POS is associated with numerous positive workplace outcomes including assessment of job performance, organisational citizenship behaviours, and affective organisational commitment (e.g. Eisenberger et al., 1990; Kurtessis et al., 2017; Shore & Wayne, 1993). Furthermore, POS has been associated with lower workplace stress and higher employee wellbeing (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014). These findings are also reflected in reports from the Health and Safety Executive (2020). For example, data from the labour force survey highlighted that *lack of support* was the second highest cause of worsening factor of workplace stress (HSE, 2020; the first highest cause being workload). It is evident that the support given to employees plays a large role in the cause and development of workplace stress but can be used to enhance employee wellbeing.

Perceived Organisational Support as a Moderator

Employee wellbeing and workplace stress have been shown to be associated with both POS (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014) and positive leadership (e.g. Kelloway et al., 2013; Marsh et al., in prep). However, how these two variables relate to each

other is still unclear. Previous research findings investigating the impact of leadership and POS on organisational attitudes are mixed. Some research suggests that POS acts as a moderator in the relationship between leadership and organisational attitudes and behaviours (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019). For instance, Getachew and Zhou (2018) showed that the relationship between transformational leadership and collective efficacy was significantly moderated by perceived organisational support such that the relationship was stronger at higher levels of perceived organisational support. Moreover, research by Wang and Xu (2019) suggests that perceived organisational support can moderate the relationship between leadership and employee wellbeing. These findings suggest that perceived organisational support plays a moderating role in the link between leadership and organisational attitudes and more specifically employee wellbeing. Consequently, in *Study 5* in this chapter, perceived organisational support will be considered as a moderator in the relationship between positive leadership and employee wellbeing.

Perceived Organisational Support as a Mediator

Although, some research has demonstrated the role of perceived organisational support as a moderator (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019), other research suggests POS instead acts as a mediator in the relationship between leadership and organisational attitudes and behaviours (e.g. DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019). For example, research by Qi and colleagues (2019) indicated that perceived organisational support mediated the relationship between inclusive leadership and employee innovative behaviour. And research has shown that perceived organisational support mediated the relationship between servant leadership and performance and turnover intentions (DeConinck et al., 2018). Moreover, it has previously been theorised that leadership styles which display an aspect of leadership support and a focus on good leader-follower interactions then this may increase employees' perceptions that the organisation

overall supports them as leaders acts as representatives for the overall organisation (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Collectively these findings suggest that perceived organisational support may instead mediate the relationship between positive leadership and employee wellbeing. At present, there is not enough research to ascertain whether POS is determined by leadership or whether it is considered an independent factor which interacts with leadership. Therefore *Study 5*, will test perceived organisational support as both a mediator and a moderator to ascertain the role it plays in the relationship between positive leadership and employee wellbeing. Additionally, *Study 6* will aim to replicate the correlational findings from *Study 5* by experimentally manipulating leadership style.

Influence of Perceived Organisational Support on Organisational Identification

Even though, this chapter is concerned with investigating the role of POS on the relationship between positive leadership and employee wellbeing, *Study* 5 will also examined the influence POS has on organisational identification. POS has also previously been linked with organizational identification (Edwards, 2009; Edwards & Peccei, 2010; Santiago, 2020). For example, Edwards and Peccei (2010) found that perceived organizational support was a predictor of organisational identification, and that organizational identification predicted other workplace outcomes. However, in my previous research examining the mediating effects of identification variables, the results have shown that for certain indicators of employee wellbeing, the relationship between positive leadership and employee wellbeing was mediated by identification with the leader and organisational identification individually and in sequence (Marsh et al., in prep; *Chapters 2* and *3*). The findings from Edwards and colleagues (2010) suggest perceived organisational support is a significant predictor and my findings (Marsh et al., in prep; *Chapters 2* and *3*) suggest identification with the leader is a significant predictor of organisational identification. Therefore, *Study 5* examines whether

there is an interaction between identification with the leader and perceived organisational support in predicting organisational identification.

Study 5: Correlational Study Investigating the Role of Perceived Organisational Support

In this study, the role of perceived organisational support in the relationship between positive leadership and employee wellbeing will be investigated using a correlational design. Based on the findings from previous research demonstrating a link between positive leadership and employee wellbeing (e.g. Kelloway et al., 2013; Marsh et al., in prep; *Chapters 2* and *3*), and the research showing a link between perceived organisational support and employee wellbeing (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014), it is hypothesised that[10]:

Hypothesis 1: Positive leadership will be positively associated with positive indicators of wellbeing (i.e. job satisfaction and general workplace wellbeing) but it will be negatively associated with negative indicators of wellbeing (i.e. depression and anxiety).

Hypothesis 2: Positive leadership will be positively associated with identification with the leader and organisational identification.

Hypothesis 3: Perceived Organisational Support will be positively associated with positive indicators of wellbeing (i.e., job satisfaction and general workplace wellbeing) and it will be negatively associated with negative indicators of wellbeing (i.e., depression and anxiety).

[10] This study was pre-registered on the Open Science Framework (https://osf.io/6bqpj). All the hypotheses are exactly the same as they are in the pre-registration but the order of the hypotheses has changes slightly.

Based on the findings from previous research demonstrating the role of identification variables in mediating the link between positive leadership and employee wellbeing (e.g. Marsh et al., in prep; *Chapters 2* and *3*), it is hypothesised that:

Hypothesis 4: The relationships between positive leadership and wellbeing indicators will be mediated by identification with the leader and organisational identification.

Research reviewed in the introduction to this chapter demonstrates support for the role of perceived organisational support in the relationship between leadership and organisational attitudes and behaviours as both a moderator (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019) and a mediator (e.g. DeConinck et al., 2018; Eisenberger et al., 1986; Milner et al., 2015; Qi et al., 2019; Rhoades & Eisenberger, 2002). Therefore, it is hypothesised:

Hypothesis 5: Perceived Organisational Support will either moderate or mediate the relationships between positive leadership and employee wellbeing indicators.

Finally, as previous research has highlighted both perceived organisational support (Edwards, 2009; Edwards & Peccei, 2010; Santiago, 2020), and identification with the leader (e.g. Marsh et al., in prep; *Chapters 2* and *3*) as predictors of organisational identification. The interaction between identification with the leader and perceived organisational support will be tested and it is hypothesised:

Hypothesis 6: Perceived Organisational Support will moderate the relationship between identification with the leader and organizational identification.

Method

Power Analysis

G-power was used to see how many participants were needed for the correlation analysis in this study. For a conventional medium effect size (r = 0.3), a p-value of 0.05 and power of 80%, g-power suggested a sample size of 64 participants.

To test the mediation, SEM was used. As advised by a psychometrician in my department, for SEM, I used the following formula to determine sample size (based on the coefficients from our previous research): Unstandardized Path Coefficient divided by 1/sqrtN. For 5% significance, this ratio should be over 2 (A. Brown, personal communication, February 1, 2019). Therefore, this analysis was conducted on the lowest significant coefficient from our previous studies: .171. With an N of 250, the ratio is 2.70 and with an N of 300, the ratio is 2.96. Consequently, to ensure that we have enough participants in case of any issues in data collection, our planned sample size will be 250 participants.

Participants

Two hundred and fifty seven participants took part in the study but 6 failed the attention check and one was currently not employed. The remaining 250 participants (95 males, 155 females) were aged between 18 and 69 years old (M = 34.41, SD = 11.10). Of these, 173 worked full-time and 77 worked part-time and only 66 held a leadership position in their organisation. Participants were recruited using the crowdsourcing site Prolific to complete a study investigating how people perceive their leaders and their own job. Participants were compensated for the time taken to complete the survey (i.e. £1.20 for 12 minute survey).

Measures

Positive Leadership

The shortened version of the positive leadership assessment scale (Antino et al., 2014; Cameron, 2012) was used to assess employees' perceptions of positive leadership. The scale consists of 15 items with five subscales, measuring Cameron's four strategies of positive leadership and general positive organizational strategies. The scale was used as a single measure of positive leadership and all items were measured on a seven-point Likert scale (1 = *never* to 7 = *always*). An example of one of the items was "Foster information sharing so that

people become aware of colleagues' difficulties and therefore, can express compassion". Higher scores indicate higher perceptions of positive leadership (See Table 9, for scale means, standard deviations and Cronbach Alpha's for each scales).

Perceived Organizational Support

Three items from the Perceived Organizational Support scale from Eisenberger and colleagues (1986) was used to assess employees' perceptions of organizational support. Previous research has also focused on these three items as a measure of POS (e.g., Edwards & Peccei, 2010). This was measured on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). An example of one of the items was "The organization really cares about my general satisfaction at work". One of the items is reverse coded so that higher scores indicated higher perceptions of organizational support".

Organizational Identification

Six items were used to measure organizational identification (Edwards & Peccei, 2007). One of the items was "I feel strong ties with my workplace". The items were measured on a seven-point scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicated higher organizational identification.

Identification with the Leader

Participants rated their agreement with seven statements measuring identification with and trust in the leader (e.g., "My values are similar to my supervisor/leader/manager's values"; Shamir et al., 1998) on a five-point scale (1 = *never* to 5 = *always*). Higher scores indicated higher identification with and trust in the leader.

General Workplace Wellbeing

The same measure of workplace wellbeing from *Chapter 3* was used to measure general levels of workplace wellbeing. This was the Wellbeing Index from Winkler et al. (2014). The scale contained six items (e.g., "Do you feel relaxed at work?") and was

measured on a four-point Likert scale (1 = *not at all to* 4 = *very*). One of the items was reverse coded, and higher scores indicated higher workplace wellbeing.

Depression and Anxiety

Items from the PHQ-4 and the GAD-7 which are used in previous research (Cano-Vindel et al., 2018; Kroenke et al., 2009) were used to measure depression and anxiety. The scale consisted of four items (e.g., "Over the previous two weeks at work, how often have you experienced little interest or pleasure in doing things") which were measured on a four-point Likert scale (1 = *never* to 4 = *most days*). Higher scores indicated higher self-reported depression and anxiety.

Job Satisfaction

Job satisfaction was measured with 11 items taken from Warr et al. (1979) (e.g., "Please indicate on the following scale how satisfied you are with your physical working conditions"; 1 = *extremely dissatisfied*, 7 = *extremely satisfied*). Higher scores indicated higher job satisfaction.

Procedure and Ethics [11]

Participants were invited to take part in a study investigating "how people perceive leaders in their organization and how they feel about their own job". Before starting the survey, participants were told they were going to be asked to think about their supervisor/leader/manager and were told this meant their direct supervisor. Participants were also informed that their responses were anonymous and would only be available to the research team and that they were able to withdraw at any time during the study. Participants gave informed consent and completed all the measures. The order which the measures was presented was randomized. After completing the measures, participants answered some demographic questions and were debriefed and thanked for their contribution. This study

[11] Study 5 was conducted pre-COVID in January 2020.

abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 201915757247446194).

Results

Correlation Analysis

Positive leadership was significantly positively correlated with job satisfaction, wellbeing, identification with the leader and organizational identification. Positive leadership was also significantly negatively correlated with depression, it was not significantly correlated with employee anxiety. Perceived organisational support was significantly correlated with employee job satisfaction, wellbeing, depression and anxiety (see Table 9 for correlation results).

Table 9

Correlations, Means, Standard Deviations and Cronbach Alphas (Study 5)

	1	2	3	4	5	6	7	8
1. Positive Leadership		.63***	.58***	.56***	-.21**	-.06	.58***	.31***
2. Identification with the Leader			.52***	.60***	-.35***	-.31***	.70***	.46***
3. Organisational Identification				.64***	-.41***	-.27***	.63***	.58***
4. Perceived Organisational Support					-.43***	-.31***	.75***	.60***
5. Depression						.71***	-.51***	-.66***
6. Anxiety							-.38***	-.55***
7. Job Satisfaction								.63***
8. Wellbeing								
Mean (SD)	2.70 (0.87)	3.40 (1.07)	4.60 (1.65)	4.47 (1.61)	1.98 (0.89)	1.93 (0.89)	4.83 (1.22)	2.59 (0.66)
Cronbach Alpha	0.93	0.96	0.95	0.90	r = 0.72	r = 0.77	0.91	0.86

Note. N = 250; # p <.10, * p < .05, ** p < .01, *** p < .001

Mediation Analysis

A full structural equation modelling mediation analysis was used to test Hypothesis 4 and Hypothesis 5. More specifically, to test whether the relationships between positive leadership and wellbeing indicators were mediated between identification with the leader and organisational identification in sequence or perceived organisational support. This was tested

with full SEM, using latent variables in AMOS (IBM SPSS AMOS 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps).

Job Satisfaction

With job satisfaction as the outcome, the chi-square of the model fit was significant $\chi 2$ (811, N= 250) = 1555.31, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (i.e. dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 1.92. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .91 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .94, *SE* = .10, *95CI*[0.75, 1.14], *p* = .001), higher organisational identification (*b* = 1.12, *SE* = .22, *95CI*[.70, 1.56], *p* = .001) and higher perceived organisational support (*b* = 1.09, *SE* = .14, *95CI*[.86, 1.40], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .29, *SE* = .15, *95CI*[.002, .59], *p* = .05). Moreover, identification with the leader (*b* = .35, *SE* = .08, *95CI*[.21, .52], *p* = .001), organisational identification (*b* = .08, *SE* = .04, *95CI*[.01, .16], *p* = .04) and perceived organisational support (*b* = .36, *SE* = .07, *95CI*[.24, .51], *p* = .001) were positively related with job satisfaction. However, the direct effect of positive leadership on job satisfaction was not significant (*b* = -.004, *SE* = .09, *95CI*[-.19, .18], *p* = .997) The indirect effects of positive leadership on job satisfaction via identification with the leader and organisational identification individually and in sequence was significant. And, the indirect effect of positive leadership on job satisfaction via perceived organisational support was significant (see Figure 6 for direct effects and Table 10 for all indirect effects).

Wellbeing

With wellbeing as the outcome, the chi-square of the model fit was significant $\chi 2$ (621, *N*= 250) = 1188.64, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (i.e. dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 1.91. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .92 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .94, *SE* = .10, *95CI*[.76, 1.14], *p* = .001), higher organisational identification, (*b* = 1.13, *SE* = .22, *95CI*[.70, 1.55], *p* = .001) and higher perceived organisational support (*b* = 1.09, *SE* = .14, *95CI*[.85, 1.39], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .29, *SE* = .15, *95CI*[.002, .59], *p* = .05). Moreover, identification with the leader (*b* = .17, *SE* = .06, *95CI*[.06, .30], *p* = .004), organisational identification (*b* = .22, *SE* = .04, *95CI*[.14, .30], *p* = .001) and perceived organisational support (*b* = .23, *SE* = .06, *95CI*[.13, .34], *p* = .001) were positively related with wellbeing. And the direct effect of positive leadership on wellbeing was significant (*b* = -.33, *SE* = .09, *95CI*[-.50, -.15], *p* = .001). The indirect effects of positive leadership on wellbeing via identification with the leader and organisational identification individually and in sequence was significant. And, the indirect effect of positive leadership on wellbeing via perceived organisational support was significant (see Figure 7 for direct effects and Table 10 for all indirect effects).

Depression

With depression as the outcome, the chi-square of the model fit was significant $\chi 2$ (487, *N*= 250) = 986.17, $p < .001$. However, chi-square is sensitive to sample size, so the

relative chi-square fit was calculated (i.e. dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 2.02. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .93 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .94, *SE* = .10, *95CI*[.76, 1.14], *p* = .001), higher organisational identification (*b* = 1.13, *SE* = .22, *95CI*[.70, 1.56], *p* = .001), and higher perceived organisational support (*b* = 1.09, *SE* = .14, *95CI*[.85, 1.40], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .29, *SE* = .15, *95CI*[.003, .59], *p* = .05). Moreover, identification with the leader (*b* = -.16, *SE* = .08, *95CI*[-.31, -.01], *p* = .04), organisational identification (*b* = -.16, *SE* = .05, *95CI*[-.26, -.06], *p* = .002) and perceived organisational support (*b* = -.21, *SE* = .07, *95CI*[-.35, -.09], *p* = .002) were negatively related with employee depression. And the direct effect of positive leadership on depression was significant (*b* = .33, *SE* = .12, *95CI*[.09, .55], *p* = .01). The indirect effects of positive leadership on employee depression via identification with the leader and organisational identification individually and in sequence was significant. And, the indirect effect of positive leadership on employee depression via perceived organisational support was significant (see Figure 8 for direct effects and Table 10 for all indirect effects).

Anxiety

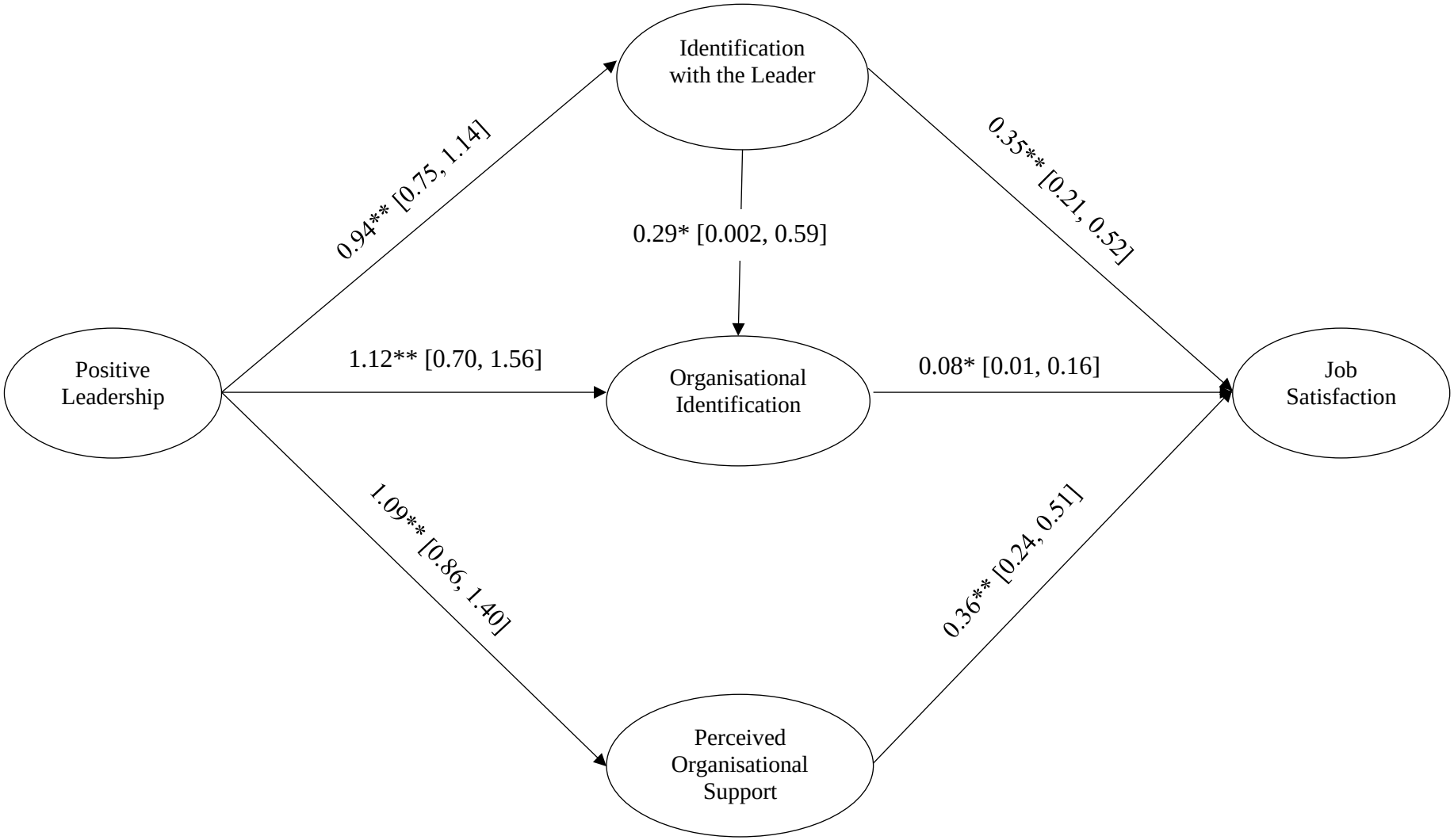
With anxiety as the outcome, the chi-square of the model fit was significant $\chi 2$ (487, *N*= 250) = 995.28, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (i.e., dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 2.04. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the

CFI of the model was .93 and the RMSEA was .07 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .95, *SE* = .10, *95CI*[.76, 1.14], *p* = .001), higher organisational identification (*b* = 1.13, *SE* = .22, *95CI*[.70, 1.56], *p* = .001, and higher perceived organisational support (*b* = 1.09, *SE* = .14, *95CI*[.85, 1.40], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .29, *SE* = .15, *95CI*[.003, .59], *p* = .05). Moreover, identification with the leader (*b* = -.35, *SE* = .09, *95CI*[-.51, -.17], *p* = .003), organisational identification (*b* = -.11, *SE* = .06, *95CI*[-.23, -.003], *p* = .04) and perceived organisational support (*b* = -.18, *SE* = .07, *95CI*[-.31, -.04], *p* = .02) were negatively related with employee anxiety. And the direct effect of positive leadership on anxiety was significant (*b* = .57, *SE* = .13, *95CI*[.33, .84], *p* = .001). The indirect effects of positive leadership on employee anxiety via identification with the leader and organisational identification individually and in sequence was significant. And, the indirect effect of positive leadership on employee anxiety via perceived organisational support was significant (see Figure 9 for direct effects and Table 10 for all indirect effects).

Figure 6

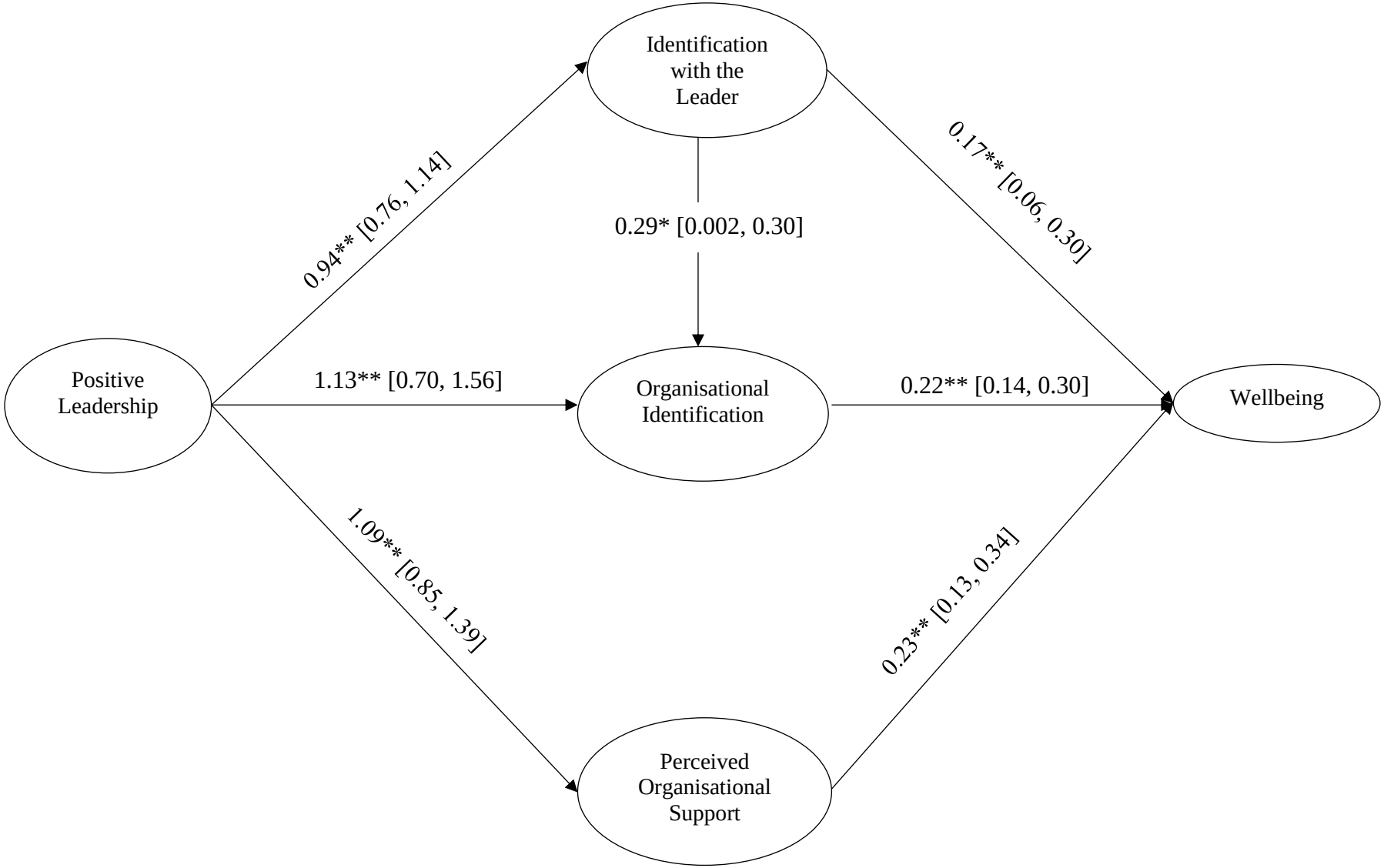
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for Job Satisfaction (Study 5)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 7

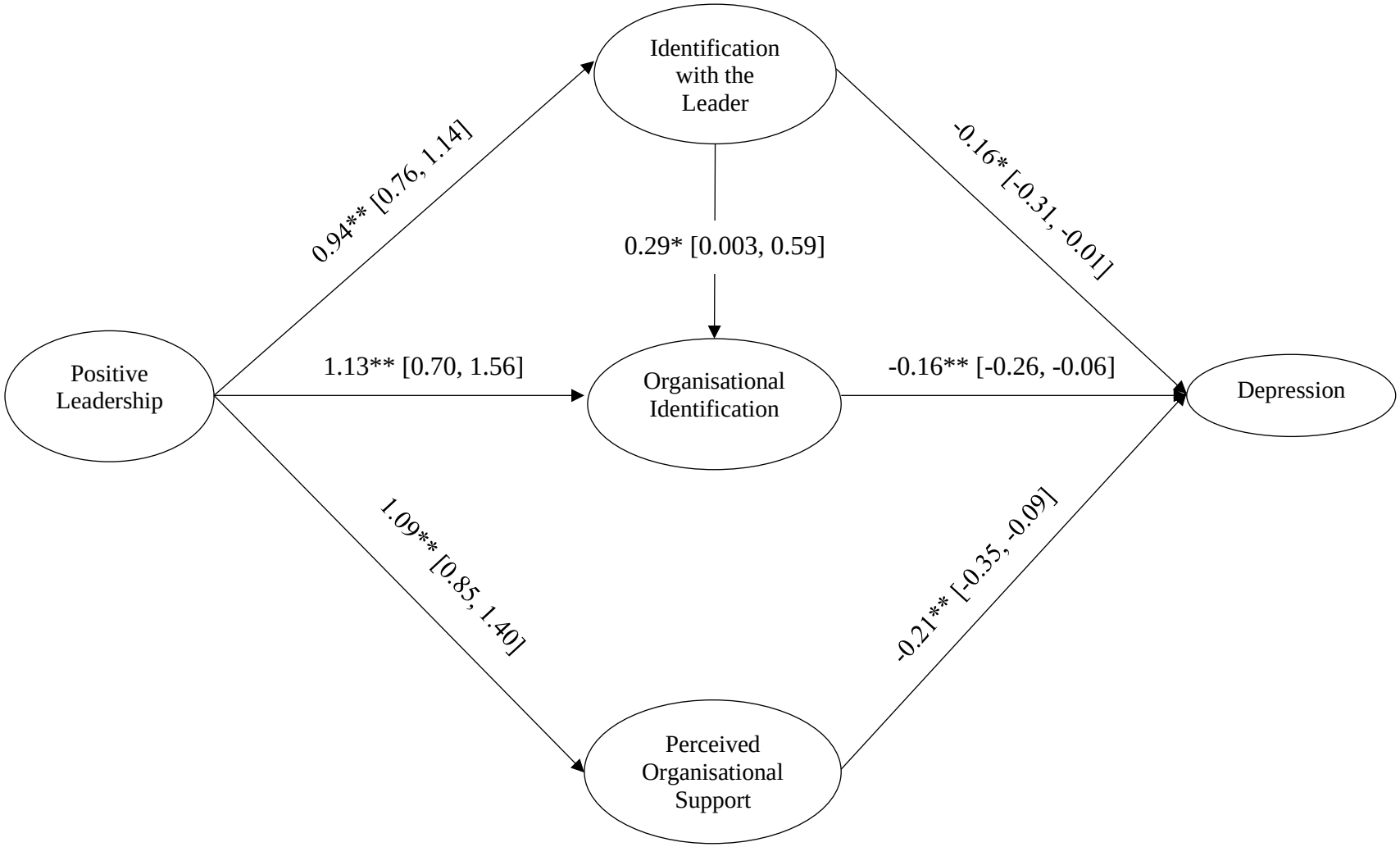
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for general workplace wellbeing (Study 5)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 8

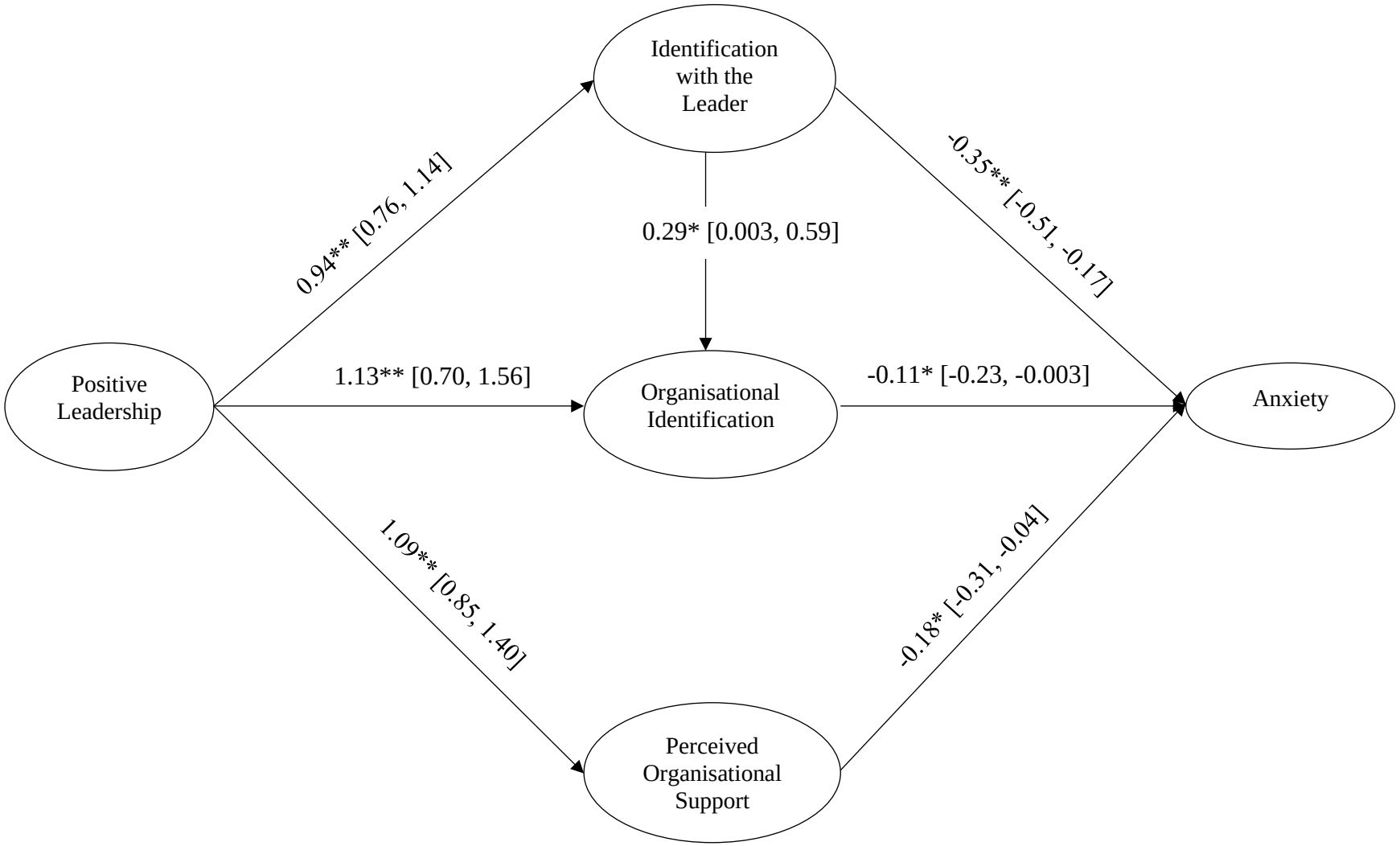
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for depression (Study 5)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 9

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for anxiety (Study 5)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 10

Summary of Indirect Effects for each of the Paths (Study 5)

Path	Indirect Effect
Positive Leadership > Identification with the Leader > Job Satisfaction	*b* = .33, *SE* = .09, *95CI*[.18, .53], *p* = .001
Positive Leadership > Organisational Identification > Job Satisfaction	*b* = .09, *SE* = .05, *95CI*[.01, .22], *p* = .03
Positive Leadership > Identification with the Leader > Organisational Identification > Job Satisfaction	*b* = .02, *SE* = .02, *95CI*[.001, .07], *p* = .05
Positive Leadership > Perceived Organisational Support > Job Satisfaction	*b* = .39, *SE* = .09, *95CI*[.24, .59], *p* = .001
Identification with the Leader > Organisational Identification > Job Satisfaction	*b* = .02, *SE* = .02, *95CI*[.00, .08], *p* = .05
Positive Leadership > Identification with the Leader > Wellbeing	*b* = .16, *SE* = .06, *95CI*[.05, .30], *p* = .01
Positive Leadership > Organisational Identification > Wellbeing	*b* = .25, *SE* = .06, *95CI*[.13, .39], *p* = .001
Positive Leadership > Identification with the Leader > Organisational Identification > Wellbeing	*b* = .06, *SE* = .03, *95CI*[.002, .14], *p* = .04
Positive Leadership > Perceived Organisational Support > Wellbeing	*b* = .25, *SE* = .07, *95CI*[.14, .40], *p* = .001
Identification with the Leader > Organisational Identification > Wellbeing	*b* = .06, *SE* = .03, *95CI*[.002, .14], *p* = .04
Positive Leadership > Identification with the Leader > Depression	*b* = -.15, *SE* = .08, *95CI*[-.31, -.01], *p* = .04
Positive Leadership > Organisational Identification > Depression	*b* = -.18, *SE* = .07, *95CI*[-.35, -.06], *p* = .001
Positive Leadership > Identification with the Leader > Organisational Identification > Depression	*b* = -.04, *SE* = .03, *95CI*[-.12, -.01], *p* = .03
Positive Leadership > Perceived Organisational Support > Depression	*b* = -.23, *SE* = .07, *95CI*[-.39, -.10], *p* = .002
Identification with the Leader > Organisational Identification > Depression	*b* = -.05, *SE* = .03, *95CI*[-.12, -.004], *p* = .03
Positive Leadership > Identification with the Leader > Anxiety	*b* = -.33, *SE* = .10, *95CI*[-.52, -.15], *p* = .003
Positive Leadership > Organisational Identification > Anxiety	*b* = -.12, *SE* = .07, *95CI*[-.29, -.01], *p* = .03
Positive Leadership > Identification with the Leader > Organisational Identification > Anxiety	*b* = -.03, *SE* = .02, *95CI*[-.09, -.001], *p* = .05
Positive Leadership > Perceived Organisational Support > Anxiety	*b* = -.20, *SE* = .08, *95CI*[-.36, -.05], *p* = .02
Identification with the Leader > Organisational Identification > Anxiety	*b* = -.03, *SE* = .02, *95CI*[-.10, .00], *p* = .05

Notes. Bootstrap confidence bias-corrected method was used; coefficients are unstandardized.

Moderation Analyses

Moderation analyses were run to see if organizational support moderated the relationship between positive leadership and the wellbeing outcomes (using model 1 in Process, 5000 bootstraps, Hayes, 2013). Organizational support did not significantly moderate the relationships between positive leadership and employee depression (*b* = -0.03, *SE* = 0.04, *t* = -0.83, *p* = .40, *95CI* -0.11, 0.04), anxiety (*b* = -0.03, *SE* = 0.04, *t* = -0.67, *p* = .50, *95CI* -0.10, 0.05) and job satisfaction (*b* = -0.05, *SE* = 0.04, *t* = -1.48, *p* = .14, *95CI* -0.12, 0.02). However, there was a marginally significant interaction for the relationship between positive leadership and employee wellbeing (*b* = 0.04, *SE* = 0.02, *t* = 1.71, *p* = .09, *95CI* -0.01, 0.09).

Moreover, a moderation analysis was run to test if organizational support moderates the relationship between identification with the leader and organizational identification (using model 1 in Process, 5000 bootstraps, Hayes, 2013). Organizational support did not significantly moderate the relationship between identification with the leader and organizational identification (*b* = 0.06, *SE* = 0.04, *t* = 1.46, *p* = .15, *95CI* -0.02, 0.15).

Discussion

The results mostly supported Hypothesis 1, positive leadership was significantly associated with employee's job satisfaction, wellbeing, and depression but not employee anxiety and replicated results from previous chapters (i.e. Job Satisfaction in *Chapters 2 and 3;* wellbeing in *Chapter 3*). In addition, Hypothesis 2 was full supported and replicated from previous research studies (i.e. Marsh et al., in prep), positive leadership was significantly associated with identification with the leader and organisational identification. Consistent with Hypothesis 3, perceived organizational support was also significantly associated with employee's job satisfaction, wellbeing, depression and anxiety.

Replicating the results from previous chapters (*Chapters 2* and *3*) and supporting Hypothesis 4, the relationships between positive leadership and all four indicators of employee wellbeing (i.e. job satisfaction, general workplace wellbeing, anxiety and depression) were significantly mediated by identification with the leader and organisational identification individually and in sequence. Furthermore, testing Hypothesis 5, the results supported the idea that perceived organizational support mediates the relationships between positive leadership and employee wellbeing indicators rather than moderates the relationship. This is demonstrated by the mediation results showing the relationships between positive leadership and all employee wellbeing indicators (i.e. job satisfaction, general workplace wellbeing, anxiety and depression) were significantly mediated by perceived organisational support. Similarly, the results did not support Hypothesis 6, perceived organizational support did not moderate the relationship between identification with the leader and organizational identification. Therefore, these results suggest that perceived organisational support is more likely to be a mediator in the relationship between positive leadership and employee wellbeing and provides support from previous research suggesting perceived organisational support is a mediator between leadership and employee behaviours and attitudes (e.g. DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019).

Overall, these results support previous findings indicating the relationships between both positive leadership (Kelloway et al., 2013; Marsh et al., in prep; *Chapters 2* and *3*) and perceived organisational support (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014) and employee wellbeing. The results also provided clarification of the role of perceived organisational support on the relationship between positive leadership and employee wellbeing. However, these results are correlational and cannot determine causation so it is important to investigate the mediating effect of organisational support in an

experimental design. Previous research has highlighted the bias in cross-sectional correlational designs in Organisational Psychology research (Mitchell & James, 2001) and the importance of using different types of research designs – specifically experimental designs - in Organisational Psychology research (Thau et al., 2014). Consequently, another research study was conducted which experimentally manipulated leadership style and examined the mediating effect of organisational support on the relationship between leadership and employee wellbeing.

Study 6: Experimental Study Examining the Mediating Role of Perceived Organisational Support

As seen in the previous study, positive leadership and perceived organisational support were related to wellbeing (i.e. general workplace wellbeing, job satisfaction, anxiety and depression) and perceived organisational support acted as a mediator – not a moderator - in the relationship between positive leadership and employee wellbeing indicators. However, the results were correlational and so causation could not be determined. In addition, research has emphasised the need for a wider variety of methods in Organisational Psychology research (Mtichell & James, 2001; Thau et al., 2014). Consequently, the current study addresses these concerns by employing an experimental design manipulating leadership style (i.e. low vs. high positive leadership) and examining its effects on perceived organisational support and the wellbeing indicators. Moreover, this study will be interested investigating whether the perceived organisational support mediation results from *Study 5* can be replicated.

Based on this findings from *Study 5* and the rationale provided at the beginning of this chapter, the following hypotheses will be tested in the current study[12]:

[12] This study was pre-registered on the Open Science Framework (https://osf.io/dhrpj)

Hypothesis 7. Participants in the high positive leadership condition[13] will have higher wellbeing, job satisfaction, identification with the leader, organisational identification and perceived organisational support than participants in the low positive leadership condition.

Hypothesis 8. Higher perceived organisational support will be associated with higher wellbeing and job satisfaction.

Hypothesis 9. High positive leadership leads to higher wellbeing and job satisfaction through higher perceived organisational support.

Method

Power Analysis

For Hypothesis 7, G-power was used to see how many participants will be needed for the independent samples t-test. Based on the conventional medium effect size (d = 0.5), and 80% power, G-power calculates a total sample size of 102 is needed.

For Hypothesis 8, G-power was used to see how many participants will be needed for the correlation analysis. Based on the lowest correlation between perceived organisational support and wellbeing in our previous correlational study investigating these links (r = .60), and 80% power, G-power calculates a sample size of 13 participants.

For Hypothesis 9, same as our mediation analysis for our correlational study before this, SEM will be used and the suggested number of participants for this is 250. Consequently, to ensure that we have enough participants in case of any issues in data collection, our planned sample size will be 250 participants.

[13] Same as Study 4 in this thesis, the conditions were labelled positive leadership condition (i.e. high positive leadership condition) and negative leadership condition (i.e. low positive leadership condition) in the pre-registration but terminology was changed as the new labels were more appropriate based on the manipulation used.

Participants

Two hundred and sixty seven participants took part but 15 failed the attention check and one person was not employed. The remaining 251 participants (37 males, 213 females, and 1 transgender) were aged between 18 and 67 years old (M = 32.65, SD = 9.59). Of the 251 participants, 195 participants were in full-time employment and 56 were in part-time employment. Participants were recruited using the online crowdsourcing site Prolific and compensated for the time taken to complete the survey (i.e. £0.80 for 8 minute survey).

Manipulations and Measures

Leadership Style Manipulation

Leadership style was manipulated by asking participants to review candidate information from a leadership award process and the employee ratings of the leaders differed in terms of leaderships style. Participants were randomly allocated to either the high positive or low positive leader conditions. The employee rating was manipulated by using five items from the positive leadership assessment scale (Cameron, 2012) and two sentences of brief comments from the employee. In the high positive leader condition, the employee ratings on these items were high and the brief comments from the employee reflected a positive leader. In the low positive leader condition, the employee ratings on these items were low and the brief comments from the employee reflected a negative leader. These were the same manipulations as Study 4 and were piloted tested with 20 participants to ensure that they indicated the correct conditions and the results indicated that the leader is the high positive leadership condition (M = 6.60, SD = 0.52) was significantly more positive than the leader in the low positive condition (M = 1.90, SD = 1.45), $t(18) = 9.66$, $p < .001$.

Manipulation Check

Although the manipulations were pilot tested, we wanted to ensure that the manipulations were still working correctly. Therefore we included one item as a manipulation

check asking participants to indicate how positive they thought the leader was on a scale of 1 to 7 (1 = *extremely negative* to 7 = *extremely positive*).

Job Satisfaction

A different measure of Job Satisfaction was used in this study as this was more appropriate for the scenario presented to participants. The Brief Index of Affective Job Satisfaction was used from Thompson and Phua (2012). This includes four items (e.g., "I would find real enjoyment in my job"; 1 = *strongly disagree*, 5 = *strongly agree*). Participants were asked to think specifically about working for the leader presented in the scenario at the beginning of the study. Higher scores indicated higher job satisfaction.

As in Study 1, the same measures were used to measure Organizational Identification, Identification with and Trust in the Leader, Perceived Organizational Support and General Workplace Wellbeing. Although, in this study participants were asked to think about the leader in the scenario they were presented with when asking these questions and to imagine what it would be like to work for them. Moreover, no measures of employee anxiety or depression were used. This is because it would be difficult to ascertain these using this imagined scenario.

Procedure and Ethics[14]

Participants were invited to take part in a study investigating "how people perceive leaders and jobs". Before starting the survey, the participants were told that they were going to review candidate information from a leadership award and then complete a series of questions about the candidate and what it would be like to work for them. Participants were also informed that their responses were anonymous and would only be available to the research team and that they were able to withdraw at any time during the study. Then participants gave informed consent and started the study. Participants were then randomly

[14] Study 6 was conducted during COVID September 2021.

allocated to one of the leadership style conditions to review the candidate information and then they completed the manipulation check and all the measures. After completing this, participants answered some demographic questions and were debriefed and thanked for their contribution. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 202116298189127271).

Results

T-Test Analyses

To test Hypothesis 7, a series of independent samples t-test were conducted to examine whether there were significant differences in the mediating variables and wellbeing indicators dependent on leadership style (see Table 11 for scale means, standard deviations and Cronbach alphas).

Manipulation Check

Similar to the pilot, the results from an independent samples t-test showed that there was a significant difference in positivity between high positive and low positive leaders ($t(249) = 66.34$, $p < .001$, Cohen's $d = 8.37$ (95% CI for Cohen's *d:* 7.60, 9.15)) with high positive leaders being viewed as more positive ($M = 6.35$, $SD = 0.54$) than low positive leaders ($M = 1.56$, $SD = 0.60$).

Organizational Identification

The results showed that there was a significant difference in organizational identification between the high positive and low positive leader conditions ($t(194.60) = 19.51$, $p < .001$, Cohen's $d = 2.47$ (95% CI for Cohen's *d:* 2.14, 2.80)). With participants perceiving a higher organizational identification with the high positive leader ($M = 5.60$, $SD = 0.81$) than the low positive leader ($M = 2.71$, $SD = 1.44$).

Identification with the Leader

The results showed that there was a significant difference in identification with the leader between high positive and low positive leader conditions ($t(234.13) = 56.24$, $p < .001$, Cohen's $d = 7.09$ (95% CI for Cohen's *d:* 6.42, 7.76)) with identification with and trust in the leader being higher in the high positive leader condition ($M = 4.23$, $SD = 0.46$) than the low positive leader condition ($M = 1.30$, $SD = 0.36$).

Perceived Organizational Support

The results showed that there was a significant difference in perceived organizational support between the high positive and low positive leader conditions ($t(237.11) = 31.78$, $p < .001$, Cohen's $d = 4.02$ (95% CI for Cohen's *d:* 3.58, 4.44)). With participants perceiving a higher organizational support with the high positive leader ($M = 5.97$, $SD = 0.79$) than the low positive leader ($M = 2.40$, $SD = 0.98$).

General Workplace Wellbeing

The results showed that there was a significant difference in wellbeing between high positive and low positive leader conditions ($t(249) = 37.37$, $p < .001$, Cohen's $d = 4.72$ (95% CI for Cohen's *d:* 4.23, 5.20)) with wellbeing higher in the high positive leader condition ($M = 3.29$, $SD = 0.40$) than the low positive leader condition ($M = 1.48$, $SD = 0.37$).

Job Satisfaction

The results showed that there was a significant difference in job satisfaction between high positive and low positive leader conditions ($t(239.18) = 38.56$, $p < .001$, Cohen's $d = 4.87$ (95% CI for Cohen's *d:* 4.38, 5.36)) with job satisfaction higher in the high positive leader condition ($M = 4.04$, $SD = 0.44$) than the low positive leader condition ($M = 1.68$, $SD = 0.53$).

Correlation Analysis

To test Hypothesis 8, Pearson's correlation analyses were conducted. Perceived Organizational Support were significantly positively correlated with both general workplace wellbeing and job satisfaction (see Table 11 for all correlation results).

Table 11

Correlations, Means, Standard Deviations and Cronbach Alphas (Study 6)

	1	2	3	4	5
1. Identification with the Leader		.81***	.90***	.94***	.93***
2. Organisational Identification			.78***	.78***	.83***
3. Organisational Support				.88***	.87***
4. Job Satisfaction					.92***
5. Wellbeing					
Mean	2.77	4.16	4.19	2.86	2.39
(SD)	(1.53)	(1.86)	(2.00)	(1.28)	(0.98)
Cronbach Alpha	0.99	0.97	0.92	0.97	0.95

Note. N = 251; # p <.10, * p < .05, ** p < .01, *** p < .001

Mediation Analysis

To test Hypothesis 9, mediation analyses were run to test whether perceived organisational support, identification with the leader and organisational identification mediate the relationship between leadership style and employee's wellbeing indicators using SEM in AMOS (IBM SPSS AMOS 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps). Latent variables were used for perceived organisational support and wellbeing but not for leadership style as this was a manipulated variable. Instead, leadership style was coded as 1 = High Positive Leader Condition and 2 = Low Positive Leader Condition).

Job Satisfaction

For the job satisfaction outcome, the chi-square of the model fit was significant $\chi 2$ (182, N = 251) = 389.63, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (i.e. dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 2.14. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .98 and the RMSEA was .07 suggesting an excellent model fit (Hu & Bentler, 1999).

Results showed that leadership style was significantly associated with perceived organisational support (*b* = -3.72, *SE* = .14, *95CI*[-3.97, -3.44], *p* = .001), identification with the leader (*b* = -2.78, *SE* =.07, *95CI*[-2.92, -2.63], *p* = .001), but not organisational identification (*b* = .06, *SE* =.51, *95CI*[-0.88, 1.10], *p* = .94). Due to the coding of the leadership style variable, this indicates that high positive leadership was associated with high organisational support and high identification with the leader. Identification with the leader was significantly positively associated with organisational identification (*b* = .99, *SE* = .19, *95CI*[0.64, 1.37], *p* = .001). Identification with the leader (*b* = .38, *SE* = .09, *95CI*[0.22, 0.56], *p* = .001) and organisational identification (*b* = .16, *SE* = .04, *95CI*[0.08, 0.24], *p* = .001) was significantly associated with higher job satisfaction but not perceived organisational support (*b* = .06, *SE* = .05, *95CI*[-0.04, 0.15], *p* = .19). And the direct effect of leadership style on job satisfaction was significant (*b* = -.68, *SE* = .26, *95CI*[-1.16, -.14], *p* = .01) and due to the coding of the leadership style variable, this indication that high positive leadership was associated with high job satisfaction. The relationship between leadership style and job satisfaction was significantly mediated by identification with the leader and identification with the leader and organisational identification in sequence. Perceived organisational support did not significantly mediated the relationship between leadership

style and employee's job satisfaction (see Figure 10 for direct effects and Table 12 for all indirect effects).

General Workplace Wellbeing

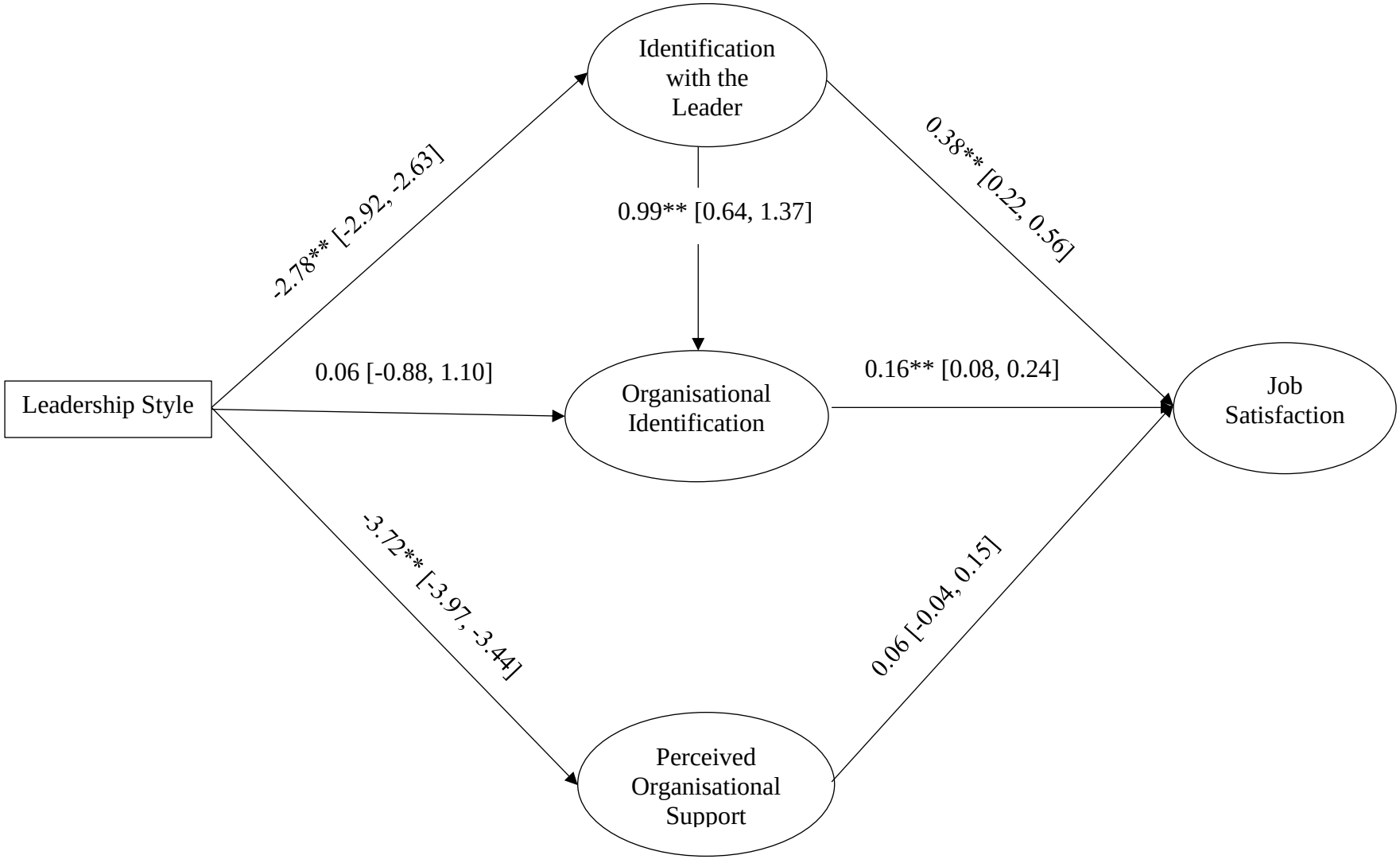
For the wellbeing outcome, the chi-square of the model fit was significant $\chi 2$ (223, N = 251) = 489.18, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (i.e. dividing chi-square index by the degrees of freedom. The relative $\chi 2$ was 2.19. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .97 and the RMSEA was .07 suggesting an excellent model fit (Hu & Bentler, 1999).

Results showed that leadership style was significantly associated with perceived organisational support (*b* = -3.72, *SE* = .14, *95CI*[-3.96, -3.44], *p* = .001), identification with the leader (*b* = -2.78, *SE* =.07, *95CI*[-2.92, -2.63], *p* = .001), but not organisational identification (*b* = .06, *SE* =.51, *95CI*[-0.88, 1.09], *p* = .94). Due to the coding of the leadership style variable, this indicates that high positive leadership was associated with high organisational support and high identification with the leader. Identification with the leader was significantly positively associated with organisational identification (*b* = .98, *SE* = .19, *95CI*[0.64, 1.37], *p* = .001). Identification with the leader (*b* = .68, *SE* = .09, *95CI*[0.50, 0.87], *p* = .001) was significantly associated with higher job satisfaction but not perceived organisational support (*b* = .04, *SE* = .04, *95CI*[-0.03, 0.13], *p* = .29) or organisational identification (*b* = .03, *SE* = .03, *95CI*[-0.03, 0.09], *p* = .26). However, the direct effect of leadership style on wellbeing was not significant (*b* = .03, *SE* = .26, *95CI*[-.45, .54], *p* = .97) The indirect effects showed the relationship between leadership style and job satisfaction was significantly mediated by identification with the leader only. Perceived organisational support and organisational identification did not significantly mediated the relationship between

leadership style and employee's job satisfaction (see Figure 11 for direct effects and Table 12 for all indirect effects).

Figure 10

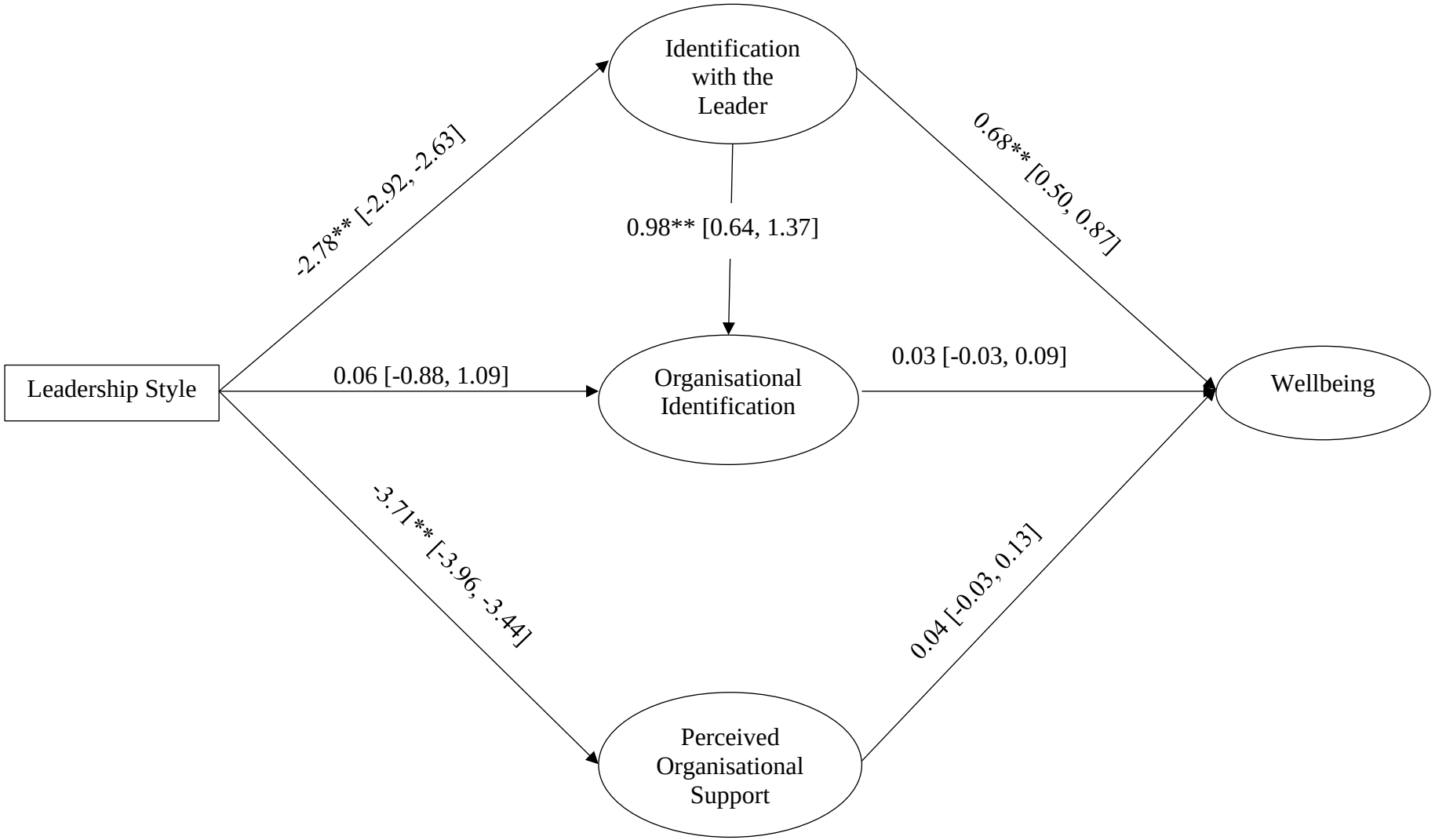
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for job satisfaction (Study 6)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 11

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for general workplace wellbeing (Study 6)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 12

Summary of Indirect Effects for each of the Paths for Mediations (Study 6)

Path	Indirect Effect
Leadership Style > Identification with the Leader > Job Satisfaction	b = -1.04, SE = .24, $95CI$[-1.59, -0.61], p = .001
Leadership Style > Organisational Identification > Job Satisfaction	b = .01, SE = .08, $95CI$[-0.15, 0.18], p = .91
Leadership Style > Identification with the Leader > Organisational Identification > Job Satisfaction	b = -0.43, SE = .13, $95CI$[-0.76, -0.21], p < .001
Leadership Style > Perceived Organisational Support > Job Satisfaction	b = -0.23, SE = .17, $95CI$[-0.56, 0.13], p = .20
Identification with the Leader > Organisational Identification > Job Satisfaction	b = .15, SE = .05, $95CI$[.08, .27], p < .001
Leadership Style > Identification with the Leader > Wellbeing	b = -1.88, SE = .26, $95CI$[-2.41, -1.38], p < .001
Leadership Style > Organisational Identification > Wellbeing	b = 0.002, SE = .02, $95CI$[-0.04, 0.06], p = .75
Leadership Style > Identification with the Leader > Organisational Identification > Wellbeing	b = -0.09, SE = .08, $95CI$[-0.26, 0.06], p = .21
Leadership Style > Perceived Organisational Support > Wellbeing	b = -0.15, SE = .15, $95CI$[-0.49, 0.11], p = .28
Identification with the Leader > Organisational Identification > Wellbeing	b = .03, SE = .03, $95CI$[-.02, .09], p = .21

Note. Leadership Style was coded as 1 = High positive leadership, 2 = Low positive leadership; Bootstrap confidence bias-corrected method was used, coefficients are unstandardized.

Discussion

The results hypotheses 7 and 8 were supported. Identification with the leader, organisational identification, perceived organisational support, job satisfaction and employee wellbeing were all significantly higher in the high positive leader condition than the low positive leader condition (supporting Hypothesis 7) which is consistent with findings from previous chapters (i.e. Job Satisfaction in *Chapters 2 and 3;* wellbeing in *Chapter 3*) and previous research (i.e. Kelloway et al., 2013; Marsh et al., in prep). Perceived organisational support was significantly associated with both job satisfaction and employee wellbeing (supporting Hypothesis 8). These findings are consistent with the findings from *Study 5* and previous research on perceived organisational support and employee wellbeing (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014).

However, the mediation results did not provide support for Hypothesis 9, as perceived organisational support did not significantly mediate the relationship between leadership style and job satisfaction or general workplace wellbeing. These findings are inconsistent with *Study 5* but this could be due to limitations of the manipulation of leadership style. Participants were only exposed to a brief employee evaluation of the leader and this may not have been realistic or provide enough information for participants to judge the wider organisational context the leader belongs to. In this study both perceived organisational support and organisational identification were not significant mediator when previously in correlational research they were. This suggests that manipulations of leadership style in an experimental setting may not be enough to provide participants with the organisational context which would play a role in participants mean levels of these variables. Previous research manipulating leadership style has tended to use video instructions with an actor playing the leader or an in-person actor leading the task (e.g. Hoyt & Blascovich, 2003;

Lyons & Schneider, 2009; Shea & Howell, 1999) and this may provide a more detailed account of the type of leader they are interacting with. *Chapter 3* did use a similar technique in *Study 2* and *3* but still the organisational identification mediator was not significant suggesting a need to use more field or longitudinal studies to examine potential causal effects of the mediating pathways of organisation wide mediators shown in correlational research.

The mediation results did show that the relationship between leadership style and job satisfaction through identification with the leader only and through identification with the leader and organisational identification in sequence. This result partially replicates the findings from *Chapter 2 and Study 5* of this chapter except the mediation through organisational identification was not significant. This could be due to the difference in job satisfaction measure used. And the relationship between leadership style and general workplace wellbeing was significantly mediated by identification with the leader only. This finding replicates the findings from *Chapter 3* (*Study 2* and *3*).

General Discussion

Overview of Results

Across the two studies presented in this chapter, the results were consistent with the results of my previous chapters (*Chapters 2* and *3*) and previous background research (i.e. Kelloway et al., 2013; Marsh et al., in prep). Specifically, *Study 5* showed that positive leadership was positively associated with positive indicators of employee wellbeing (i.e. job satisfaction, general workplace wellbeing) and negatively associated with negative indicators of wellbeing (i.e. employee anxiety and depression) and positively associated with identification with the leader and organisational identification. Similarly, *Study 6* showed that employee wellbeing (i.e. job satisfaction and general workplace wellbeing), identification with the leader and organisational identification was higher in the high positive leader condition than the low positive leader condition.

The results from both studies presented in this chapter are also consistent with the previous research indicating that perceived organisational support is associated with lower workplace stress and higher employee wellbeing (e.g. Jadon & Upadhyay, 2016; Jain et al., 2013; Malik & Noreen, 2015; Walters & Raybould, 2007; Wang & Xu, 2019; Wattoo et al., 2018; Wikhamn & Hall, 2014). *Study 5* demonstrated that perceived organisational was positively associated with positive wellbeing indicators (i.e. job satisfaction and general workplace wellbeing) and negatively associated with negative wellbeing indicators (i.e. employee depression and anxiety). *Study 6* replicated this findings and showed that perceived organisational support was positively associated with positive wellbeing indicators (i.e. job satisfaction and general workplace wellbeing).

The mediation results across both studies support the role of identification variables in the relationship between positive leadership and employee wellbeing indicators which is consistent with previous research (Marsh et al., in prep) and findings from previous chapters (*Chapter 2* and *3*). The mediation results from *Study 5* demonstrated the relationship between positive leadership and all indicators of employee wellbeing (i.e. job satisfaction, general workplace wellbeing, employee depression and anxiety) were significantly mediated by both identification with the leader and organisational identification individually and in sequence. This replicates the mediation findings for job satisfaction shown in *Chapter 2* (i.e. *Study 1*) and the mediation findings for general workplace wellbeing shown in *Chapter 3* (i.e. *Study 2* and *3*) were also partially replicated. The mediation results from *Study 6*, also replicate previous findings as they showed that the relationship between leadership style and job satisfaction was significantly mediated by identification with the leader and identification with the leader and organisational identification in sequence. This partially replicates the mediation results shown in *Chapter 2* (i.e. *Study 1*). And the relationship between positive

leadership and general workplace wellbeing was significantly mediated by identification with the leader. This replicates the results from *Chapter 3* (i.e. *Study 2* and *3*).

Additionally, the mediation and moderation analysis for perceived organisational support in *Study 5* demonstrated that perceived organisational support is a mediator and not a moderator. The mediation analysis showed that perceived organisational support significantly mediated the relationship between positive leadership and all indicators of employee wellbeing (i.e. job satisfaction, general workplace wellbeing, employee depression and anxiety). However, the moderation analysis showed that perceived organisational support did not significantly moderate the relationship between positive leadership and indicators of employee wellbeing. These results support previous research which has identified perceived organisational support as a mediator between leadership and employee attitudes and behaviours (e.g. DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019). This is important because it suggests that perceived organisational support is not a completely independent factor in determining employee wellbeing but instead is another mechanism through which leadership enhances employee wellbeing. While this mediational link was not replicated in the experimental *Study 6*, this is likely due to the need for real-life exposure to the organisation to truly reflect the influence leadership can have on these organisational specific variables.

Theoretical and Applied Implications

The current chapter provides novel insights into the investigation of the link between positive leadership and employee wellbeing by considering the impact of the wider organisation which has not been investigated much in previous research on the link between leadership and employee wellbeing (e.g. Li et al., 2014). As I have demonstrated in previous chapters (*Chapters 2* and *3*) and supported by initial previous research (Marsh et al., in prep), positive leadership has an enhancing impact on employee wellbeing and the link between

positive leadership and employee wellbeing indicators in mediated by identification variables. These findings have been supported again by the results of this chapter but has extended on this by considering the role of perceived organisational support. In the previous chapter (*Chapter 3*), we examined leader characteristics as potential boundary conditions on the impact of positive leadership and while the results did not find support for differences as a result of key leadership characteristics (i.e. leader age, gender or group membership), the influence of other organisational factors needed to be considered.

The moderation results from this chapter indicated that in the case of perceived organisational support, it does not limit the effectiveness of positive leadership on employee wellbeing but in fact it helps to explain the underlying psychological process. As previously highlighted the behaviour of leaders and their interactions with followers can influence employee's perceptions of the organisation overall (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Consistent with this, the results from *Study 5* of this chapter demonstrated that positive leadership did influence perceived organisational support and through this mechanism enhanced employee wellbeing. Consequently, this adds to the previous research indicating the role of identification variables as potential psychological mechanisms – the *why* – in the relationship between positive leadership and employee wellbeing with perceived organisational support identified as an additional mediator. While these mediation results were not supported in *Study 6* of this chapter, this is potentially due to the limitations of manipulating leadership style with a hypothetical scenario which may not be enough to provide information on the wider organisation.

Furthermore, the findings from this chapter especially *Study* 5 have provided some clarification in the research on the role of perceived organisational support regarding the relationship between leadership and employee wellbeing. Previous research was mixed on the role perceived organisational support plays in the relationship between leadership and

employee wellbeing. However, the findings from *Study 5* – specifically relating to positive leadership – reveals the variable as a mediator rather than a moderator. This is the first research investigating the role of perceived organisational support which tests it as both a mediator and moderator in the same study.

Limitations and Future Directions

The difference in the mediation results between *Study 5* and *6* indicates a potential limitation of the leadership style manipulation. In *Study 5*, there was clear evidence supporting the mediating role of perceived organisational support when measuring the variables in a cross-sectional design but when leadership style was manipulated in a hypothetical scenario in *Study 6* the meditation results were not significant. When manipulating leadership style it was a hypothetical scenario which then asked participants to imagine the perceived organisational support of the organisation the leader works for, so participants do not have as much information about the wider organisation and therefore, it can be difficult for them to assess the full impact the leader has on the organisation. The results from the cross-sectional study is more realistic and probably indicates to the actual relationships between these variables. However, this could be examined further using longitudinal or field studies to provide further support of the mediating role of perceived organisational support.

Furthermore, the results from this chapter and previous chapters (*Chapters 2* and *3*) provide support for the beneficial impact of positive leadership on employee wellbeing but previous research has identified similar relationships of other leadership styles and employee wellbeing (e.g. e.g. Arnold et al., 2007; Chughtai, et al., 2015; Fransen et al., 2020). Specifically, research has shown links between transformational leadership (e.g. Arnold et al., 2007; Ahmed et al., 2019; Liu et al., 2010; McMurray et al., 2010; Munir et al., 2012; Nielsen et al., 2008), ethical leadership (e.g. Chughtai, et al., 2015; Kalshoven & Boon, 2012;

Rivers et al., 2018; Sarwar et al., 2020) and identity leadership (e.g. Fransen et al., 2020; Krug et al., 2021; Steffens et al., 2018) on employee wellbeing. However, there is limited research which has compared the effects of different leadership styles on employee wellbeing and no research which has compared the positive leadership style with transformational, ethical and identity leadership styles in one study. Additionally, the indicators of wellbeing assessed in this chapter and the previous chapters (*Chapters 2* and *3*) have considered both positive and negative indicators but there needs to be a more comprehensive examination of a wider variety of wellbeing indicators (Inceoglu et al., 2018) which incorporates not just positive and negative indicators but both hedonic and eudemonic indicators. Similarly, other potential mediators should be examined. The results from this chapter and previous chapters have supported the role of identification variables and this chapter has examined a wider organisational mediator but as positive leadership is a relational style of leadership then it would be interesting to investigate potential relational mediators such as LMX.

Chapter Summary and Conclusion

This chapter examined the influence of the wider organisation on the relationship between leadership and wellbeing. Specifically, it tested the role of perceived organisational support on the relationship between positive leadership and indicators of employee wellbeing. Moreover, it tested the potential for perceived organisational support as both a mediator and a moderator as previous research on it role was mixed. The results from this chapter supported the findings from previous chapters (*Chapter 2* and *3*) of the beneficial impact of positive leadership on indicators on employee wellbeing and the role of identification variables in the explaining the underlying psychological mechanisms. Moreover, the results supported the role of perceived organisational support as a mediator instead of a moderator in the relationship between positive leadership and employee

wellbeing. In the next chapter, I will compare the effect of positive leadership to other leadership styles and investigate LMX as another potential mediator.

Chapter 5 – Comparing Positive Leadership with Other Leadership Styles

Chapter Overview

As emphasised by the results from the longitudinal study in *Chapter 2*, the correlational studies and experimental studies in *Chapters 3 and 4*, positive leadership is associated with better employee wellbeing. Expanding on this, the current chapter examines the role of positive leadership in comparison to other popular theories of leadership. Specifically, this chapter tests the effects of positive leadership on a wider variety of wellbeing outcomes while controlling for the effects of transformational, ethical and identity leadership. Moreover, as the mediation results highlighted in *Chapters 2, 3 and 4*, the relationship between positive leadership and employee wellbeing is mediated by identification variables, this was tested again in this chapter alongside another relational mediator LMX. *Study 7* presented in this chapter investigates the unique effects of positive leadership in a correlational design and compares the mediating effects of identification with the leader, organisational identification and LMX. The results showed that all four leadership styles were positively correlated with positive wellbeing indicators (except resilience) and negatively correlated with negative wellbeing indicators. The multiple regression showed that positive leadership was a significant predictor of all indicators of employee wellbeing (except resilience) and did show unique effects when predicting general workplace wellbeing, work engagement, job satisfaction, turnover intentions, employee anxiety and depression while controlling for all other leadership styles. The mediation results demonstrated that LMX was a significant mediator alongside identification with the leader and organisational identification for certain wellbeing outcomes (i.e. emotional exhaustion, general workplace wellbeing, meaning at work and job satisfaction) and was a marginally significant mediator for resilience and psychosomatic complaints.

Leadership and Wellbeing

Leaders have a significant impact on work behaviour, performance and employee wellbeing (e.g. Avolio et al., 2009; Kuoppala et al., 2008). They have the power to create a positive work environment through their own behaviours and decisions (Bakker, 2009). There has been a lot of research examining the link between leadership and employee wellbeing (e.g. Arnold et al., 2007; Liu et al., 2010; Mackey et al., 2017; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020). For example, research in this area has demonstrated that abusive leadership styles are associated with higher workplace stress (Schyns & Schilling, 2012) and higher employee emotional exhaustion (Mackey et al., 2017). Other research has shown clear communication and guidance from leaders has been associated with better employee wellbeing (Kim, 2002; Men, 2014). Consequently, it is clear that leader behaviours and styles have a clear impact on their followers wellbeing and this provides practical implications for improving employee wellbeing (Wegge et al., 2014).

Several different leadership styles have been associated with employee wellbeing. Four desirable leadership styles associated with higher employee wellbeing are: transformational leadership (Bass, 1998; Bass & Riggio, 2006), ethical leadership (Brown et al., 2005), identity leadership (Hogg, 2001; Hogg & van Knippenberg, 2003; Steffens et al., 2014) and positive leadership (Cameron, 2012; 2013). As outlined in *Chapter 1*,these leadership styles take different approaches to leadership. Transformational leadership is considered a change-oriented leadership style where transformational leaders are described as those who inspire others to strive beyond what they thought was achievable. Ethical leadership focuses on the leader being a moral individual who displays attributes including being upright, fair and principled but also ensuring that their followers meet this standard. Identity leadership is another more recently developed approach to leadership which is

focused on the prototypicality of the leader and the importance of leaders developing a sense of cohesion through enforcing group norms and values to promote the status of the group. And finally, positive leadership is a more relational approach to leadership involves implementation of strategies to develop an abundance culture and strive for above average performance. These strategies include fostering a culture of compassion, forgiveness and appreciation of employees, building a community, highlighting organisational values, communicating a clear vision, building networks between employees and giving and receiving best self-feedback and addressing limitations in a supportive manner.

Transformational leadership and its influence on employee wellbeing is the most frequently examined (e.g. Ahmed et al., 2019; Arnold et al., 2007; Liu et al., 2010; McMurray et al., 2010; Munir et al., 2012; Nielsen et al., 2008), but there is evidence for the link between ethical leadership and employee wellbeing (e.g. Chughtai, et al., 2015; Kalshoven & Boon, 2012; Rivers et al., 2018; Sarwar et al., 2020), identity leadership and employee wellbeing (e.g. Fransen et al., 2020; Krug et al., 2021; Steffens et al., 2018) and positive leadership and employee wellbeing (Kelloway et al., 2013; Marsh et al., in prep).

In a review from Bormann & Rowold (2018), they argued that there is a construct proliferation problem in leadership research. They suggest with the addition of more and more theories or approaches to leadership, there needs to be more consideration of discriminant validity to avoid construct redundancy. Comparing positive leadership to the leadership styles outlined above, we can see some theoretical overlap. For example, the importance placed on values in the theory of positive leadership is also reflected in the importance of moral standards in ethical leadership. And the importance of developing full potential in employees which is key to transformational leadership is also similar to developing individual strengths highlighted in the theory of positive leadership. There are also clear theoretical differences of these approaches. For instance, positive leadership

focuses not just on the relationship between the leader and followers but the creation of an overall positive culture within the whole organisation and developing relationships between employees.

Additionally, there is some empirical evidence for the differences between positive leadership and transformational leadership on employee wellbeing. Kelloway and colleagues (2013) compared the effects of positive leadership and transformational leadership on context-free (i.e. positive affective wellbeing) and context- specific (i.e. affective organisational commitment and job satisfaction) employee wellbeing. The results revealed that when controlling for the effects of transformational leadership, positive leadership was still significantly associated with employee wellbeing. These results provide initial support for the unique effects of positive leadership on employee wellbeing. However, the conceptualised of positive leadership in this study was too oversimplified and it still only compared the influence of two leadership styles.

Previous meta-analytic research has shown that different leadership behaviours and styles have differential impacts on employee performance and job satisfaction (e.g. DeRue et al., 2011; Piccolo et al., 2012). Only one study has compared more than two leadership constructs in one study (Gregersen et al., 2014). Gregersen and colleagues compared four different leadership approaches and behaviours (including transformational, transactional leadership, consideration and initiating structure leadership behaviours and leader-member exchange) on various different indicators of wellbeing. The results showed that leader member exchange was the best predictor of the most indicators of wellbeing. Apart from this example, there is little research which examines the effect of more than one leadership constructs on different indicators of employee wellbeing. To address the concern of construct proliferation in leadership research (Bormann & Rowold, 2018), there needs to be further research examining the effects of several approaches to leadership on employee wellbeing.

This will be considered in this chapter which examines the effects of positive leadership, while controlling for transformational, identity and ethical leadership. Also, taking into account the findings from Kelloway and colleagues (2013), it is expected that positive leadership will show unique effects on employee wellbeing.

Indicators of Wellbeing

As highlighted in *Chapter 1*, employee wellbeing has been conceptualised and measured in many different ways. Research into employee wellbeing have used work engagement, emotional exhaustion, life and job satisfaction, positive and negative affect, general employee health, psychosomatic complaints, depression, anxiety, resilience and workplace stress as indicators of employee wellbeing (Gregersen et al., 2014; Hsieh et al., 2019; Kelloway et al., 2013; Milner et al., 2015; Ogbonnaya et al., 2018; Page & Vella-Brodrick, 2013; Rivers et al., 2018; van Dick et al., 2017b; Winkler et al., 2014). However, most research has only focused on including two or three indicators in one study and the most commonly used indicator is job satisfaction (Inceoglu et al., 2018). In a review of the literature on leadership and employee wellbeing, Inceoglu et al. (2018) demonstrated that most studies focused on the hedonic, positive elements of wellbeing (i.e. job satisfaction) and emphasised that future research needs to consider multiple forms of employee wellbeing in one study. This would incorporate hedonic, eudemonic, negative and physical facets of employee wellbeing.

Therefore, in the current study 10 indicators of wellbeing are included which consists of hedonic (e.g. job satisfaction and general workplace wellbeing), eudemonic (e.g. meaning at work and work engagement) and negative indicators (e.g. workplace stress and emotional exhaustion). The current study also investigates the effects on employee behavioural intentions by considering turnover intentions. This helps to provide a more comprehensive investigation of the effects of positive leadership. The incorporation of a variety of indicators

expands on the previous research presented in this thesis as the eudemonic indicators have not been considered in the other chapters and the inclusion of more than one negative indicator expands on the inclusion of workplace stress in *Chapters 2 and 3* and depression and anxiety in *Chapter 4.*

Study 7: Comparing Positive Leadership to other Leadership Styles

Therefore, the current research serves to replicate previous links between these four leadership styles (e.g. Arnold et al., 2007; Chughtai et al., 2015; Kelloway et al., 2013; Steffens et al., 2014) on employee wellbeing, while also considering different facets of employee wellbeing in the same study[15]. Moreover, in this research, we will compare the effects of these four leadership styles in one study.

Hypothesis 1a: Positive leadership, transformational leadership, identity leadership and ethical leadership will all be positively correlated with indicators of positive employee wellbeing (i.e. job satisfaction, resilience, work engagement, meaning at work and general workplace wellbeing scores).

Hypothesis 1b: Positive leadership, transformational leadership, identity leadership and ethical leadership will all be negatively correlated to indicators of employee illbeing (i.e. workplace stress, emotional exhaustion, depression, anxiety, psychosomatic complaints and turnover intentions).

Hypothesis 2: Positive leadership will show unique effects when predicting employee wellbeing compared to other leadership styles, while controlling for all other leadership styles.

Mediating Role of LMX

In addition to comparing the different leadership styles and a variety of indicators of employee wellbeing, potential mediating factors in the relationship between positive

[15] This study was pre-registered on the Open Science Framework (https://osf.io/kftya)

leadership and employee wellbeing will be explored in this study. We have previously shown that the relationship between positive leadership and employee wellbeing is mediated by identification variables (Marsh et al., in prep; *Chapters 2, 3,* and *4*). Specifically, the results showed the relationship between positive leadership and job satisfaction (*Chapter 2* and *Chapter 4*) and employee anxiety and depression (*Chapter 4*) were significantly mediated by both identification with the leader and organisational identification individually and in sequence. And the link between positive leadership and stress (*Chapter 2* and *Chapter 3[Study 1])*, employee mental health (*Chapter 2*) and general workplace wellbeing (*Chapters 3* and *4*) was significantly mediated by identification with the leader only. These relationships will be tested again in this chapter but other wellbeing indicators will also be considered to see if there are any differences in the mediating mechanisms for these other indicators.

Building on this examination of identification variables in the previous chapters (*Chapters 2, 3,* and *4*), and the consideration of perceived organisational support in *Chapter 4*), *Study 7* is also looking at Leader Member Exchange (LMX) as a further potential mediator in these relationships. In a review from Inceoglu and colleagues (2018), they highlighted the potential for differential effects of leadership on different indicators of employee wellbeing as a result of different mediating processes. They emphasised that there is limited research examining different mediating processes in the relationship between leadership and employee wellbeing in one study. However, a couple of examples of research comparing different mediating processes have demonstrated some differences (e.g. Liu et al., 2010; Nielsen et al., 2008). For instance, research has highlighted that transformational leadership was related to eudemonic indicators of wellbeing through motivational mediators but was related to hedonic indicators through identification-related mediators (Nielsen et al., 2008). As research in the previous chapters (*Chapters 2, 3,* and *4*) has focused mainly on hedonic indicators (i.e. job satisfaction, general workplace wellbeing, depression, anxiety and

stress), this could explain why identification variables were significant mediators in the relationship between positive leadership and these indicators. But this might not be the case in this study when considering some other eudemonic indicators (i.e. meaning at work and work engagement). In this chapter, a relational mediator (i.e. LMX) will be examined and compared with the identification mediators.

Leader-Member Exchange (LMX) emphasizes the unique relationships that develop between a leader and their employees (Graen & Uhl-Bien, 1995). These can be classed as low or high quality. Low quality is described as only completing contractual obligations whereas high quality involves a relationship where leaders provide support, opportunities for employees to develop and other benefits. LMX has previously been associated with employee wellbeing (i.e. job satisfaction), stress and turnover (Dulebohn et al., 2012; Gerstner & Day, 1997; Graen et al., 1982; Sparr & Sonnentag, 2008; van Dierendonck et al., 2004) and how leaders achieve high quality relationships has been suggested to rely on leadership style (Erdogan & Bauer, 2015). Research has shown that LMX does mediate the relationships between leadership and employee wellbeing (e.g. Anseel & Lievens, 2007; Liao et al., 2016; Sparr & Sonnetag, 2008).

While LMX has been shown to be associated with employee wellbeing and has been tested as a relational mediator, the relationship between positive leadership and LMX has not yet been investigated. Theoretically, it would make sense for LMX to mediate the relationship between positive leadership and employee wellbeing for two reasons. Firstly, as previously highlighted by the research findings from Anseel and Lievens (2007) and Sparr and Sonnentag (2008), LMX mediated the relationship between fair supervisor feedback and employee wellbeing. One of the four key foundations of the theory of positive leadership (Cameron 2012; 2013) is ensuring best self-feedback and delivering negative feedback in a supportive and positive manner. This positive communication facet of positive leadership

reflects the fair supervisor feedback in previous research. Secondly, another of the key foundations of positive leadership is developing positive relationships. LMX is defined as a relational mediator (Inceoglu et al., 2018) and the definition of LMX is based on the unique relationships developed between leaders and their employees. Consequently, it is proposed that positive leadership leads to high quality LMX which then leads to improved employee wellbeing.

Hypothesis 3: Positive leadership will be positively associated with indicators of positive employee wellbeing and negatively associated with indicators of negative employee wellbeing through identification with the leader, organisational identification and LMX in parallel.

Method

Power Analysis

G-power was used to see how many participants will be needed for the correlation and multiple regression analysis in this study. Based on previous research examining the effect of leadership styles (i.e. positive, transformational, identity and ethical leadership), the lowest effect size reported was 0.17 for the relationship between ethical leadership and the emotional exhaustion indicator of wellbeing (Chughtai et al., 2014). Consequently, for the correlational analysis, the effect size of 0.17 was inputted into G-power. Based on this effect size, G-power recommends recruiting 266 participants for 80% power. For the multiple regression analysis, based on the conventional small to medium effect size (R-squared = 0.04), and 80% power with 4 predictors, G-power calculates a sample size of 191 participants.

To test the mediation effects, SEM will be used. Similar to the SEM, in *Chapter 4*, the following formula will be used to determine sample size (based on the coefficients from our previous research): Unstandardized Path Coefficient divided by 1/sqrtN. For 5% significance,

this ratio should be over 2. Therefore, this analysis was conducted on the lowest significant coefficient from our previous studies: .171. With an N of 250, the ratio is 2.70 and with an N of 300, the ratio is 2.96. Consequently, to ensure that we have enough participants in case of any issues in data collection, our planned sample size will be 300 participants.

Participants

Three hundred and eight participants took part in this study but 10 participants failed to pass the attention check. The remaining 298 participants (167 males and 128 females) were aged between 18 and 60 years old (M = 31.89, SD = 8.16). Of these 285 were in full-time employment and 13 were in part-time employment. Moreover, 283 of these participants currently worked for the leader they reflected on and 66 had a leadership role in their organisation. Participants were recruited from an online crowdsourcing site Prolific and were compensated for the time taken to complete the survey (i.e. £1.90 for 19 minute survey).

Measures

Positive Leadership

The full version of the positive leadership assessment scale (Cameron, 2012) was used to assess employees' perceptions of positive leadership. The scale consists of 24 items with five subscales, measuring Cameron's four strategies of positive leadership and general positive organizational strategies. The scale was used as a single measure of positive leadership and all items were measured on a seven-point Likert scale (1 = *never* to 7 = *always*). An example of one of the items was "Foster information sharing so that people become aware of colleagues' difficulties and therefore, can express compassion". Higher scores indicate higher perceptions of positive leadership (see Table 13 for all scale means, standard deviations and Cronbach alphas).

Identity Leadership

The identity leadership inventory (Steffens et al., 2014) was used to measure identity leadership. This inventory is made up of 15 items measured on a seven-point Likert scale (1 = *not at all* to 7 = *completely*). An example of one of the items is "This leader acts as a champion for the organization". Higher scores indicate higher perceptions of identity leadership.

Ethical Leadership

To measure ethical leadership, the 15 item scale from Yukl et al., (2013) was used. The items for this scale are measured on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*) with higher scores indicating higher perceptions of ethical leadership. An example of one of the items is "Shows a strong concern for ethical and moral values".

Transformational Leadership

Twenty-three items comprise the transformational leadership scale (Podsakoff et al., 1990). The items are measured on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*) with higher scores indicating higher perceptions of transformational leadership. An example of one of the items is "Has a clear understanding of where we are going".

Perceived Stress Scale

The ten item version of this scale (Cohen et al., 1983) has been used in previous studies measuring self-reported levels of stress (Walvekar et al., 2015; Willis & Burnett, 2016; Xu et al., 2017) and has been shown to be a well-validated stress scale (Smith et al., 2014). One of the items was "In the last month, how often have you been upset because of something that happened unexpectedly?" The items were measured on a five-point Likert scale (0 = *never* to 4 = *very often*).

Emotional Exhaustion

A subscale from Maslach's Burnout Inventory (Maslach & Jackson, 1981) was used to measure emotional exhaustion. The items were measured on a seven-point Likert scale (1 = *never* to 6 = *everyday*). An example of one of the items is "I feel emotionally drained from my work". Higher scores indicated higher emotional exhaustion.

General Workplace Wellbeing

A same measure of workplace wellbeing from *Chapters 3* and *4.* This measure is the Wellbeing Index (Winkler et al., 2014) and was used to measure general levels of workplace wellbeing. The scale contained six items (e.g. "Do you feel relaxed at work?") and was measured on a four-point Likert scale (1 = *not at all* to 4 = *very*). One of the items was reverse coded so that higher scores indicated higher workplace wellbeing.

Resilience

The Brief Resilience Scale (Smith et al., 2008) was used to measure resilience at work. The scale consisted of six statements (e.g. "It is hard for me to snap back when something bad happens at work") which was measured on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Three of the items were reverse coded so that higher scores indicated higher resilience.

Work Engagement

Seventeen items were used to measure work engagement (Schaufeli et al., 2006). Participants responded to these items on a seven-point Likert scale (0 = *never* to 6 = *always*). An example of one of the items is "When I am working, I forget everything else around me". Higher score indicated higher work engagement.

Depression and Anxiety

Items from the PHQ-4 and the GAD-7 (Kroenke et al., 2009) which are used in previous research (Van Dick et al., 2017b) were used to measure depression and anxiety. The

scale consisted of four items (e.g. “Over the previous two weeks at work, how often have you experienced little interest or pleasure in doing things”) which were measured on a four-point Likert scale (1 = *never* to 4 = *most days*). Higher scores indicated higher self-reported depression and anxiety.

Psychosomatic Complaints

To measure psychosomatic complaints, a scale from Winkler et al. (2014) was used. This scale is similar to a scale taken from the psychosomatic complaints scale (Mohr & Müller, 2005). The scale was comprised of nine items (e.g. “How often do you suffer from headaches?” which were measured on a five-point Likert scale (1 = *never* to 5 = *almost every day*). Higher scores indicated more frequent psychosomatic complaints.

Job Satisfaction

Job satisfaction was measured with 11 items taken from Warr et al. (1979) (e.g., “Please indicate on the following scale how satisfied you are with your physical working conditions”; 1 = *extremely dissatisfied*, 7 = *extremely satisfied*). Higher scores indicated higher job satisfaction.

Meaning at Work

To measure meaning at work, a subscale was used from the validated Copenhagen Psychosocial Questionnaire (COPSOQ; Kristensen et al., 2005). This subscale comprised of three items (e.g. “Do you feel that the work you do is important?”). Participants rated their agreement on a five-point Likert scale (1 = *to a very small extent* to 5 = *to a very large extent*). Higher scores indicated higher meaning at work.

Turnover Intentions

Turnover intentions were measured using four items (e.g. “In the next few years I expect to leave this company”; 1 = *strongly disagree*; 5 = *strongly agree*; Mitchell et al.,

2001). One of the items was reverse coded so that higher scores indicated higher intentions to leave.

LMX

Leader-Member Exchange was measured using a seven item scale created by Scandura and Graen (1984). All items are measured on seven-point scales but for consistency with the wording of the questions, the end-points are not the same for all questions. An example of one of the items is "How well does he/she recognize your potential?" which was measured from 1 (*not at all*) to 7 (*fully*). Higher scores indicate higher LMX.

Organizational Identification

Six items were used to measure organizational identification (Edwards & Peccei, 2007). One of the items was "I feel strong ties with my workplace". The items were measured on a seven-point scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicated higher organizational identification.

Identification with the Leader

Participants rated their agreement with seven statements measuring identification with and trust in the leader (e.g. "My values are similar to my supervisor/leader/manager's values"; Shamir et al., 1998) on a seven-point scale (1 = *never* to 5 = *always*). Higher scores indicated higher identification with and trust in the leader.

Procedure and Ethics [16]

Participants were invited to take part in a study investigating "how people perceive leaders in their organization and how they feel about their own job". Before starting the survey, participants were told they were going to be asked to think about their supervisor/leader/manager and were told this meant their direct supervisor. Participants were also informed that their responses were anonymous and would only be available to the

[16] Study 7 was conducted pre-COVID in March 2019.

research team and that they were able to withdraw at any time during the study. Then, participants gave informed consent and completed all the measures. The order which the measures was presented was randomized. After completing the measures, participants answered some demographic questions and were debriefed and thanked for their contribution. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 201915518069915468).

Results

Correlation Analysis

Positive leadership was positively correlated with general workplace wellbeing, work engagement, meaning at work and job satisfaction. Moreover, positive leadership was negatively correlated with workplace stress, emotional exhaustion, depression, anxiety, psychosomatic complaints and turnover intentions (see Table 13 for all correlations).

Transformational leadership was positively correlated with general workplace wellbeing, resilience, work engagement, meaning at work and job satisfaction and was negatively correlated with workplace stress, emotional exhaustion, depression, anxiety, psychosomatic complaints and turnover intentions.

Identity leadership was positively correlated with general workplace wellbeing, work engagement, meaning at work and job satisfaction. Furthermore, identity leadership was negatively correlated with workplace stress, emotional exhaustion, depression, anxiety, psychosomatic complaints and turnover intentions.

Ethical leadership was positively correlated with general workplace wellbeing, resilience, work engagement, meaning at work and job satisfaction and was negatively correlated with workplace stress, emotional exhaustion, depression, psychosomatic complaints and turnover intentions.

Table 13

Correlations, Means, Standard Deviations and Cronbach Alphas (Study 7)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Positive Leadership																		
2. Identity Leadership	.78***																	
3. Ethical Leadership	.72***	.81***																
4. Transformational Leadership	.78***	.84***	.84***															
5. Stress	-.18**	-.18**	-.24***	-.22***														
6. Emotional Exhaustion	-.34***	-.37***	-.40***	-.41***	.53***													
7. Wellbeing	.51***	.48***	.47***	.52***	-.56***	-.61***												
8. Resilience	.07	.11#	.14*	.12*	-.54***	-.39***	.39***											
9. Work Engagement	.47***	.46***	.42***	.48***	-.41***	-.42***	.69***	.19**										
10. Depression	-.29***	-.25***	-.26***	-.29***	.55***	.61***	-.54***	-.38***	-.46***									
11. Anxiety	-.18**	-.13*	-.11#	-.14*	.62***	.52***	-.47***	-.45***	-.26***	.60***								
12. Psychosomatic Complaints	-.12*	-.15*	-.19**	-.16**	.52***	.49***	-.43***	-.38***	-.19**	.56***	.54***							
13. Job Satisfaction	.69***	.69***	.67***	.72***	-.35***	-.55***	.67***	.21***	.61***	-.42***	-.27***	-.28***						
14. Meaning	.45***	.46***	.43***	.49***	-.33***	-.43***	.65***	.16**	.76***	-.43***	-.24***	-.20**	.66***					
15. Turnover Intentions	-.41***	-.40***	-.38***	-.44***	.35***	.48***	-.58***	-.20**	-.56***	.43***	.32***	.22***	-.57***	-.55***				
16. OrgID	.46***	.47***	.41***	.46***	-.32***	-.43***	.63***	.16**	.71***	-.40***	-.20**	-.16**	.62***	.75***	-.56***			
17. LMX	.66***	.73***	.77***	.78***	-.22***	-.40***	.50***	.16**	.41***	-.27***	-.16**	-.20**	.71***	.42***	-.40***	.39***		
18. Identification with Leader	.72***	.81***	.84***	.82***	-.19**	-.40***	.47***	.12*	.45***	-.28***	-.12*	-.18**	.71***	.45***	-.39***	.46***	.78***	
Mean	4.07	4.61	4.88	4.64	2.83	3.35	2.64	3.24	4.45	2.06	2.02	2.58	4.77	3.38	3.30	4.75	4.80	4.72
(SD)	(1.16)	(1.35)	(1.21)	(1.08)	(0.62)	(1.36)	(0.60)	(0.77)	(1.14)	(0.81)	(0.82)	(0.75)	(1.14)	(1.02)	(1.28)	(1.47)	(1.27)	(1.49)
Cronbach Alpha	.95	.96	.96	.95	.85	.92	.81	.82	.94	r = .58	r = .69	.83	.89	.88	.94	.94	.92	.96

Note. N = 298; # p <.10, * p < .05, ** p < .01, *** p < .001

Regression Analysis

Workplace Stress

A two-stage hierarchical multiple regression was conducted with perceived workplace stress as the outcome variable. Positive leadership was entered at stage one and then identity leadership, ethical leadership and transformational leadership were added at stage two. The variables were entered like this to first all of see if positive leadership was a significant predictor of workplace stress and then the other leadership styles were entered to investigate whether positive leadership would still be a significant predictor or whether other leadership styles are more important predictors. The regression statistics are presented in Table 14.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 10.14$, $p = .002$ and accounted for 3% of the variation in perceived workplace stress. The results from step 1 show that positive leadership is negatively associated with stress ($\beta = -.18$, $SE = 0.03$, $t = -3.19$, $p = .002$), so that the more positive a leader is perceived, the lower stress participants report. When all four leadership styles were included in stage two, this accounted for 6% of the variation in perceived workplace stress and this change in R Square was also significant, $F(4, 293) = 4.88$, $p = .001$. When all four leadership styles were included, only ethical leadership was a marginally significant predictor of perceived workplace stress, positive leadership became a non-significant predictor.

Table 14

Summary of the Hierarchical Regression Analysis for Variables predicting Perceived Workplace Stress

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.18	.03	
Positive Leadership	-.18	-3.19**	-.18			
Step 2				.25	.06	.03
Positive Leadership	-.02	-.18	-.01			
Identity Leadership	.12	.98	.06			
Ethical Leadership	-.22	-1.91#	-.11			
Transformational Leadership	-.13	-1.01	-.06			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Emotional Exhaustion

A two-stage hierarchical multiple regression was conducted with emotional exhaustion as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 15.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 38.83$, $p < .001$ and accounted for 12% of the variance in emotional exhaustion. When all four leadership styles were included in stage two, this accounted for 18% of the variation in burnout and this change in R Square was also significant, $F(4, 293) = 16.03$, $p < .001$. The results from step 1 show that positive leadership is a significant negative predictor of burnout ($\beta = -.34$, $SE = 0.06$, $t = -6.23$, $p < .001$), so that the more the leader was perceived to be high in positive leadership, the lower the employee ratings of emotional exhaustion. However, when all four leadership styles were included, only ethical leadership and transformational leadership were marginally significant negative predictors of burnout, positive leadership became a non-significant predictor.

Table 15

Summary of the Hierarchical Regression Analysis for Variables predicting Burnout

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.34	.12	
Positive Leadership	-.34	-6.23***				
Step 2				.42	.18	.06
Positive Leadership	-.01	-.12	-.01			
Identity Leadership	-.03	-.27	-.01			
Ethical Leadership	-.18	-1.71#	-.09			
Transformational Leadership	-.22	-1.92#	-.10			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

General Workplace Wellbeing

A two-stage hierarchical multiple regression was conducted with general wellbeing as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 16.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 101.67$, $p < .001$ and accounted for 26% of the variance in general wellbeing. When all four leadership styles were included in stage two, this accounted for 30% of the variation in general wellbeing and this change in R Square was also significant, $F(4, 293) = 30.67$, $p < .001$. The results from step 1 show that positive leadership is a significant positive predictor of general wellbeing ($\beta = .51$, $SE = 0.03$, $t = 10.08$, $p < .001$), so that as ratings of positive leadership increases, so does general workplace wellbeing. In addition, when all four leadership styles were included, positive leadership was still a significant predictor of general wellbeing, along with transformational leadership. However, identity leadership and ethical leadership were not significant predictors of general wellbeing.

Table 16

Summary of the Hierarchical Regression Analysis for Variables predicting General Wellbeing

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.51	.26	
Positive Leadership	.51	10.08***	.51			
Step 2				.54	.30	.04
Positive Leadership	.24	2.81**	.14			
Identity Leadership	.06	0.54	.03			
Ethical Leadership	.05	0.48	.02			
Transformational Leadership	.25	2.26*	.11			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Resilience

A two-stage hierarchical multiple regression was conducted with resilience as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 17.

The hierarchical multiple regression revealed that at stage one, positive leadership did not contribute significantly to the regression model, $F(1, 296) = 1.29$, $p = .26$ and only accounted for 0.4% of the variance in resilience. When all four leadership styles were included in stage two, this accounted for 2% of the variation in resilience and this change in R Square was also not significant, $F(4, 293) = 1.74$, $p = .14$. The results from step 1 show that positive leadership is not a significant positive predictor of resilience ($\beta = .07$, $SE = 0.04$, $t = 1.14$, $p = .26$), so that as ratings of positive leadership increases, so does employee ratings of resilience. In addition, when all four leadership styles were included, none of the leadership styles were significant predictors of resilience.

Table 17

Summary of the Hierarchical Regression Analysis for Variables predicting Resilience

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.07	.004	
Positive Leadership	.07	1.14	.07			
Step 2				.15	.02	.02
Positive Leadership	-.10	-0.96	-.06			
Identity Leadership	.001	0.01	.001			
Ethical Leadership	.16	1.42	.08			
Transformational Leadership	.05	0.42	.02			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Work Engagement

A two-stage hierarchical multiple regression was conducted with work engagement as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 18.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 81.93$, $p < .001$ and accounted for 22% of the variance in work engagement. When all four leadership styles were included in stage two, this accounted for 26% of the variation in work engagement and this change in R Square was also significant, $F(4, 293) = 25.49$, $p < .001$. The results from step 1 show that positive leadership is a significant positive predictor of work engagement ($\beta = .47$, $SE = 0.05$, $t = 9.05$, $p < .001$), so that as ratings of positive leadership increases, ratings of work engagement also increase. In addition, when all four leadership styles were included, positive leadership was still a significant predictor of work engagement along with transformational leadership. However, identity and ethical leadership were not significant predictors of work engagement when considering all four leadership styles.

Table 18

Summary of the Hierarchical Regression Analysis for Variables predicting Work Engagement

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.47	.22	
Positive Leadership	.47	9.05***				
Step 2				.51	.26	.04
Positive Leadership	.19	2.22*	.11			
Identity Leadership	.13	1.28	.06			
Ethical Leadership	-.06	-0.59	-.03			
Transformational Leadership	.27	2.44*	.12			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Depression

A two-stage hierarchical multiple regression was conducted with depression as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 19.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 27.24$, $p < .001$ and accounted for 8% of the variance in depression. When all four leadership styles were included in stage two, this accounted for 10% of the variation in depression and although the overall regression model was significant, $F(4, 293) = 7.79$, $p < .001$, this change is R square was not significant ($p = .28$). The results from step 1 show that positive leadership is a significant negative predictor of depression ($\beta = -.29$, $SE = 0.04$, $t = -5.22$, $p < .001$). In addition, when all four leadership styles were included, positive leadership was still a marginally significant negative predictor of depression. This means the higher the ratings of positive leadership, the lower the ratings of employee depression. However, when taking into account all four leadership

styles, identity, ethical and transformational leadership were not significant predictors of depression.

Table 19

Summary of the Hierarchical Regression Analysis for Variables predicting Depression

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.29	.08	
Positive Leadership	-.29	-5.22***	-.29			
Step 2				.31	.10	.01
Positive Leadership	-.17	-1.82#	-.10			
Identity Leadership	.07	0.58	.03			
Ethical Leadership	-.05	-0.46	-.03			
Transformational Leadership	-.17	-1.36	-.08			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Anxiety

A two-stage hierarchical multiple regression was conducted with anxiety as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 20.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 9.73$, $p = .002$ and accounted for 3% of the variance in anxiety. When all four leadership styles were included in stage two, this also accounted for 3% of the variation in anxiety and although the overall regression model was significant, $F(4, 293) = 2.49$, $p = .04$, this change is R square was not significant ($p = .96$). The results from step 1 show that positive leadership is a significant negative predictor of anxiety ($\beta = -.18$, $SE = 0.04$, $t = -3.12$, $p = .002$), so that as ratings of positive leadership increase, ratings of employee anxiety decrease. In addition, when all four leadership styles were included, positive leadership was still a marginally significant

predictor of anxiety. However, when taking into account all four leadership styles, identity, ethical and transformational leadership were not significant predictors of anxiety.

Table 20

Summary of the Hierarchical Regression Analysis for Variables predicting Anxiety

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.18	.03	
Positive Leadership	-.18	-3.12**	-.18			
Step 2				.18	.03	.001
Positive Leadership	-.19	-1.93#	-.11			
Identity Leadership	-.01	-0.06	-.003			
Ethical Leadership	.06	0.55	.03			
Transformational Leadership	-.04	-0.28	-.02			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Psychosomatic Complaints

A two-stage hierarchical multiple regression was conducted with psychosomatic complaints as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 21.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 4.55$, $p = .03$ and accounted for 2% of the variance in psychosomatic complaints. When all four leadership styles were included in stage two, this accounted for 4% of the variation in psychosomatic complaints and although the overall regression model was significant, $F(4, 293) = 2.90$, $p = .02$, this change is R square was only marginally significant ($p = .08$). The results from step 1 show that positive leadership is a significant negative predictor of psychosomatic complaints ($\beta = -.12$, $SE = 0.04$, $t = -2.13$, $p = .03$), so that as ratings of positive leadership increase, ratings of psychosomatic complaints decrease. In addition, when all four leadership styles were included, only ethical leadership was a marginally significant predictor of psychosomatic

complaints. However, when taking into account all four leadership styles, positive leadership became a non-significant predictor along with identity and transformational leadership.

Table 21

Summary of the Hierarchical Regression Analysis for Variables predicting Psychosomatic Complaints

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.12	.02	
Positive Leadership	-.12	-2.13*	-.12			
Step 2				.20	.04	.02
Positive Leadership	.04	0.35	.02			
Identity Leadership	.03	0.27	.02			
Ethical Leadership	-.21	-1.87#	-.11			
Transformational Leadership	-.04	-0.28	-.02			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Job Satisfaction

A two-stage hierarchical multiple regression was conducted with job satisfaction as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 22.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 269.63$, $p < .001$ and accounted for 48% of the variance in job satisfaction. When all four leadership styles were included in stage two, this accounted for 57% of the variation in job satisfaction and this change in R Square was also significant, $F(4, 293) = 98.11$, $p < .001$. The results from step 1 show that positive leadership is a significant positive predictor of job satisfaction ($\beta = .69$, $SE = 0.04$, $t = 16.42$, $p < .001$), so that as ratings of positive leadership increases, ratings of job satisfaction also increases. In addition, when all four leadership styles were included, positive leadership was still a significant predictor of job satisfaction. Identity and transformational

leadership were also significant predictors of job satisfaction when taking into account all four leadership styles.

Table 22

Summary of the Hierarchical Regression Analysis for Variables predicting Job Satisfaction

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.69	.48	
Positive Leadership	.69	16.42***	.69			
Step 2				.76	.57	.10
Positive Leadership	.26	3.96***	.15			
Identity Leadership	.17	2.09*	.08			
Ethical Leadership	.09	1.16	.04			
Transformational Leadership	.30	3.59***	.14			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Meaning at Work

A two-stage hierarchical multiple regression was conducted with meaning as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 23.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 75.43$, $p < .001$ and accounted for 20% of the variance in meaning. When all four leadership styles were included in stage two, this accounted for 26% of the variation in meaning and this change in R Square was also significant, $F(4, 293) = 25.28$, $p < .001$. The results from step 1 show that positive leadership is a significant positive predictor of meaning ($\beta = .45$, $SE = 0.05$, $t = 8.69$, $p < .001$), so that as ratings of positive leadership increases, employee ratings of meaning at work also increases. However, when taking into account all four leadership styles, positive leadership became non-significant along with identity and ethical leadership. In Step 2, only transformational leadership was a significant predictor of meaning.

Table 23

Summary of the Hierarchical Regression Analysis for Variables predicting Meaning at Work

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.45	.20	
Positive Leadership	.45	8.69***	.45			
Step 2				.51	.26	.05
Positive Leadership	.14	1.61	.08			
Identity Leadership	.09	0.88	.04			
Ethical Leadership	-.01	-0.07	-.003			
Transformational Leadership	.31	2.81**	.14			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Turnover Intentions

A two-stage hierarchical multiple regression was conducted with turnover intentions as the outcome variable. This multiple regression followed the same procedure as the stress multiple regression. The regression statistics are presented in Table 24.

The hierarchical multiple regression revealed that at stage one, positive leadership contributed significantly to the regression model, $F(1, 296) = 61.08$, $p < .001$ and accounted for 17% of the variance in turnover intentions. When all four leadership styles were included in stage two, this accounted for 21% of the variation in turnover intentions and this change in R Square was also significant, $F(4, 293) = 19.28$, $p < .001$. The results from step 1 show that positive leadership is a significant negative predictor of turnover intentions ($\beta = -.41$, $SE = 0.06$, $t = -7.82$, $p < .001$), so that as ratings of positive leadership increases, ratings of turnover intentions decreases. However, when all four leadership styles were included, transformational leadership was a significant predictor and positive leadership became a marginally significant predictor of turnover intentions. However, when taking into account all four leadership styles, identity and ethical leadership were not significant predictors of turnover intentions.

Table 24

Summary of the Hierarchical Regression Analysis for Variables predicting Turnover Intentions

Variable	β	*t*	sr^2	R	R^2	ΔR^2
Step 1				.41	.17	
Positive Leadership	-.41	-7.82***	-.41			
Step 2				.46	.21	.04
Positive Leadership	-.17	-1.84#	-.10			
Identity Leadership	-.06	-0.52	-.03			
Ethical Leadership	.04	0.43	.02			
Transformational Leadership	-.30	-2.64**	-.14			

Note. $N = 298$; # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Mediation Analysis

A full structural equation modelling mediation analysis was used to test identification with the leader, organisational identification and LMX as mediators in the relationship between positive leadership and wellbeing indicators. This was tested with full SEM, using latent variables in AMOS (IBM SPSS AMOS 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps).

Workplace Stress

With workplace stress as the outcome, the chi-square of the model fit was significant $\chi 2$ (1369, N= 298) = 2870.86, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.10. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .87 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (b = .92, SE = .07, $95CI$[0.79, 1.06], p = .001), higher organisational identification (b = .34, SE = .11,

95CI[0.15, 0.57], *p* = .002) and higher perceived organisational support (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, only organisational identification was significantly negatively related with workplace stress (*b* = -.10, *SE* = .03, *95CI*[-0.17, -0.04], *p* = .001); identification with the leader (*b* = .03, *SE* = .05, *95CI*[-0.06, .13], *p* = .50) and LMX (*b* = -.07, *SE* = .05, *95CI*[-0.17, 0.02], *p* = .13) were not significantly directly related with workplace stress. And, the direct effect of positive leadership on workplace stress was not significant (*b* = .004, *SE* = .05, *95CI*[-.09, .11], *p* = .93). The indirect effects of positive leadership on workplace stress via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on workplace stress via LMX was significant (see Figure 12 for direct effects and Table 25 for all indirect effects).

Emotional Exhaustion

With emotional exhaustion as the outcome, the chi-square of the model fit was significant $\chi 2$ (1317, *N*= 298) = 2760.26, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.10. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .88 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* =

.23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, both organisational identification (*b* = -.34, *SE* = .08, *95CI*[-0.49, -0.18], *p* = .001) and LMX (*b* = -.30, *SE* = .13, *95CI*[-0.56, -0.06], *p* = .01) were significantly negatively related with emotional exhaustion but identification with the leader was not (*b* = -.05, *SE* = .11, *95CI*[-0.26, 0.16], *p* = .66). And the direct effect of positive leadership on emotional exhaustion was not significant (*b* = .002, *SE* = .13, *95CI*[-.23, .27], *p* = .97). The indirect effects of positive leadership on emotional exhaustion via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on emotional exhaustion via LMX was significant (see Figure 13 for direct effects and Table 25 for all indirect effects).

Wellbeing

With wellbeing as the outcome, the chi-square of the model fit was significant $\chi 2$ (1167, *N*= 298) = 2389.53, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.05. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.03, 0.42], *p* = .02). Moreover, both organisational identification (*b* = .31, *SE* = .04, *95CI*[0.24, 0.38], *p* = .001) and LMX (*b* = .15, *SE* = .06, *95CI*[0.04, 0.27], *p* = .01) were significantly positively related with wellbeing but identification with the leader was

not (*b* = -.05, *SE* = .05, *95CI*[-0.14, 0.05], *p* = .37). And the direct effect of positive leadership on wellbeing was marginally significant (*b* = .10, *SE* = .06, *95CI*[-.02, .21], *p* = .09). The indirect effects of positive leadership on wellbeing via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on wellbeing via LMX was significant (see Figure 14 for direct effects and Table 25 for all indirect effects).

Resilience

With resilience as the outcome, the chi-square of the model fit was significant $\chi 2$ (1167, *N*= 298) = 2518.60, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.16. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .88 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.56], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, organisational identification (*b* = .08, *SE* = .04, *95CI*[-0.001, 0.17], *p* = .05) was significantly positively related with resilience and LMX (*b* = .11, *SE* = .07, *95CI*[-0.01, 0.28], *p* = .07) was marginally positively related with resilience, but identification with the leader was not (*b* = -.01, *SE* = .06, *95CI*[-0.15, 0.11], *p* = .84). And the direct effect of positive leadership on resilience was not significant (*b* = -.07, *SE* = .07, *95CI*[-.22, .06], *p* = .28). The indirect effects of positive leadership on resilience via organisational identification and through identification with the leader and organisational

identification in sequence were significant. And, the indirect effect of positive leadership on resilience via LMX was marginally significant (see Figure 15 for direct effects and Table 25 for all indirect effects).

Work Engagement

With work engagement as the outcome, the chi-square of the model fit was significant $\chi 2$ (1761, N= 298) = 3529.38, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.00. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .88 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.43], *p* = .02). Moreover, organisational identification (*b* = .58, *SE* = .06, *95CI*[0.47, 0.71], *p* = .001) was significantly positively related with work engagement but LMX (*b* = .11, *SE* = .08, *95CI*[-0.05, 0.29], *p* = .17) and identification with the leader (*b* = -.01, *SE* = .08, *95CI*[-0.16, 0.15], *p* = .95) were not significantly related with work engagement. And the direct effect of positive leadership on work engagement was not significant (*b* = .10, *SE* = .07, *95CI*[-.04, .25], *p* = .16). The indirect effects of positive leadership on work engagement via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on resilience via LMX was not significant (see Figure 16 for direct effects and Table 25 for all indirect effects).

Depression

With employee depression as the outcome, the chi-square of the model fit was significant $\chi 2$ (981, *N*= 298) = 2160, $p < .001$. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.20. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .72, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, organisational identification (*b* = -.20, *SE* = .06, *95CI*[-0.31, -0.05], *p* = .004) was significantly negatively related with employee depression but LMX (*b* = -.04, *SE* = .07, *95CI*[-0.17, 0.10], *p* = .59) and identification with the leader (*b* = .01, *SE* = .07, *95CI*[-0.12, 0.15], *p* = .83) were not significantly related with depression. And the direct effect of positive leadership on depression was not significant (*b* = -.08, *SE* = .07, *95CI*[-.20, .06], *p* = .23) The indirect effects of positive leadership on depression via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on depression via LMX was not significant (see Figure 17 for direct effects and Table 25 for all indirect effects).

Anxiety

With employee anxiety as the outcome, the chi-square of the model fit was significant $\chi 2$ (981, *N*= 298) = 2118.92, $p < .001$. However, chi-square is sensitive to sample size, so the

relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.16. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.03, 0.42], *p* = .02). Moreover, organisational identification (*b* = -.09, *SE* = .05, *95CI*[-0.19, -0.01], *p* = .04) was significantly negatively related with employee anxiety but LMX (*b* = -.08, *SE* = .09, *95CI*[-0.25, 0.09], *p* = .28) and identification with the leader (*b* = .08, *SE* = .08, *95CI*[-0.05, 0.24], *p* = .28) were not significantly related with anxiety. And the direct effect of positive leadership on anxiety was not significant (*b* = -.09, *SE* = .11, *95CI*[-.30, .09], *p* = .46). The indirect effects of positive leadership on anxiety via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on anxiety via LMX was not significant (see Figure 18 for direct effects and Table 25 for all indirect effects).

Psychosomatic Complaints

With psychosomatic complaints as the outcome, the chi-square of the model fit was significant $\chi 2$ (1317, *N*= 298) = 2644.84, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.01. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for

model fit. Moreover, the CFI of the model was .88 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, organisational identification (*b* = -.06, *SE* = .04, *95CI*[-0.15, 0.01], *p* = .09) and LMX (*b* = -.11, *SE* = .07, *95CI*[-0.24, 0.02], *p* = .09) were marginally significantly related with psychosomatic complaints but identification with the leader (*b* = -.02, *SE* = .06, *95CI*[-0.14, 0.11], *p* = .81) was not significantly related with psychosomatic complaints. And the direct effect of positive leadership on psychosomatic complaints was not significant (*b* = .05, *SE* = .06, *95CI*[-.07, .18], *p* = .44). The indirect effects of positive leadership on psychosomatic complaints via organisational identification and through identification with the leader and organisational identification in sequence were marginally significant. And, the indirect effect of positive leadership on psychosomatic complaints via LMX was marginally significant (see Figure 19 for direct effects and Table 25 for all indirect effects).

Job Satisfaction

With job satisfaction as the outcome, the chi-square of the model fit was significant $\chi 2$ (1422, *N*= 298) = 3005.70, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.11. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .87 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.42], *p* = .02). Moreover, organisational identification (*b* = .15, *SE* = .04, *95CI*[0.09, 0.24], *p* = .001), LMX (*b* = .24, *SE* = .05, *95CI*[0.15, 0.36], *p* = .001) and identification with the leader (*b* = .10, *SE* = .04, *95CI*[0.01, 0.18], *p* = .03) were significantly positively related with job satisfaction. And the direct effect of positive leadership on job satisfaction was significant (*b* = .13, *SE* = .05, *95CI*[.05, .24], *p* = .001). The indirect effects of positive leadership on job satisfaction via identification with the leader and organisational identification individually and in sequence were significant. And, the indirect effect of positive leadership on job satisfaction via LMX was significant (see Figure 20 for direct effects and Table 25 for all indirect effects).

Meaning at Work

With meaning at work as the outcome, the chi-square of the model fit was significant $\chi 2$ (1026, *N*= 298) = 2239.54, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.18. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* =

.23, *SE* = .10, *95CI*[0.04, 0.43], *p* = .02). Moreover, organisational identification (*b* = .53, *SE* = .05, *95CI*[0.43, 0.63], *p* = .001) and LMX (*b* = .13, *SE* = .06, *95CI*[0.02, 0.27], *p* = .03) were significantly positively related with meaning at work but identification with the leader (*b* = -.01, *SE* = .06, *95CI*[-0.13, 0.10], *p* = .79) was not significantly related. And the direct effect of positive leadership on meaning at work is not significant (*b* = -.001, *SE* = .07, *95CI*[-.14, .14], *p* = .99). The indirect effects of positive leadership on meaning at work via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on meaning at work via LMX was significant (see Figure 21 for direct effects and Table 25 for all indirect effects).

Turnover Intentions

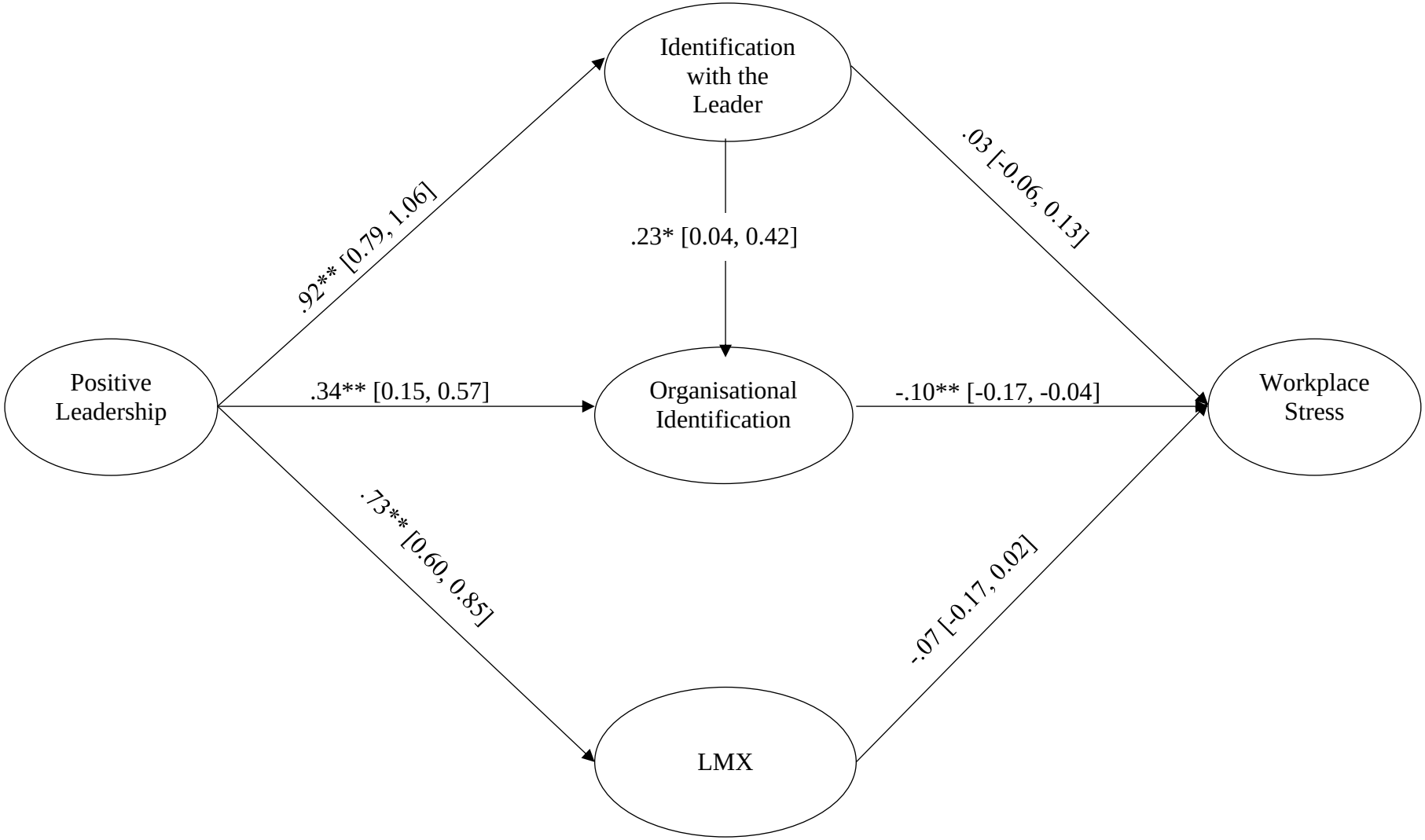
With turnover intentions as the outcome, the chi-square of the model fit was significant $\chi 2$ (1072, *N*= 298) = 2304.50, *p* < .001. However, chi-square is sensitive to sample size, so the relative chi-square fit was calculated (dividing chi-square index by the degrees of freedom). The relative $\chi 2$ was 2.15. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets the necessary criteria for model fit. Moreover, the CFI of the model was .90 and the RMSEA was .06 suggesting an acceptable model fit (Hu & Bentler, 1999).

Positive leadership was associated with higher identification with the leader (*b* = .92, *SE* = .07, *95CI*[0.79, 1.06], *p* = .001), higher organisational identification (*b* = .34, *SE* = .11, *95CI*[0.15, 0.57], *p* = .002) and LMX (*b* = .73, *SE* = .07, *95CI*[0.60, 0.85], *p* = .001). Identification with the leader was positively associated with organisational identification (*b* = .23, *SE* = .10, *95CI*[0.04, 0.43], *p* = .02). Moreover, organisational identification (*b* = -.45, *SE* = .06, *95CI*[-0.57, -0.32], *p* = .002) and LMX (*b* = -.23, *SE* = .11, *95CI*[-0.47, -0.03], *p* = .02) were significantly negatively related with turnover intentions but identification with the

leader (*b* = .09, *SE* = .09, *95CI*[-0.09, 0.27], *p* = .31) was not significantly related with turnover intentions. And the direct effect of positive leadership on turnover intentions is not significant (*b* = -.12, *SE* = .11, *95CI*[-.34, .11], *p* = .33). The indirect effects of positive leadership on turnover intentions via organisational identification and through identification with the leader and organisational identification in sequence were significant. And, the indirect effect of positive leadership on turnover intentions via LMX was significant (see Figure 22 for direct effects and Table 25 for all indirect effects).

Figure 12

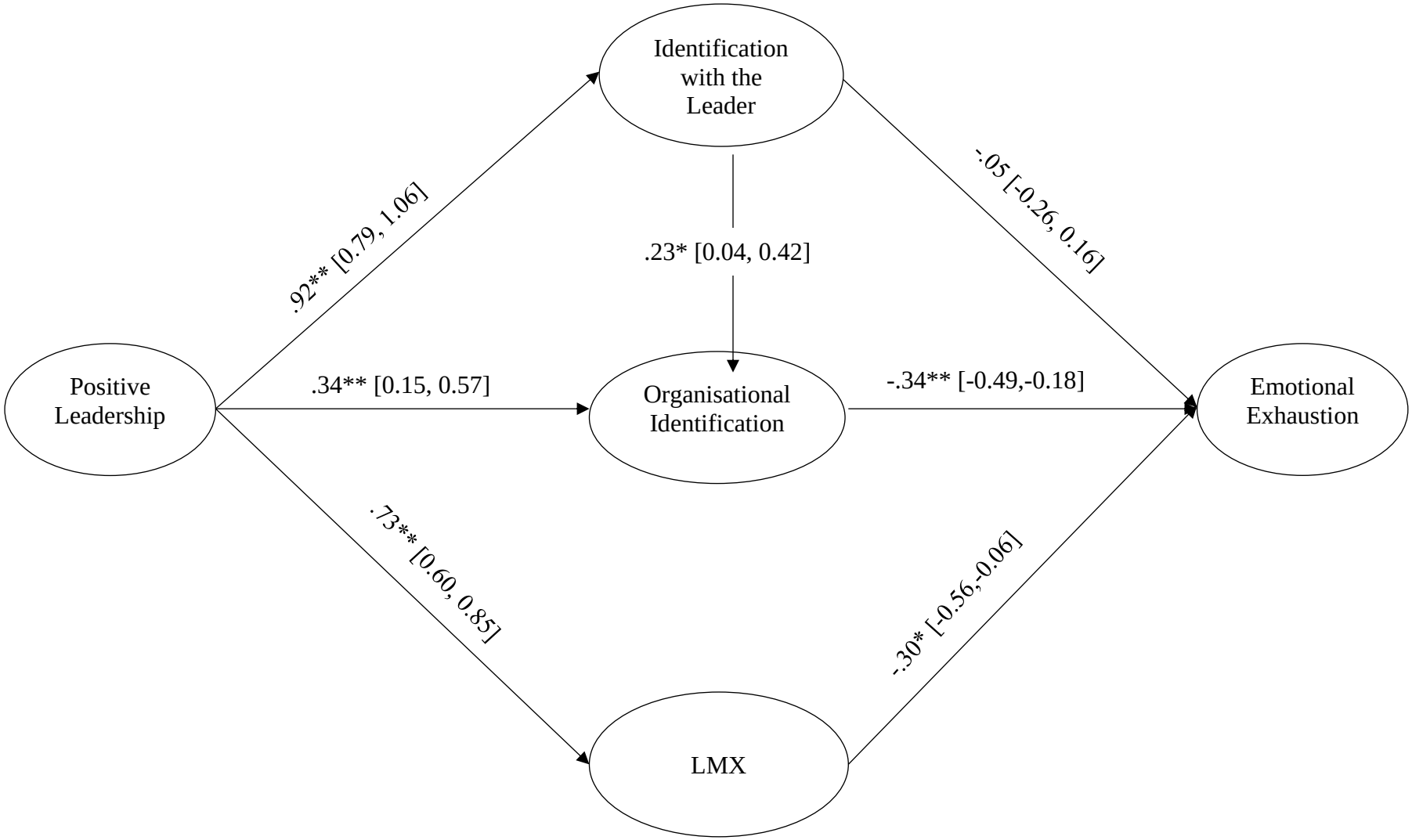
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for workplace stress (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 13

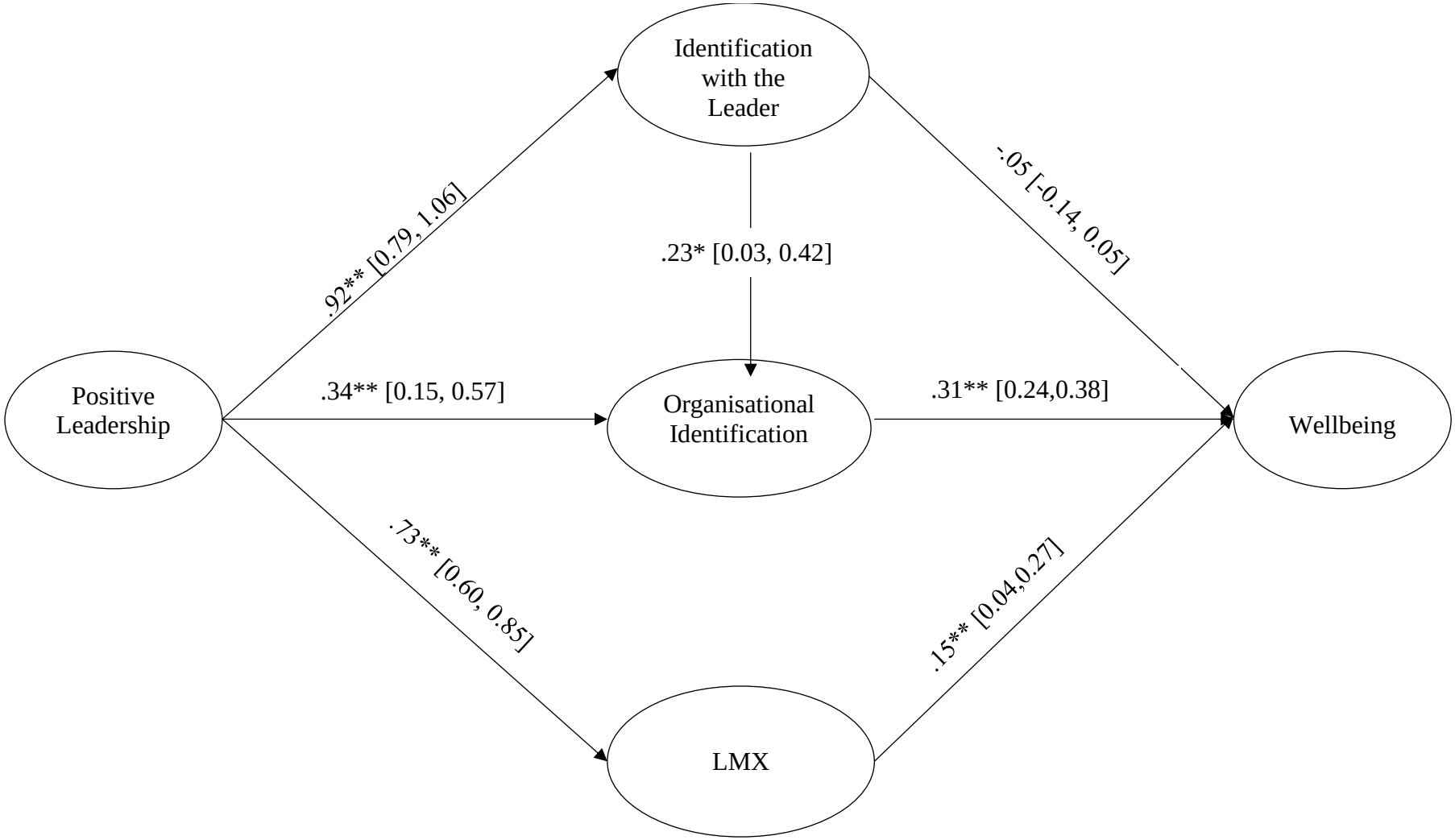
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for emotional exhaustion (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 14

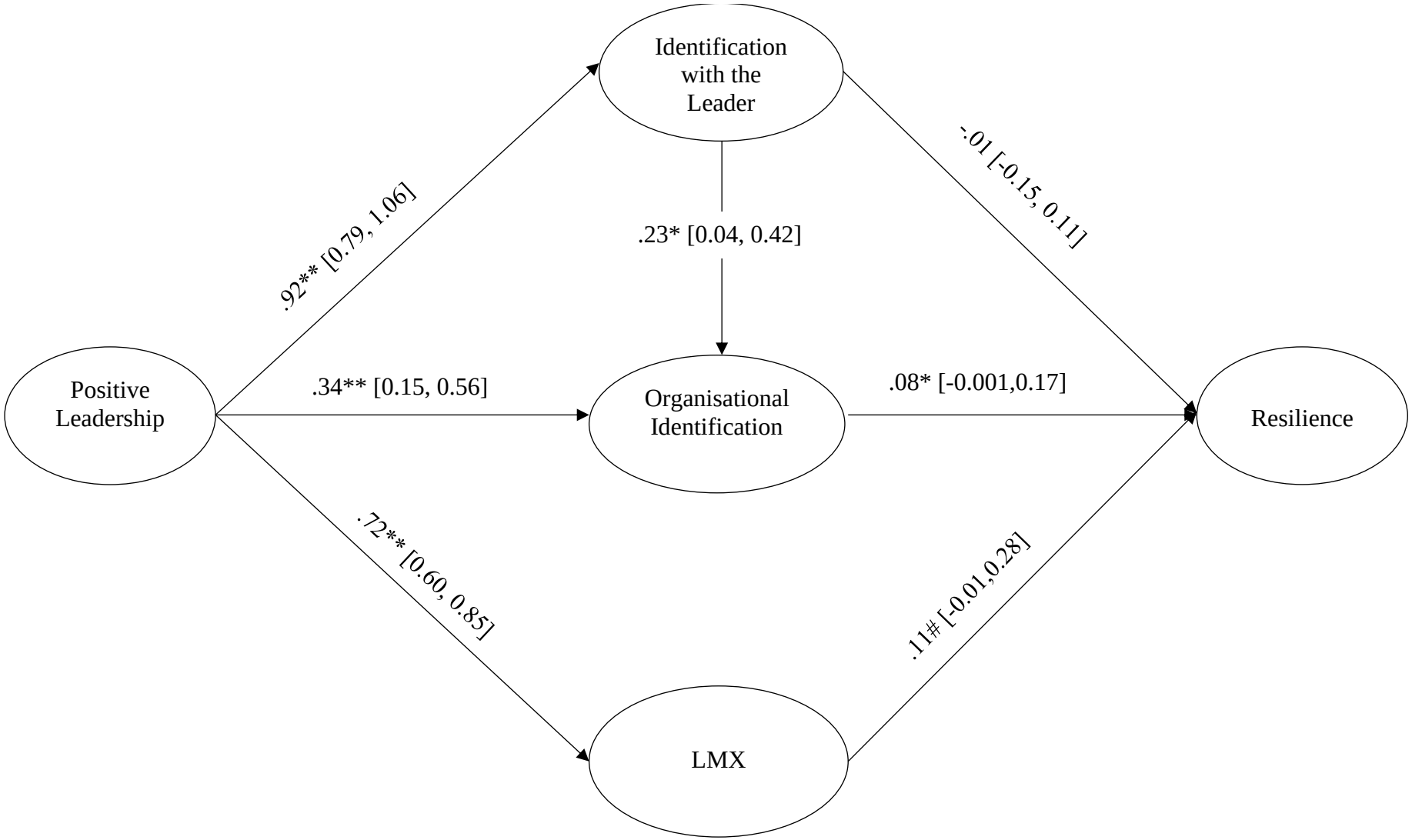
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for general workplace wellbeing (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 15

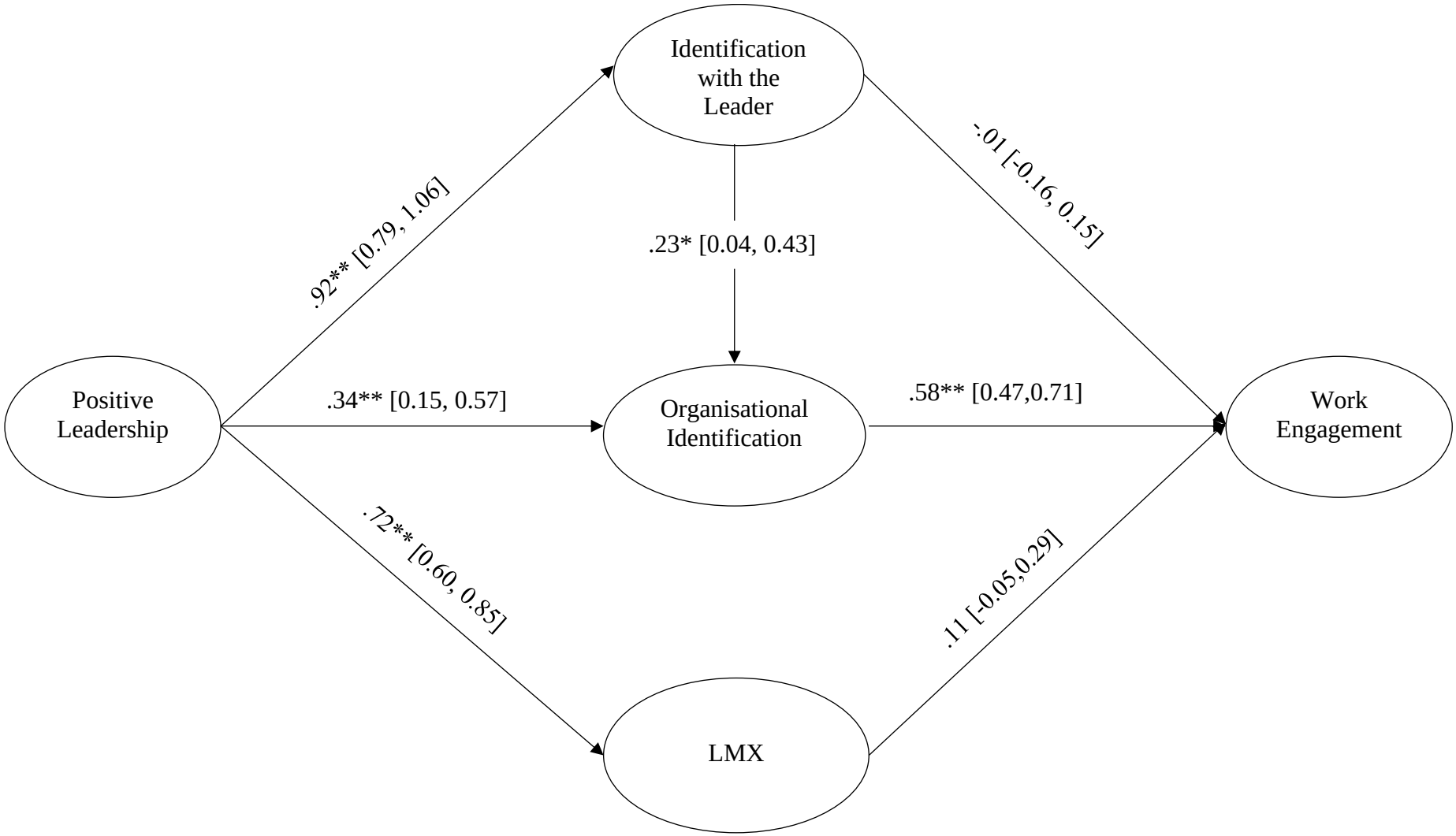
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for resilience (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 16

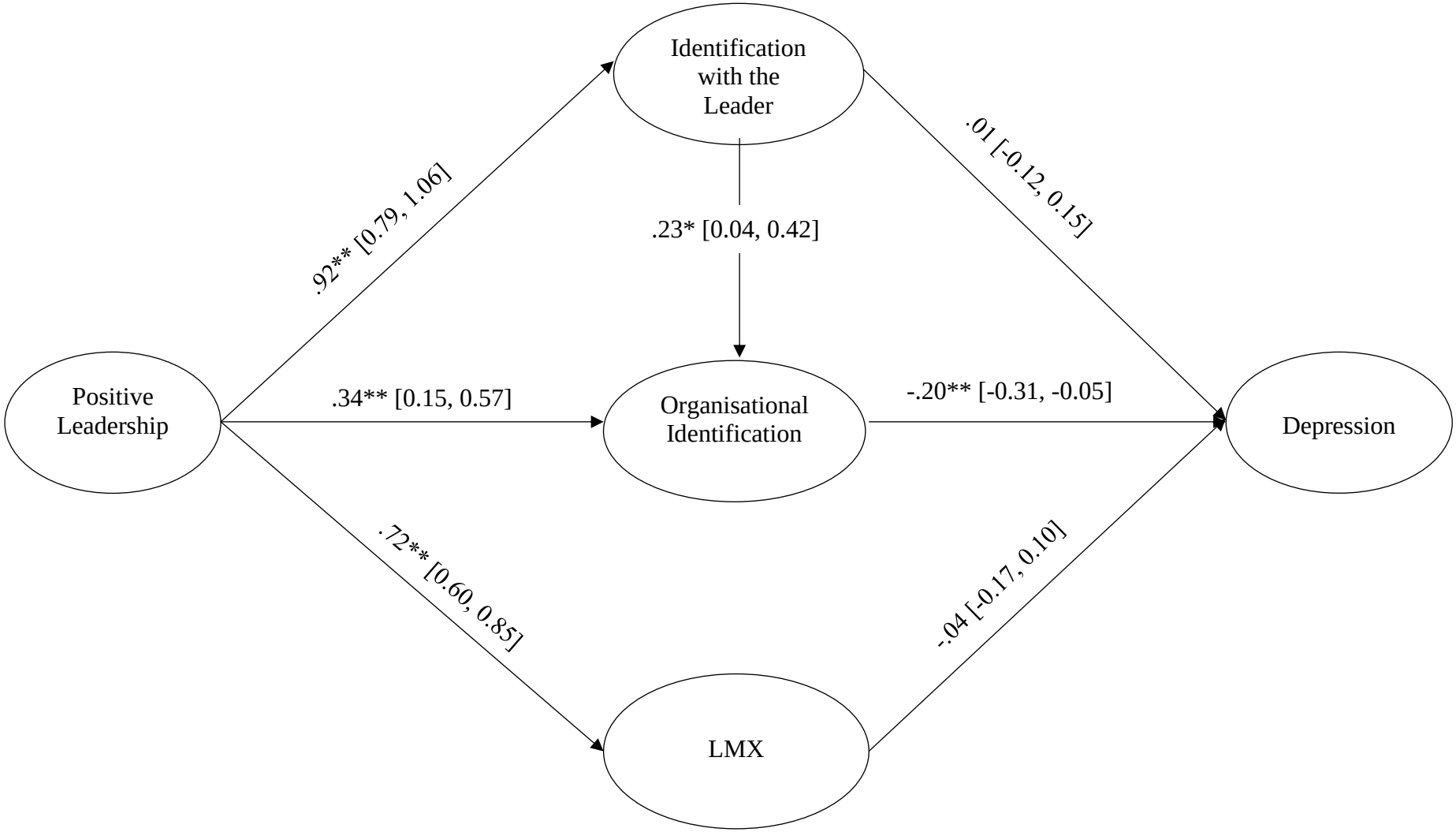
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for work engagement (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 17

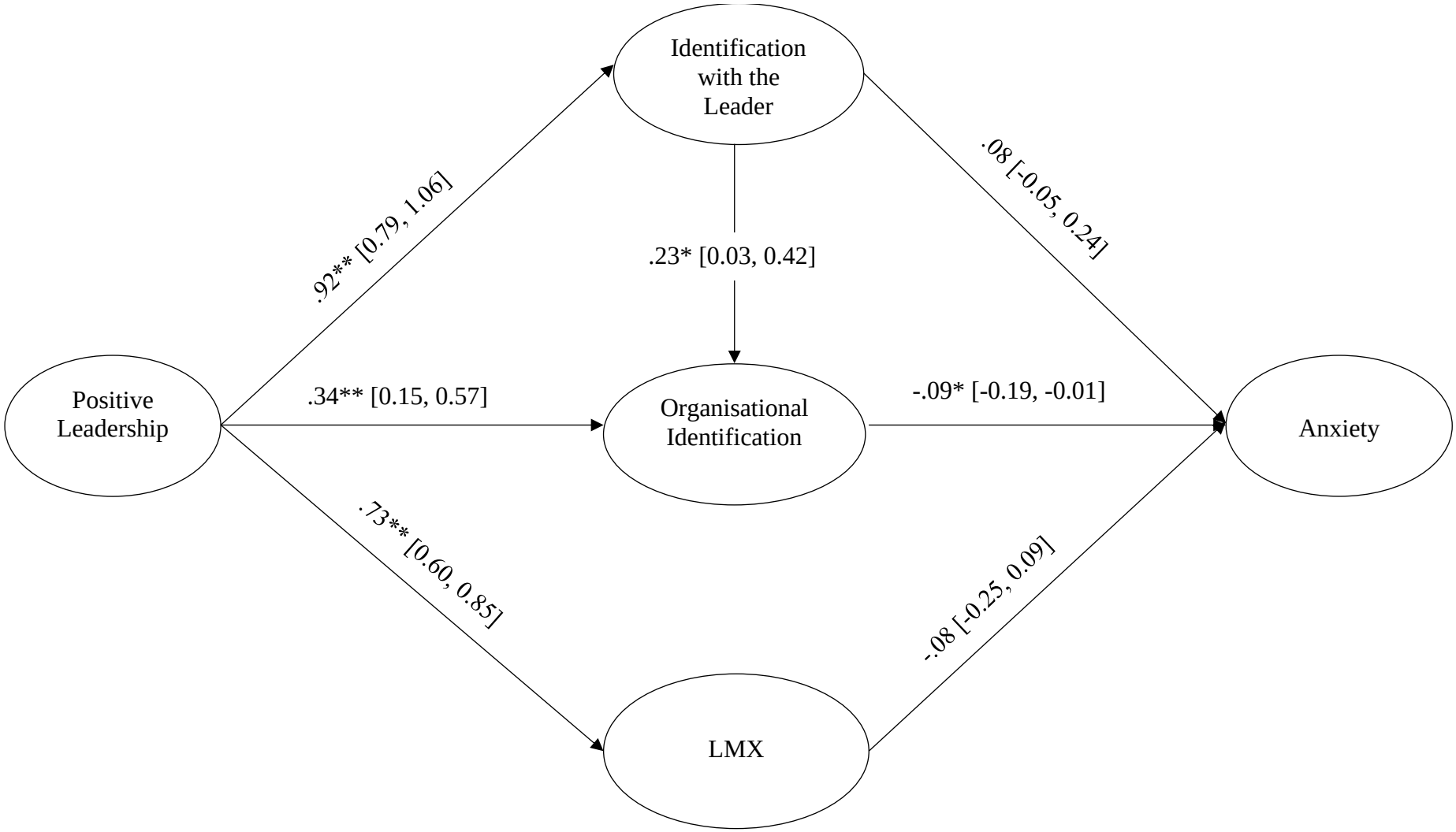
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for depression (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 18

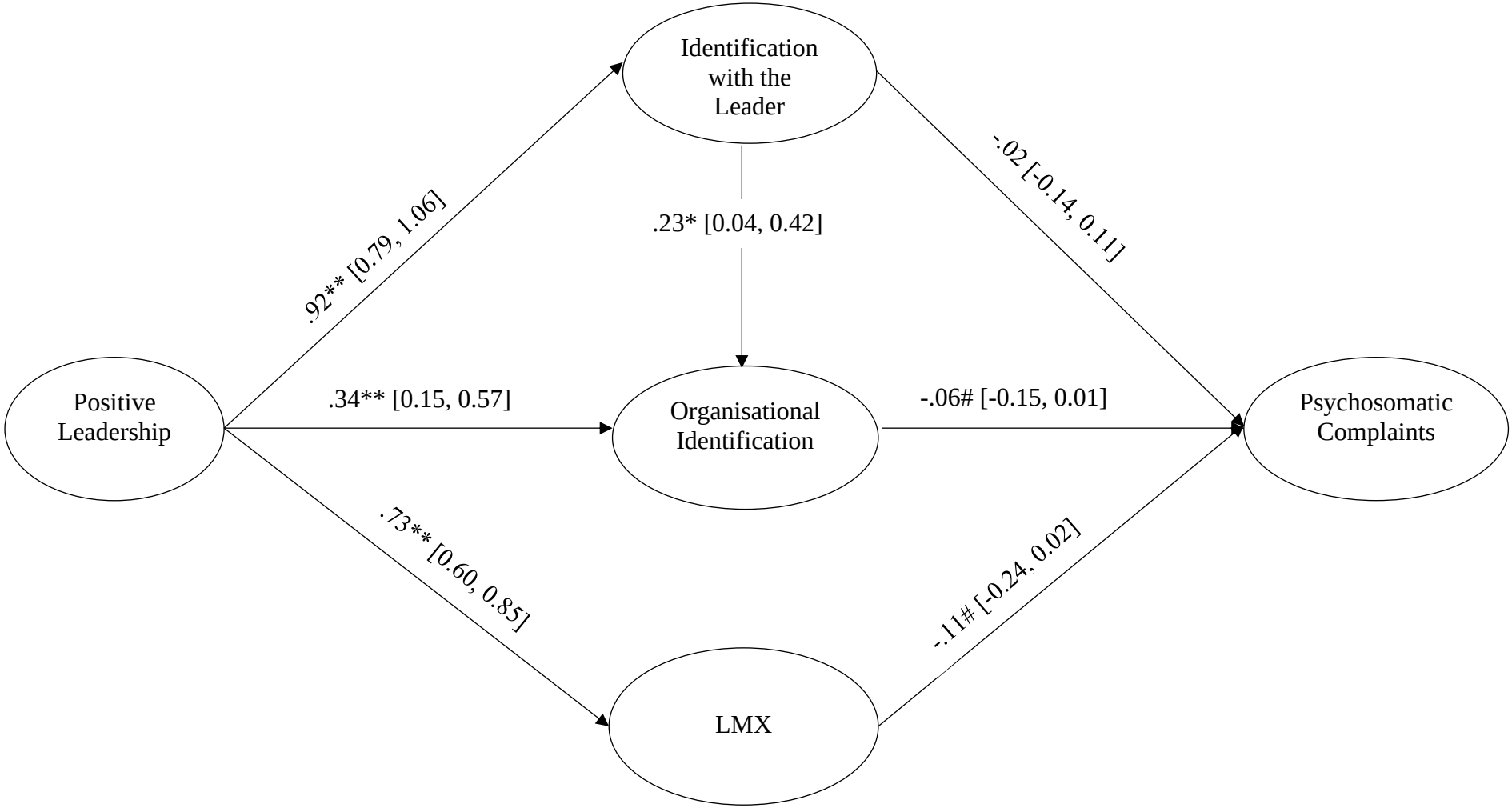
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for anxiety (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 19

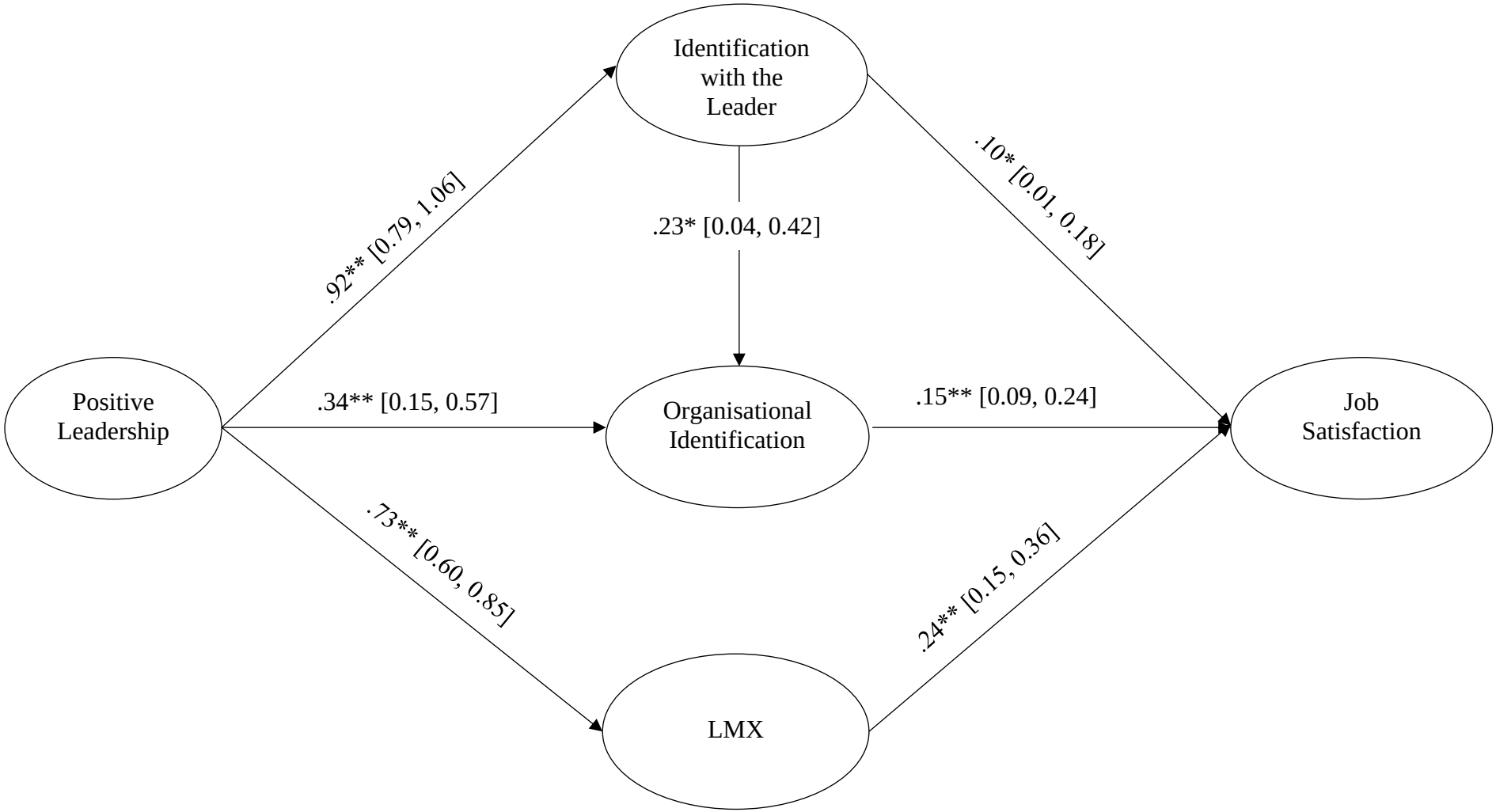
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for psychosomatic complaints (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 20

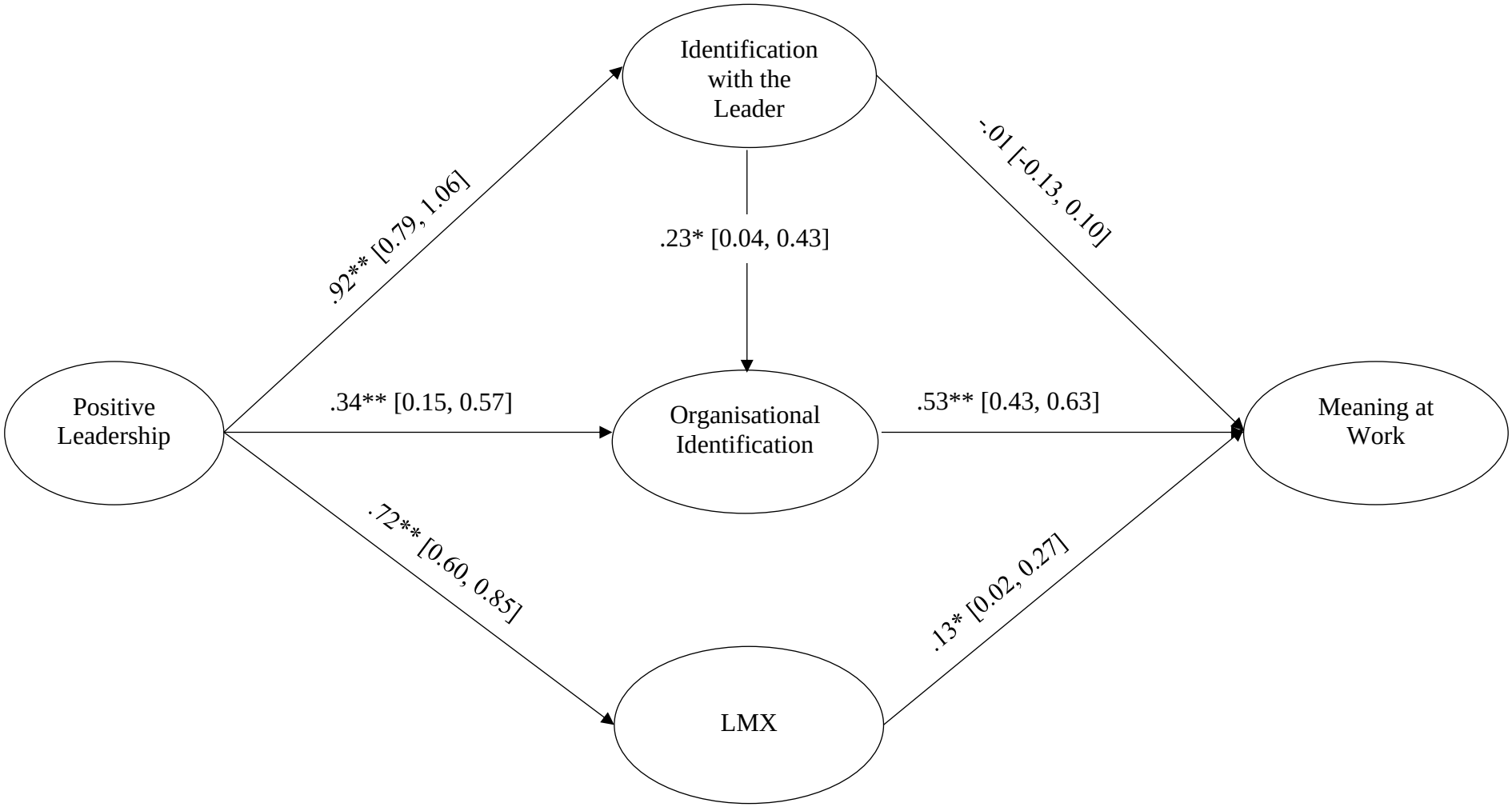
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for job satisfaction (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 21

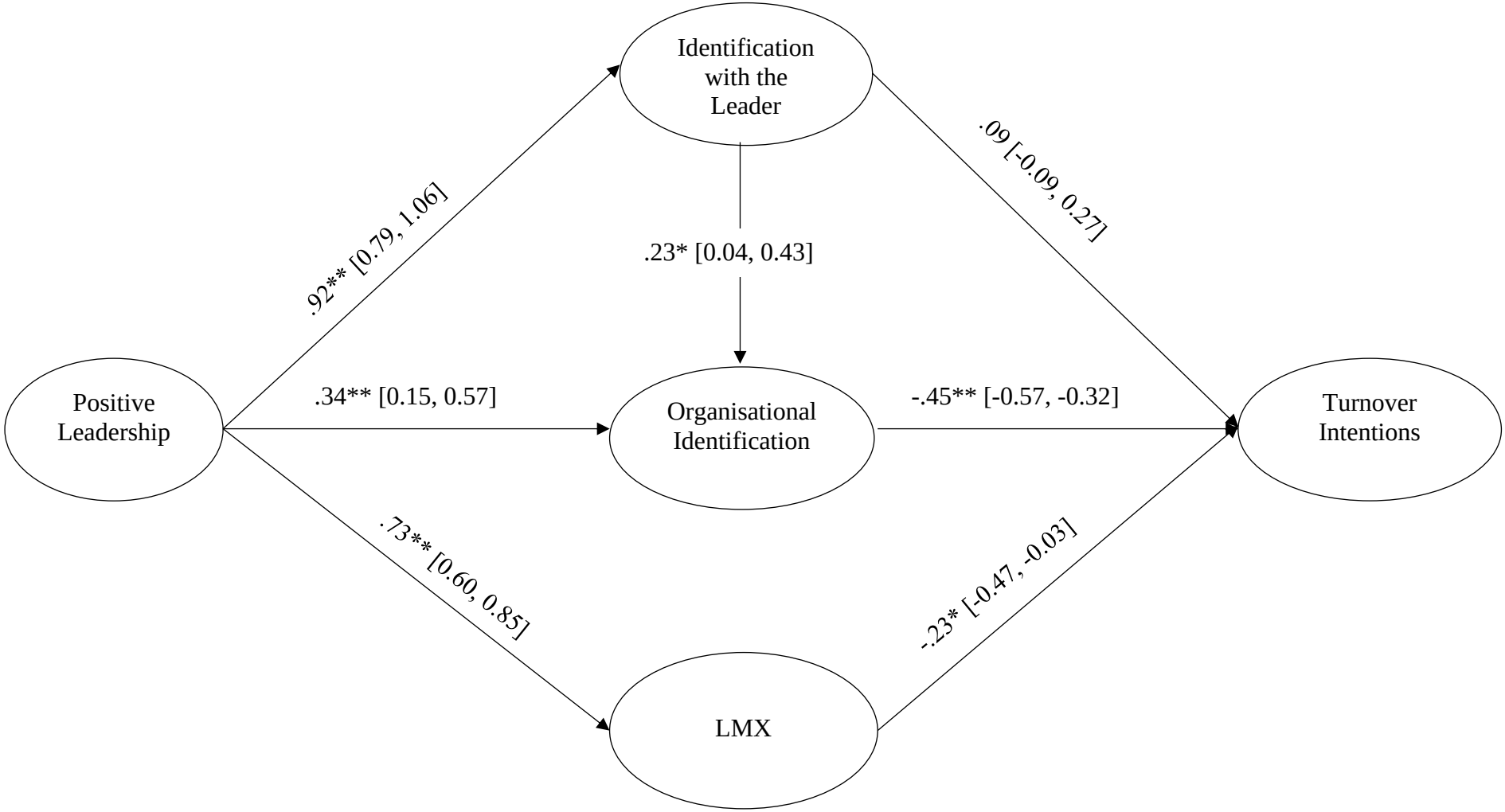
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for meaning at work (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 22

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for turnover intentions (Study 7)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 25

Summary of Indirect Effects for each of the Paths (Study 7)

Path	Indirect Effect
Positive Leadership > Identification with the Leader > Workplace Stress	*b* = .03, *SE* = .05, *95CI*[-0.06, 0.12], *p* = .50
Positive Leadership > Organisational Identification > Workplace Stress	*b* = -.04, *SE* = .02, *95CI*[-0.08, -0.01], *p* = .002
Positive Leadership > Identification with the Leader > Organisational Identification > Workplace Stress	*b* = -.02, *SE* = .01, *95CI*[-0.05, -0.01], *p* = .01
Positive Leadership > LMX > Workplace Stress	*b* = -.05, *SE* = .04, *95CI*[-0.13, 0.01], *p* = .12
Identification with the Leader > Organisational Identification > Workplace Stress	*b* = -.02, *SE* = .01, *95CI*[-.06, -.01], *p* = .01
Positive Leadership > Identification with the Leader > Emotional Exhaustion	*b* = -.04, *SE* = .10, *95CI*[-0.25, 0.15], *p* = .66
Positive Leadership > Organisational Identification > Emotional Exhaustion	*b* = -.11, *SE* = .05, *95CI*[-0.23, -0.04], *p* = .001
Positive Leadership > Identification with the Leader > Organisational Identification > Emotional Exhaustion	*b* = -.07, *SE* = .03, *95CI*[-0.15, -0.01], *p* = .02
Positive Leadership > LMX > Emotional Exhaustion	*b* = -.22, *SE* = .09, *95CI*[-0.40, -0.04], *p* = .01
Identification with the Leader > Organisational Identification > Emotional Exhaustion	*b* = -.08, *SE* = .04, *95CI*[-.16, -.02], *p* = .02
Positive Leadership > Identification with the Leader > Wellbeing	*b* = -.04, *SE* = .05, *95CI*[-0.13, 0.05], *p* = .38
Positive Leadership > Organisational Identification > Wellbeing	*b* = .10, *SE* = .04, *95CI*[0.04, 0.18], *p* = .002
Positive Leadership > Identification with the Leader > Organisational Identification > Wellbeing	*b* = .06, *SE* = .03, *95CI*[0.01, 0.13], *p* = .02
Positive Leadership > LMX > Wellbeing	*b* = .11, *SE* = .04, *95CI*[0.03, 0.20], *p* = .01
Identification with the Leader > Organisational Identification > Wellbeing	*b* = .07, *SE* = .03, *95CI*[.01, .14], *p* = .02
Positive Leadership > Identification with the Leader > Resilience	*b* = -.01, *SE* = .06, *95CI*[-0.13, 0.11], *p* = .84
Positive Leadership > Organisational Identification > Resilience	*b* = .03, *SE* = .02, *95CI*[0.002, 0.07], *p* = .03
Positive Leadership > Identification with the Leader > Organisational Identification > Resilience	*b* = .02, *SE* = .01, *95CI*[0.001, 0.05], *p* = .03
Positive Leadership > LMX > Resilience	*b* = .08, *SE* = .05, *95CI*[-0.01, 0.19], *p* = .07
Identification with the Leader > Organisational Identification > Resilience	*b* = .02, *SE* = .01, *95CI*[.001, .06], *p* = .03
Positive Leadership > Identification with the Leader > Work Engagement	*b* = -.01, *SE* = .07, *95CI*[-0.15, 0.14], *p* = .94
Positive Leadership > Organisational Identification > Work Engagement	*b* = .20, *SE* = .06, *95CI*[0.09, 0.34], *p* = .002
Positive Leadership > Identification with the Leader > Organisational Identification > Work Engagement	*b* = .12, *SE* = .05, *95CI*[0.02, 0.24], *p* = .02
Positive Leadership > LMX > Work Engagement	*b* = .08, *SE* = .06, *95CI*[-0.03, 0.20], *p* = .17
Identification with the Leader > Organisational Identification > Work Engagement	*b* = .13, *SE* = .06, *95CI*[.02, .25], *p* = .02
Positive Leadership > Identification with the Leader > Depression	*b* = .01, *SE* = .06, *95CI*[-0.11, 0.14], *p* = .82
Positive Leadership > Organisational Identification > Depression	*b* = -.07, *SE* = .03, *95CI*[-0.14, -0.02], *p* = .003
Positive Leadership > Identification with the Leader > Organisational Identification > Depression	*b* = -.04, *SE* = .02, *95CI*[-0.10, -0.01], *p* = .02

Positive Leadership > LMX > Depression	*b* = -.03, *SE* = .05, *95CI*[-0.12, 0.08], *p* = .58
Identification with the Leader > Organisational Identification > Depression	*b* = -.05, *SE* = .02, *95CI*[-.10, -.01], *p* = .01
Positive Leadership > Identification with the Leader > Anxiety	*b* = .07, *SE* = .07, *95CI*[-0.05, 0.23], *p* = .28
Positive Leadership > Organisational Identification > Anxiety	*b* = -.03, *SE* = .02, *95CI*[-0.09, -0.004], *p* = .03
Positive Leadership > Identification with the Leader > Organisational Identification > Anxiety	*b* = -.02, *SE* = .01, *95CI*[-0.06, -0.002], *p* = .03
Positive Leadership > LMX > Anxiety	*b* = -.06, *SE* = .06, *95CI*[-0.17, 0.06], *p* = .27
Identification with the Leader > Organisational Identification > Anxiety	*b* = -.02, *SE* = .01, *95CI*[-.07, -.002], *p* = .03
Positive Leadership > Identification with the Leader > Psychosomatic Complaints	*b* = -.01, *SE* = .06, *95CI*[-0.13, 0.10], *p* = .79
Positive Leadership > Organisational Identification > Psychosomatic Complaints	*b* = -.02, *SE* = .02, *95CI*[-0.07, 0.001], *p* = .06
Positive Leadership > Identification with the Leader > Organisational Identification > Psychosomatic Complaints	*b* = -.01, *SE* = .01, *95CI*[-0.04, 0.001], *p* = .06
Positive Leadership > LMX > Psychosomatic Complaints	*b* = -.08, *SE* = .05, *95CI*[-0.18, 0.01], *p* = .08
Identification with the Leader > Organisational Identification > Psychosomatic Complaints	*b* = -.01, *SE* = .01, *95CI*[-.04, .001], *p* = .06
Positive Leadership > Identification with the Leader > Job Satisfaction	*b* = .09, *SE* = .04, *95CI*[0.01, 0.17], *p* = .03
Positive Leadership > Organisational Identification > Job Satisfaction	*b* = .05, *SE* = .02, *95CI*[0.02, 0.11], *p* = .001
Positive Leadership > Identification with the Leader > Organisational Identification > Job Satisfaction	*b* = .03, *SE* = .02, *95CI*[0.01, 0.07], *p* = .01
Positive Leadership > LMX > Job Satisfaction	*b* = .18, *SE* = .04, *95CI*[0.11, 0.27], *p* = .001
Identification with the Leader > Organisational Identification > Job Satisfaction	*b* = .04, *SE* = .02, *95CI*[.01, .07], *p* = .01
Positive Leadership > Identification with the Leader > Meaning at Work	*b* = -.01, *SE* = .05, *95CI*[-0.13, 0.09], *p* = .79
Positive Leadership > Organisational Identification > Meaning at Work	*b* = .18, *SE* = .06, *95CI*[0.08, 0.31], *p* = .002
Positive Leadership > Identification with the Leader > Organisational Identification > Meaning at Work	*b* = .11, *SE* = .05, *95CI*[0.02, 0.22], *p* = .02
Positive Leadership > LMX > Meaning at Work	*b* = .09, *SE* = .05, *95CI*[0.01, 0.20], *p* = .03
Identification with the Leader > Organisational Identification > Meaning at Work	*b* = .12, *SE* = .05, *95CI*[.02, .23], *p* = .02
Positive Leadership > Identification with the Leader > Turnover Intentions	*b* = .08, *SE* = .09, *95CI*[-0.08, 0.24], *p* = .30
Positive Leadership > Organisational Identification > Turnover Intentions	*b* = -.15, *SE* = .05, *95CI*[-0.28, -0.06], *p* = .002
Positive Leadership > Identification with the Leader > Organisational Identification > Turnover Intentions	*b* = -.09, *SE* = .04, *95CI*[-0.19, -0.02], *p* = .02
Positive Leadership > LMX > Turnover Intentions	*b* = -.16, *SE* = .08, *95CI*[-0.34, -0.02], *p* = .02
Identification with the Leader > Organisational Identification > Turnover Intentions	*b* = -.10, *SE* = .05, *95CI*[-.20, -.02], *p* = .02

Notes. Bootstrap confidence bias-corrected method was used. Coefficients are unstandardized.

Discussion

Overview of Results

In line with Hypothesis 1a, positive leadership, transformational leadership, identity leadership and ethical leadership were all positively correlated with general workplace wellbeing, work engagement, meaning at work and job satisfaction. However, only transformational leadership and ethical leadership were significantly positively correlated with resilience. Similarly, consistent with Hypothesis 1b, positive leadership, transformational leadership, identity leadership and ethical leadership were all negatively correlated with workplace stress, emotional exhaustion, depression, psychosomatic complaints and turnover intentions. Furthermore, positive leadership, transformational leadership and identity leadership were negatively correlated with anxiety.

Hypothesis 2 was partly supported. Positive leadership was a significant predictor of all indicators of employee wellbeing (except resilience) and did show unique effects when predicting certain indicators of employee wellbeing while controlling for all other leadership styles. Specifically, positive leadership was still a marginally significant predictor of depression and anxiety when controlling for other leadership styles and was the only significant predictor. In addition, positive leadership remained a significant predictor - alongside transformational leadership - of general workplace wellbeing, work engagement, job satisfaction and turnover intentions. For general workplace wellbeing and job satisfaction, positive leadership uniquely explained a higher percentage of the variance than the other leadership styles But the overall effect sizes for positive leadership compared to transformational leadership on work engagement and job satisfaction were slightly lower and the effect size for both positive leadership and transformational leadership on general workplace wellbeing was roughly the same.

The mediation results show that Hypothesis 3 is partially supported. LMX was a significant mediator alongside identification with the leader and organisational identification mediators for certain wellbeing indicators (i.e. emotional exhaustion, general workplace wellbeing, meaning at work and job satisfaction) and marginally significant for other indicators (i.e. resilience and psychosomatic complaints). The results for the identification mediators showed that positive leadership was significantly associated with workplace stress, work engagement, depression, anxiety, emotional exhaustion, general workplace wellbeing, meaning at work, job satisfaction and resilience through both identification with the leader and organisational identification in sequence and organisational identification only. Additionally, the relationship between positive leadership and job satisfaction was significantly mediated by identification with the leader only.

The mediation results for job satisfaction as the outcome are consistent with the mediation findings from *Chapter 2* and *Chapter 4*. With regard to the mediation results for general workplace wellbeing, these results are partially consistent with the mediation results from *Chapter 3 (Study 2* and *3)* and *Chapter 4 (Study 5)* as they indicated that positive leadership and general workplace wellbeing were marginally significantly mediated by identification with the leader and organisational identification in sequence. Moreover, the finding that the relationship between positive leadership and general workplace wellbeing was significantly mediated by organisational identification is consistent with the findings from *Chapter 3 (Study 2)* and *Chapter 4 (Study 5).*

Theoretical and Applied Implications

The current chapter provides novel insights into the influence of leadership on wellbeing and more specifically the influence of positive leadership on employee wellbeing. Firstly, these results compared the influence of several different leadership styles (i.e. positive, transformational, ethical and identity leadership) in one study – not considered in

previous research examining the influence of leadership on wellbeing (Arnold et al., 2007; Chughtai et al., 2014; Jetten et al., 2017; Kelloway et al., 2013; Steffens et al., 2014). Importantly, this research examined the robustness of the link between positive leadership and employee wellbeing by considering whether there was another leadership style which could be more effective. The results indicated that positive leadership did have a positive effect on all wellbeing indicators (except resilience) but did also have the strongest effect on certain wellbeing indicators (i.e. depression, anxiety, general workplace wellbeing, work engagement, job satisfaction) and also turnover intentions even when taking into account the three other leadership styles.

The correlational results also demonstrated the distinctiveness of these leadership styles. A previous theoretical review by Bormann and Rowold (2018) does suggest that there is a construct proliferation problem in leadership research meaning that there needs to be more consideration of the discriminant validity of new leadership styles to avoid construct redundancy. When comparing leadership styles, Shaffer et al. (2016) asserted that correlations between constructs that are equal or larger than .90 indicate construct redundancy. The correlations between the four leadership styles in this study were high but none of them exceeded a magnitude of .90. While this seems to indicate a distinction between these constructs, according to Bormann and Rowold (2018) these association also need to be tested at two different measurement points and using different sources of measurement (i.e. not only follower self-reports). This is something to be considered in more depth in future research.

Secondly, this research considered numerous indicators of wellbeing when examining the different effects of leadership styles. The conceptualisation of wellbeing is broad but the majority of research in this area has typically measured employee wellbeing in terms of job satisfaction (Inceoglu et al., 2018). By including a variety of wellbeing indicators in the

current study, it enables the link between leadership styles and wellbeing to be investigated in more depth and considered that not all leadership styles will be effective for every wellbeing problem an organisation faces. In this current study, 10 indicators of wellbeing which have been identified in previous research on wellbeing (Gregersen et al., 2014; Hsieh et al., 2019; Kelloway et al., 2013; Milner et al., 2015; Ogbonnaya et al., 2018; Page & Vella-Brodrick, 2013; Rivers et al., 2018; van Dick et al., 2017b; Winkler et al., 2014) were investigated and the results do suggest that different leadership styles may impact different facets of wellbeing differently. For example, during COVID anxiety surrounding job retention has been high and as our results show, positive leadership is the most suitable leadership style for dealing with employee anxiety.

Thirdly, this study considered different potential mediating mechanisms in one study. As highlighted in the review from Inceoglu and colleagues (2018), leadership styles can have effects on different indicators of wellbeing through different mediating processes. While, the current study did not show a perfect distinction between hedonic and eudemonic in terms of the mediating processes shown in other research (i.e. Nielsen et al., 2008), different indicators still did have different mediating mechanisms. Identification variables overall tended to have a clear mediating role in more of the indicators of wellbeing than LMX.

Limitations and Future Directions

The analysis presented in this chapter is correlational and therefore causality could not be determined. Leadership style has been successfully manipulated in previous research (e.g. Hoyt & Blascovich, 2003; Lyons & Schneider, 2009; Shea & Howell, 1999) but these distinctions tend to be comparison between clearly distinct leadership styles such as comparing transactional and transformational leaders. The leadership styles considered in the current study contain certain facets which may overlap which makes manipulating them more difficult. For example, both positive leadership and transformational leaderships include

facets which include developing full potential of employees and building energy networks (Zbierowski, 2016). Therefore, some aspects of the experimental manipulations may not be distinct enough to consider the key differences between these leadership styles. However, it would be valuable to employ longitudinal designs, experimental designs and field studies to inform how these variables influence each other overtime and potential causal links.

Furthermore, COVID has had a dramatic influence on the world of work and the examinations of positive leadership on employee wellbeing in the current chapter and previous chapters of this thesis (*Chapters 2, 3,* and *4*) have not investigated the impact of COVID. With dramatic changes to working conditions such as increased number of people working from home (Office for National Statistics, 2020), leaders have needed to adapt their behaviours. Therefore, it is important to investigate how positive leaders have responded to this crisis. Additionally, there is research which suggests that during times of uncertainty, followers prefer authoritative or even narcissistic leaders (Hogg & Adelman, 2013; Nevicka et al., 2013; Rast, 2015; Rast et al., 2013; Schoel et al., 2011) and this means that the beneficial impact of positive leadership may not be the same under the period of uncertainty associated with the COVID pandemic. Consequently, leader responses and their impact on employee wellbeing should be further investigated in the context of COVID. Similarly, the results from *Chapter 4* indicated the mediating role of both identification variables and perceived organisational support and the results from this chapter also highlighted the mediating role of LMX but these four mediators should be examined together in one study.

Chapter Summary and Conclusion

This chapter was the first study to compare positive leadership to three other popular leadership theories (i.e. transformational, ethical and identity leadership) and examined the different effects on various indicators of wellbeing (i.e. hedonic, eudemonic and negative facets) in a single study. Moreover, this chapter considered two different types of mediating

variables (i.e. identification and relational) and compared their potential mediating effects on the relationship between positive leadership and employee wellbeing indicators. In conclusion, the results demonstrated that positive leadership did have unique effects on certain indicators of wellbeing (i.e. depression, anxiety, general workplace wellbeing, work engagement and job satisfaction) and turnover intentions, when controlling for the three other leadership styles. Overall, the mediation results showed that identification variables significantly mediated more of the relationships between positive leadership and employee wellbeing indicators than LMX. In the next chapter, I will explore leader responses during the COVID pandemic and its influence on employee wellbeing. Moreover, I will be comparing the mediating role of identification variables, LMX and perceived organisational support in a single study.

Chapter 6 – Examining Leadership and Employee Wellbeing during COVID

Chapter Overview

Following on from previous chapters, it becomes clear that positive leadership has a significant impact on employee wellbeing through identification variables (*Chapters 2, 3, 4,* and *5*), perceived organisational support (*Chapter 4*) and LMX (*Chapter 5*). It is interesting to ask then - do leaders respond to challenges associated with employee wellbeing by adopting a positive leadership style? The COVID pandemic provides an opportunity to study leaders' responses to a real-world wellbeing crisis. This chapter used a mixed methods design and provides a case study investigating leaders responses to the COVID pandemic and the impact these responses have on their employees' wellbeing. Furthermore, this chapter tests all mediations paths from previous chapters (*Chapters 2, 3, 4,* and *5*) in one study. The qualitative results showed that leader behaviours during the pandemic fall into five themes: adherence to COVID safety measures, health versus profits, communication, social connectedness, and wellbeing support. The results of the quantitative analysis revealed that for leaders coded as positive, their employees reported significantly higher LMX, identification with the leader, organisational identification, perceived organisational support and wellbeing; and significantly lower stress and anxieties about work due to COVID. Mediation results showed that the relationship between leadership style and employee wellbeing was significantly mediated by identification with the leader and organisational identification in sequence and perceived organisational support. The relationship between leadership style and stress was significantly mediated by identification with the leader and organisational identification in sequence.

Uncertainty and COVID-19

Organisations operate in a volatile, uncertain, complex and ambiguous (i.e. VUCA) environment (Bennett & Lemoine, 2014). This means that organisations need to adapt to ongoing change and deal with internal and external pressures. One example of an external organisational pressure is the COVID-19 pandemic and this has presented organisations with a lot of uncertainty and need for change. The COVID-19 pandemic has had a profound impact on many levels worldwide. One of the perhaps less obvious impacts are the consequences to employees' well-being. Generally, with countries struggling to deal with the number of cases of COVID-19, lockdowns limiting social interaction and the high levels of unemployment putting additional stress on social security systems (Blustein et al., 2020), the pandemic has had a clear social and economic impact. It has had a profound impact on the workplace with an increase in numbers of employees working from home (Office for National Statistics, 2020). It has also been a significant period of uncertainty for employees due to furlough schemes and companies not surviving the crisis. The changes in the workplace are not only limited to the adaptations made during lockdown but also the impact this has on the future of working. For example, the role of the office environment has been debated as to whether it is more beneficial to keep working from home or returning to offices (The Economist, 2020) and employee wellbeing has been considered more important since the pandemic (CIPD, 2021a).

The Importance of Employee Wellbeing during COVID-19

While employee wellbeing is an important topic generally considering the increasing number of workplace stress cases in the UK (Health & Safety Executive, 2018; 2019), there has been an even higher increase since the pandemic (Health & Safety Executive, 2020). Furthermore, research has documented the effects that the pandemic has had to employee wellbeing (Galanti et al., 2021; Trougakos et al., 2020; Yu et al., 2021). The increase in

people working from home (Office for National Statistics, 2020) means that employees are missing out on aspects of work which are beneficial to their wellbeing. For example, the simple act of meeting other colleagues in the office for lunch or a chat and with that others ability to notice colleagues struggling. The workplace does not simply fulfil employees' material needs by providing a paycheque but also fulfils social needs by providing a sense of affiliation and belonging along with regular interaction with people outside of your usual social group (Klein & D'Aunno, 1986). The impact of the pandemic on employee wellbeing has led to an increased research focus on improving this to help deal with the negative influence of COVID on workers (Agarwal, 2021; Blake et al., 2020; Malinen et al., 2020). One area that this research has examined is the role of leadership in enhancing employee wellbeing during this time.

The Role of Leadership in Mitigating the Negative Impact of COVID-19

Research from before the pandemic has clearly demonstrated the importance of leadership in influencing employee wellbeing (e.g. Harms et al., 2017; Schyns & Schilling, 2013). For example, research has highlighted that toxic leadership has a negative influence on employee's psychological wellbeing and engagement which in turn leads to higher turnover intentions (Naeem & Khurram, 2020). Conversely, employee wellbeing is enhanced by good communication and direction from supervisors (Barling & Frone, 2017; Lobban et al., 1998; Kim, 2002; Madlock, 2008; Men, 2014). This research demonstrates the importance of leadership behaviours and overall leadership style in diminishing or enhancing employee wellbeing. Furthermore, positive leadership has been outlined as one style of leadership that has positive effects on employee wellbeing (Kelloway et al., 2013). These findings have also been supported by the results presented in my previous thesis chapters (*Chapters 2, 3, 4* and *5*).

Furthermore, commentaries and reports from during the pandemic have emphasised that leadership is important in helping to combat the influence COVID has had on employee wellbeing (Ahern & Loh, 2020; CIPD, 2021b; Haque, 2021). For example, Ahern and Loh's (2020) commentary emphasised the significance of trust in leadership during times of uncertainty. They also highlight trust in leadership is a dynamic process but it requires them to offer hope, have a clear vision and guidance for how to achieve this vision. Moreover, the results from a report by the CIPD in 2021, demonstrated the increase in manager interest in employee wellbeing and specifically mitigating the negative impact of the pandemic on employees. The CIPD report also emphasises that the role of management or leadership style is still the second most common cause of stress at work following workload. This highlights the important role of leadership in dealing with the continuing problem of employee wellbeing and also the impact of the pandemic on wellbeing.

With such drastic workplace changes as a result of COVID, the role of leadership could also be different. For instance, leaders can find it harder to motivate and track progress without employees being physically in one place (Dulebohn & Hoch, 2017) so their behaviours may need to change to accommodate this. So, positive leaders may need to respond to this crisis differently from other leaders and as a result enhance employee wellbeing through these behaviours. Therefore, it is important to investigate (1) how leaders have responded to the COVID-19 crisis in the way they related to employees/ team members, (2) whether and how the leader-member relationships has changed during the pandemic. Additionally, it is important to examine how their responses related to employee wellbeing and attitudes towards their leaders and organisations.

Research on leadership during time of crisis and uncertainty have highlighted a preference for strong authoritative leadership or even narcissistic leaders (Hogg & Adelman, 2013; Nevicka et al., 2013; Rast, 2015; Rast et al., 2013; Schoel et al., 2011). It is argued that

this preference for authoritative leaders is because they are good at reducing followers' uncertainty (De Hoogh et al., 2015; Rast et al., 2013; Schoel et al., 2011). This would suggest that due to the wide uncertainty surrounding work during the pandemic, there would be a preference to move towards these types of leadership behaviours. On the one hand, this suggests that as a result of employees preferring this style of leadership, then adopting this approach they could reduce uncertainty and may have a more beneficial impact on employee wellbeing.

However, the COVID-19 pandemic is not simply a time of organisational uncertainty but a time of uncertainty with a strong focus on employee health and wellbeing. Employee health and wellbeing are paramount during this time (Galanti et al., 2021; Health & Safety Executive, 2020; Trougakos et al., 2020; World Health Organisation, 2020; Yu et al., 2021) and with the increase in numbers of cases of workplace stress, depression and anxiety during the COVID pandemic (Health & Safety Executive, 2020), then it is possible that other leadership behaviours would be more suitable and have a more successful effect on employee wellbeing. As previously highlighted based on previous findings, positive leadership would be considered suitable for enhancing employee wellbeing during this time (Kelloway et al., 2013; Marsh et al., in prep). But, positive leadership examples and measures are based on these behaviours during a normal working setting and COVID has caused key changes which may mean that these measures may not accurately capture a positive leadership approach to COVID. With the increase in remote working, there has been a loss of key aspects of work which would usually help boost employee wellbeing such as social interactions with colleagues and leaders and as a result working behaviours do not necessarily act out in the same ways. Therefore, it is important to explore how a positive leadership approach may translate in the working environment during COVID.

The Current Study

Although, both leadership approaches may be utilised by different leaders during the pandemic, there is also a need to identify the impact of these on employees. This will help to assess which leadership approach has a more beneficial influence on employees during COVID. This chapter provides an interesting case study to examine the influence of positive leadership on employee wellbeing. In addition, the current chapter assesses the impact of COVID-19 by investigating leader responses during this time through a qualitative thematic analysis of employee responses and how overall leadership approaches relate to employee wellbeing and job attitudes during this time. Therefore, the current study takes both a qualitative and quantitative approach to investigating more about this topic. The importance of mixed methodology in investigating research questions and to increase the validity of research has been emphasised (Hurmerinta-Peltomaki & Nummela, 2006). Moreover, as highlighted by Cabrera (2011), using both qualitative and quantitative methods allows to overcome the limitations of each individual method. Qualitative analysis allows for a more in-depth understanding of the participant experience that may not be fully captured by survey or experimental methods (Cabrera, 2011). However, quantitative analysis allows for systematic and objective analysis of the links between variables.

In the previous PhD chapters, the results have consistently supported both a correlational (*Chapters 4 [Study 1]* and *5*), experimental (*Chapters 3* and *4 [Study 2]*), and longitudinal (*Chapter 2*) link between positive leadership and various indicators of employee wellbeing. The link between these two variables has been shown to be mediated by identification with the leader and organisational identification (*Chapters 2, 3, 4* and *5*), perceived organisational support (*Chapter 4 [Study 1]*), and LMX (*Chapter 5*). These findings combined show strong support of the beneficial impact of positive leadership on employee wellbeing but also the mediating processes of this relationship. The current study

will continue to test this relationship but will be based on coders categorisation of leadership behaviours and the employee measures of wellbeing. This will provide a good case study investigating the role of leaders during the COVID pandemic. The qualitative analysis will provide a thematic analysis of leaders behaviours during the pandemic and the quantitative analysis will investigate the impact of leadership approaches on employee wellbeing. Moreover, the current study will again test the mediating processes on the relationship between leadership style and employee wellbeing but it will test all four mediators in one study. Therefore, the following hypotheses are proposed:

Hypothesis 1: Leaders coded as positive will receive higher employee ratings of LMX, identification with the leader, organisational identification, perceived organisational support and wellbeing but lower employee ratings of stress and anxieties about work due to COVID than leaders coded as negative.

Hypothesis 2: Identification with the leader, organisational identification, perceived organisational support and LMX will mediate the relationships between leadership style and employee wellbeing, stress and anxieties about work due to COVID.

Study 8: COVID, Leadership Responses and Employee Wellbeing

Method

Participants

Two hundred and one UK participants completed the full survey. However, 11 participants were excluded from the data analysis (2 failed the attention check, 3 were self-employed and 6 focused on political leadership rather than the leader from their organisation). Of the 190 participants, 141 participants were female, 48 participants were male and 1 did not identify as female, male or transgender and were aged between 18 and 65 years old (M = 33.93, SD = 9.87). One hundred and thirty one participants were in full-time employment and 59 were in part-time employment. Participants were recruited from the

online crowdsourcing site Prolific and compensated for the time taken to complete the survey (i.e. £1.20 for the 12 minute survey).

Design

The study employed both a qualitative and quantitative design. The qualitative part was used to examine the leadership behaviours apparent during the COVID-19 pandemic. The quantitative part used a quasi-experimental design to assess the association between employee relationship with their leaders and their wellbeing during the COVID-19 pandemic.

Measures

Qualitative Questions

Participants were asked to answer four questions to assess their leaders response to the COVID pandemic. These were used to examine some of the behaviours that would have been displayed and to make a judgement of the type of leadership being displayed (i.e. positive or negative leadership). For these questions, participants were asked to write in as much detail as possible but not include any identifiable information in their responses. The four questions were the following:

1. Has your leader provided clarity during the time of this health crisis? Please explain in what ways they have or have not provided you with clarity.
2. Has your leader been able to provide you with the support you need? Has your leader fostered a sense of community between workers? Please provide examples of ways in which your leader has or has not been supportive or ensured a sense of community.
3. Has your leader ensured that you are safe and well during this crisis? Please provide details of how your leader has ensured you are safe and well.
4. Have you been surprised by your leader's response to the current crisis? And please provide details why you have or have not been surprised.

LMX

Leader-Member Exchange was measured using a scale from Scandura and Graen (1984). This scale asks seven questions about participants relationship with their immediate boss. An example item is "How well does he/she recognise your potential?". All items were measured on seven point scales with differing scale point depending on the wording of the question (e.g. 1= Not a bit to 7 = A great deal or 1 = None to 7 = Very High). Higher scores indicate higher quality relationships between leaders and followers. This was included as it has been highlighted in the previous chapter (*Chapter 5*) to have a mediating effect on the link between leadership and wellbeing. Therefore, it is important to consider both its link with leadership behaviours and wellbeing in the current COVID context (see Table 26 all scale means, standard deviations and Cronbach alphas) .

Identification with the Leader

Similar to my previous research studies (*Chapter 2, 3, 4* and *5*), identification with the leader was measured using the same scale from Shamir et al. (1998). This scale consists of seven items (e.g. "My supervisor/leader/manager is a model for me to follow") on a five point scale (1 = *Never* to 5 = *Always*). Higher scores indicated higher identification with and trust in the leader. As has been highlighted in those previous chapters (*Chapters 2, 3, 4* and *5*), identification also plays a mediating role in the link between leadership and employee wellbeing but it is important to consider its link with these variables in the current pandemic context.

Organisational Identification

The same organisational identification scale (Edwards & Peccei, 2007) from my previous studies was used (*Chapters 2, 3, 4* and *5*). The measure includes six items (e.g. "What my workplace stands for is important to me") on a seven point scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*). Higher scores indicated higher identification with the

organisation. Similar to the identification and trust in the leader and LMX, organisational identification was also noted as a mediator in my previous studies investigating the link between leadership and employee wellbeing in *Chapters 2, 3, 4* and *5*.

Perceived Organisational Support

The same three items (Eisenberger et al., 1986) as used in my previous studies measured perceived organisational support. An example of one of these items is "The organisation really cares about my general satisfaction at work" and is measured on a seven point Likert scale (1 = *Strongly disagree* to 7 = *Strongly agree*). Perceived Organisational Support was also highlighted as a potential mediator in Study 1 of *Chapter 4* and therefore, it was included to test its relationships with leadership and employee wellbeing in this COVID context.

General Workplace Wellbeing

The same measure of workplace wellbeing was used as in my previous studies (*Chapter 3, 4,* and 5). This measure is the Wellbeing Index from Winkler et al. (2014) based on the WHO 5 wellbeing scale (Brahler et al., 2007) which contains six items (e.g. "Do you feel vital and active at work?") and measured on a four-point scale (1 = *Not at all* to 4 = *Very*). Higher scores represent higher levels of workplace wellbeing.

Stress

The perceived stress scale (Cohen et al., 1983) from my previous research studies was used (*Chapters 2* and *5*). This is the ten-item version of the scale (e.g. "In the last month, how often have you felt that you were unable to control the important things in your life?") and measured on a five-point scale (1 = *Never* to 5 = *Very Often*). Higher scores indicate higher levels of stress.

Anxieties about Work due to COVID

To assess anxieties regarding their job and workplace situation due to COVID, a seven item scale was created. This was important to ensure that employee wellbeing with specific regard to COVID was being assessed in the survey. An example of one of the item is "Due to COVID, I feel very vulnerable about my current work situation". These items were measured on a seven-point Likert scale (1 = *Strongly disagree* to 7 = *Strongly agree*). Higher scores indicated higher anxieties about work due to COVID.

Procedure and Ethics[17]

Participants were asked to take part in a new research study investigating leadership responses to the coronavirus in the UK and attitudes towards work and leaders during the coronavirus in the UK. Before taking part they were informed that the research was interested in their work experiences during this time (i.e. how their leaders have dealt with this issue) and how they have felt about their job over the last five months. Participants were told that they would be asked to complete a series of scales and four open-ended questions. For the open-ended questions they were asked to write in as much detail as possible but not to include any identifiable information (i.e. company names or leader names). The information sheet also informed participants that their responses were anonymous and would only be available to the research team and they were able to withdraw at any time during the study. Then participants gave informed consent before completing the survey.

The study was set so that all participants completed the four open-ended questions first before completing the rest of the measures. Six measures were presented in random order after the open-ended questions (i.e. LMX, identification with and trust in the leader, organisational identification, general workplace wellbeing, stress and perceived organisational support). Then participants were asked to complete the anxieties about work

[17] Study 8 was conducted during COVID in August 2020.

due to COVID measure. Finally, participants completed the demographic questions and were debriefed and thanked for their contribution. This study abided by the BPS Code of Ethics and Conduct (2021) and the ethics application was approved by the University of Kent (Ethics ID: 202015934623196531).

Results

Table 26

Means, Standard Deviations and Cronbach Alphas for all the dependent variables (Study 8)

	Mean (SD)	Cronbach Alpha
LMX	4.91 (1.52)	.94
Identification with the Leader	3.50 (1.16)	.97
Organisational Identification	4.71 (1.65)	.95
Perceived Organisational Support	4.51 (1.64)	.91
General Workplace Wellbeing	2.63 (0.66)	.84
Workplace Stress	2.89 (0.61)	.86
Anxieties about Work due to COVID	3.47 (1.37)	.85

Notes. $N = 190$

Qualitative Analysis

To examine the behaviours displayed by leaders during the COVID pandemic, two independent coders completed a thematic analysis of the qualitative responses. Thematic analysis was used to interpret the brief written descriptions from participants because it allows to generate a rich, detailed picture (Braun & Clarke, 2006). The two independent coders read each of the participant responses and identified common themes. The coders highlighted five overarching themes: adherence to COVID safety measures, health vs profit,

communication, social connectedness and wellbeing support. These were then broken down into displays of positive and negative leadership.

Adherence to COVID safety measures

This entailed employers following the guidelines specified by the UK government which included ensuring social distancing, home working, PPE, regular testing hand and work space sanitizers. Following these safety measures was a key display of positive leadership:

> *"Adhered all advice given by Gov regarding a safe work place environment…hand sanitizing stations and one way walking systems around the office" (Participant 12)*
>
> *"My employer encourages regular COVID testing, does daily temperature check on arrival and provides masks for use in the workplace" (Participant 46)*
>
> *"They made sure we well protected with plenty of masks, visors, gloves and sanitisers" (Participant 61)*

One of the strategies outlined in the theory of positive leadership is positive meaning (Cameron, 2012; 2013) which is partly defined as connecting the values of the company to personal values. This is a good example of how positive leaders could have achieved this during the COVID by ensuring that the companies were following the UK societal and governmental expectations and reflecting those in the increased safety measures in the workplace.

On the other hand, lack of safety measures were considered clear displays of negative leadership. In some regards it seems that some leaders were not even following government requirements (i.e. PPE, social distancing, regular COVID testing) which means that they are not valuing the health and wellbeing of their staff at all:

> *"Failed to give employees the correct PPE" (Participant 71)*

"Not in the beginning - work environment just carried on as normal as if COVID wasn't happening. Weren't sure whether we were to carry on with role as usual as seemed unsafe but leaders had not discussed this." (Participant 79)

"No one was checked that we are safe and I don't believe that the company is ensuring social distancing is maintained… social distancing is not being followed by manager and supervisors" (Participant 85)

"…No attempt is made at social distancing either, a workplace isn't really designed to let staff work 2 meters apart but nobody seems to even be trying. Many staff still shake hands at the start of the day and has not been stopped by our supervisors." (Participant 170)

Health versus profits

This theme highlights the value leaders were putting on their employees' health and wellbeing in comparison to the company profits. This is shown through the general feeling employees received from their leaders but also through behavioural examples. Coders considered displays or indications of health over profits as a clear indication of positive leadership:

"It is an organisation that puts people first and they have responded very quickly to make sure that people's health, safety and wellbeing is the priority" (Participant 77)

"Made it clear out mental wellbeing comes first. Gave me days off to deal with the stress of the situation without it being annual leave" (Participant 143)

"Health was of utmost concern over profit margins" (Participant 12)

"… before this I felt as if we were just numbers in the business but this pandemic has made me feel more like we are valued and thought about" (Participant 41)

Another strategy outlined in positive leadership (Cameron, 2012; 2013) is positive climate which is partially focused on promoting appreciation within the organisation. The

displays highlighted above demonstrate how positive leaders can display this during the pandemic because they are emphasising the appreciation of their employees over the company profits.

In comparison, coders believed putting the business needs before their staff wellbeing clearly demonstrated negative leadership during the pandemic. In this case, employees are not valued and expected to work as normal although there is a global pandemic which in some instances can put staff at risk because the organisation needs the money:

> *"He has not been supportive personally he is very focused on the job and making sure it is done right, this comes before looking at the staff" (Participant 8)*
>
> *"They tend to put their business interests first, and dress up staff and student wellbeing afterwards." (Participant 27)*
>
> *"Seems as though the economy gets the priority rather than people's lives" (Participant 98)*
>
> *"The lack of care for people's safety and the focus on putting money back into the economy has been the biggest surprise of all" (Participant 189)*

Communication

Another theme that was apparent in participant responses of leadership behaviours was communication with employees. Coders highlighted that participant responses emphasised positive leadership behaviours through consistent, clear and regular communication from leaders. This came in many forms (i.e. emails, personal contact and team meetings) and helped to clarify decisions and alleviate uncertainty/ anxiety employees may have surrounding work during the pandemic:

> *"Frequent emails have ensured clarity although at times these have been long awaited" (Participant 16)*

"They have kept us up to date as much as possible and let us know what has been happening, what decisions have been made and what may happen in the future… They have personally kept in contact with all of us on a weekly basis and they have also made sure that we all communicate daily using teams chat." (Participant 80)

"They have updated our team during weekly team meetings and answered questions we have had about how the organisation at large is responding to the crisis" (Participant 126)

"Ongoing conversations about making it work, explaining the thinking behind each decision. Regular emails sharing what she could with the team as the situation changed over time with latest government advice" (Participant 181)

Another aspect of positive leadership (Cameron, 2012; 2013) is positive communication which is usually about the self-feedback employees receive but it also entails the general communication from the leader. The communication needs to be clear and addressing problems in a supportive and positive manner. In the examples above, the communication from leaders was consistent, clear and helping to address the anxiety surrounding work as a result of the pandemic.

In contrast, coders highlighted the negative leadership responses in terms of communication lead to presenting inconsistent information, lack of clarity in the information given to employees but also a lack of communication from their leaders. As highlighted by the quotes below, problems in communications means that employees are unclear about their roles and lack of support during a time of already heightened anxiety.

"…very uncertain and misleading messages… not been clear on who goes back to work and who doesn't" (Participant 1)

"I have had one phone call with my manager since lockdown began and I initiated the call" (Participant 3)

"I expressed concern in emails when we hadn't received an update about things but never received a reply or any support as such" (Participant 57)

"Senior management has not been transparent with staff whatsoever. They have made several decisions without informing member of staff, such as many redundancies and general updates/announcements" (Participant 180)

Social Connectedness

This fourth theme encompasses the emphasis leaders place on connections between employees and the support given through building strong teams. The coders agreed that fostering a sense of community was a clear demonstration of positive leadership behaviours. This entails creating groups (especially online due to remote working) that ensure consistent contact and support between employees. These were both for ensuring team stayed connected but also as a way of connecting socially to stop employees feeling isolated when working from home.

"Microsoft Teams was set up, with several different social groups and activities on here, over and above work activities. Daily video chats happened to keep a sense of team and a social aspect to the day. Evening zoom drinks also took place." (Participant 55)

"We have zoom coffee mornings each week followed by team meetings and were encouraged to keep in touch with each other outside of these" (Participant 62)

"My manager has facilitated a sense of community between workers through hosting online social events for colleagues which has been a great sense of support" (Participant 127)

"Leader has managed to provide a sense of community by arranging daily team meetings by Skype. The whole team where we normally wouldn't speak to each other now speak every day." (Participant 194)

The final key aspect of positive leadership (Cameron, 2012; 2013) is positive relationships. Positive relationships is focused on creating networks between employees which can be seen in the examples highlighted above. Leaders arranging for social meetings and online spaces for teamwork during the pandemic demonstrates their focus on ensuring these networks are still present during the pandemic with employees working more from home and not being able to physically meet and spend time together. There is also an overlap with the positive climate aspect of positive leadership because as the examples above indicate there is a good display of appreciation of employees and providing a supportive overall climate during this time of stress.

In comparison, coders highlighted that a lack of community between leaders and employees and within the organisation more generally was a clear demonstration of negative leadership behaviours during the pandemic. As highlighted by the quotes below, the lack of community instigated by leadership leads to feelings of isolation, lack of appreciation for employees and no support during this time of uncertainty.

> *"No there has been no sense of community. We have been left to our own devices and told to just get on with it." (Participant 6)*
>
> *"As everybody is working from home, there is not much sense of community – more isolation" (Participant 45)*
>
> *"They haven't created a sense of community, I feel like I am just another person to them. They only see me as a part of the workforce and not as a valuable individual." (Participant 133)*
>
> *"There has been no group communication for all our team to take part in which makes me feel disconnected from the team" (Participant 157)*

Wellbeing Support

The final theme highlighted in participant responses is the support provided by their leaders in terms of their mental and physical wellbeing. Similar to the previous themes, coders identified providing wellbeing support as a form of positive leadership. This can take many forms and may have been adapted during the pandemic from the usual wellbeing initiatives offered (e.g. providing flexibility in working hours, availability of therapy, and wellbeing sessions) as highlighted in the examples below:

> *"She has supported my main need during the crisis which was issues with childcare and the flexibility I needed to overcome this." (Participant 16)*
>
> *"They have constantly reiterated the importance of mental health as well as physical health. They reminded us that we have a mental health representative we can talk to and through work, we have access to an online therapy system as well." (Participant 55)*
>
> *"My leader set up a 'well-being Wednesday' teams meeting every Wednesday. We could drop in and out as and when we needed. Each week was a new theme, e.g. wear a funny hat, bring a joke…" (Participant 121)*
>
> *"Encouraged to take regular breaks, information provided regarding health and wellbeing, virtual training sessions also arranged" (Participant 174)*

Similar to the theme of health over profits, this theme is another way of displaying the positive climate aspect of positive leadership (Cameron, 2012; 2013) because it emphasises the appreciation of employees but also encompasses the other part of the positive climate strategies which is focusing on promoting forgiveness between employees and within the organisation. The example above where leaders helped by providing flexibility for employees with childcare needs or encouraging regular breaks and online therapy all stress the

promotion of forgiveness and support for those employees who may need extra help during this time.

In contrast, a lack of wellbeing support for employees was considered by coders as a negative leadership approach. As shown in the quotes below this was not simply a lack of wellbeing initiatives and therapy support but also through a lack of empathy for employees:

"No acknowledgement of emotional impact or other commitments such as childcare" (Participant 11)

"They simply don't care at all. They do not listen to our concerns and dismiss any as 'tough'" (Participant 51)

"I am surprised at the lack of empathy from my leaders" (Participant 115)

"Despite my managers being fully aware of my health condition they have not even asked me if I should be working or how I am" (Participant 186)

Quantitative Analysis

The two independent raters were asked to make a judgement whether the qualitative responses indicated a positive or negative leader. They were also allowed to code the response as neutral if the response did not clearly seem positive or negative. The ratings were compared using Cohen's Kappa which indicated a good agreement between coders (Cohen's Kappa = .70, $p < .001$). Therefore, a combined coding score was created which allowed for comparisons to be tested between the positive and negative leaders only on those that both coders agreed the ratings. Of the 190, both coders agreed that 105 depicted positive leaders, 42 depicted negative leaders, 12 were classed as neutral and there was disagreement on the remaining 31 leaders. Therefore, a series of independent samples t-test were conducted to analyse whether there were differences in LMX, identification with the leader, organisational identification, perceived organisational support, wellbeing, stress and anxieties about work due to COVID between employees whose leaders were rated as positive and negative.

Leader-Member-Exchange

The results showed that there was a significant difference in LMX between positive and negative leaders ($t(62.99) = 8.57$, $p < .001$, Cohen's $d = 1.72$, (95% CI for Cohen's *d:* 1.31, 2.13) with positive leaders having higher quality relationships with followers ($M = 5.51$, $SD = 1.17$) than negative leaders ($M = 3.35$, $SD = 1.46$).

Identification with the Leader

The results showed that there was a significant differences in identification with the leader between the leaders rated as positive and negative ($t(145) = 8.43$, $p < .001$, Cohen's $d = 1.54$, (95% CI for Cohen's *d:* 1.14, 1.94) with employees identifying more with positive leaders ($M = 3.95$, $SD = 0.94$) than negative leaders ($M = 2.45$, $SD = 1.05$).

Organisational Identification

The results from an independent samples t-test demonstrated that employees of leaders rated as positive ($M = 5.21$, $SD = 1.41$) were significantly more identified with the organisation ($t(62.40) = 5.26$, $p < .001$, Cohen's $d = 1.06$, (95% CI for Cohen's *d:* 0.68, 1.44) than employees of leaders rated as negative ($M = 3.58$, $SD = 1.79$).

Perceived Organisational Support

The results showed that there was a significant difference in perceived organisational support between positive and negative leaders ($t(145) = 9.93$, $p < .001$, Cohen's $d = 1.81$, (95% CI for Cohen's *d:* 1.40, 2.22) with employees of positive leaders perceived higher organisational support ($M = 5.23$, $SD = 1.23$) than negative leaders ($M = 2.87$, $SD = 1.48$).

General Workplace Wellbeing

The results showed that there was a significant differences in wellbeing between the leaders rated as positive and negative ($t(145) = 5.25$, $p < .001$, Cohen's $d = 0.96$, (95% CI for Cohen's *d:* 0.58, 1.33) with employees with positive leaders having higher wellbeing ($M = 2.81$, $SD = 0.61$) than negative leaders ($M = 2.21$, $SD = 0.66$).

Stress

The results from an independent samples t-test demonstrated that employees of leaders rated as positive (M = 2.78, SD = 0.54) were significantly less stressed ($t(145)$ = -4.70, $p < .001$, Cohen's d = -0.86, (95% CI for Cohen's *d:* -1.23, -0.49) than employees of leaders rated as negative (M = 3.26, SD = 0.63).

Anxieties about Work due to COVID

The results showed that there was a significant differences in anxieties about work due to COVID between the leaders rated as positive and negative ($t(145)$ = -3.88, $p < .001$, Cohen's d = -0.71, (95% CI for Cohen's *d:* -1.07, -0.34) with employees with positive leaders having less anxiety about work due to COVID (M = 3.24, SD = 1.31) than negative leaders (M = 4.17, SD = 1.34).

Mediation Analysis

As previously highlighted in other chapters (*Chapters 2, 3, 4,* and *5*), identification with the leader and organisational identification are considered key mediators in the link between positive leadership and employee wellbeing. Also research studies from other chapters have highlighted the potential mediating role of perceived organisational support (*Chapter 4 [Study 1]*) and LMX (*Chapter 5*). Therefore, all four variables were analysed in this current study. To test the processes through which positive leadership is associated with wellbeing outcomes and anxieties towards work due to COVID through identification variables and perceived organisational support, a SEM model using latent variables in AMOS (IBM SPSS Amos 25 Graphics, Arbuckle, 2017 using Maximum Likelihood estimator with 2,000 bootstraps) was conducted. These model considered all four potential mediators individually but also tested a serial mediation whereby positive leadership is associated with identification with the leader which is then associated with organisational identification and in turn the wellbeing outcomes and anxieties towards work due to COVID.

General Workplace Wellbeing

The chi-square of the model fit was significant, $\chi 2$ (396, N= 147) = 832.87, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 2.10. According to Schumacker and Lomax (2004), the relative chi-square should be less than five so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .91 and the RMSEA was .09 suggesting an acceptable fit (Hu & Bentler, 1999). Leadership style was significantly associated with identification with the leader, perceived organisational support and LMX, not with organisational identification. Identification with the leader was positively associated with organisational identification. Organisational identification and perceived organisational support were significant positive predictors of general workplace wellbeing. However, LMX was marginally significantly associated with general workplace wellbeing. And the direct effect of leadership style on general workplace wellbeing was not significant (*b* = .19, *SE* = .17, *95CI*[-.16, .51], *p* = .27; See Figure 23 for direct effects and Table 27 for all indirect effects).

Stress

The chi-square of the model fit was significant, $\chi 2$ (518, N= 147) = 1040.64, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 2.01, so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .89 and the RMSEA was .08 suggesting an acceptable fit (Hu & Bentler, 1999). Leadership style was significantly associated with identification with the leader, perceived organisational support and LMX, not with organisational identification. Identification with the leader was positively associated with organisational identification. Only organisational identification was a significant positive predictor of stress. However, identification with the leader was

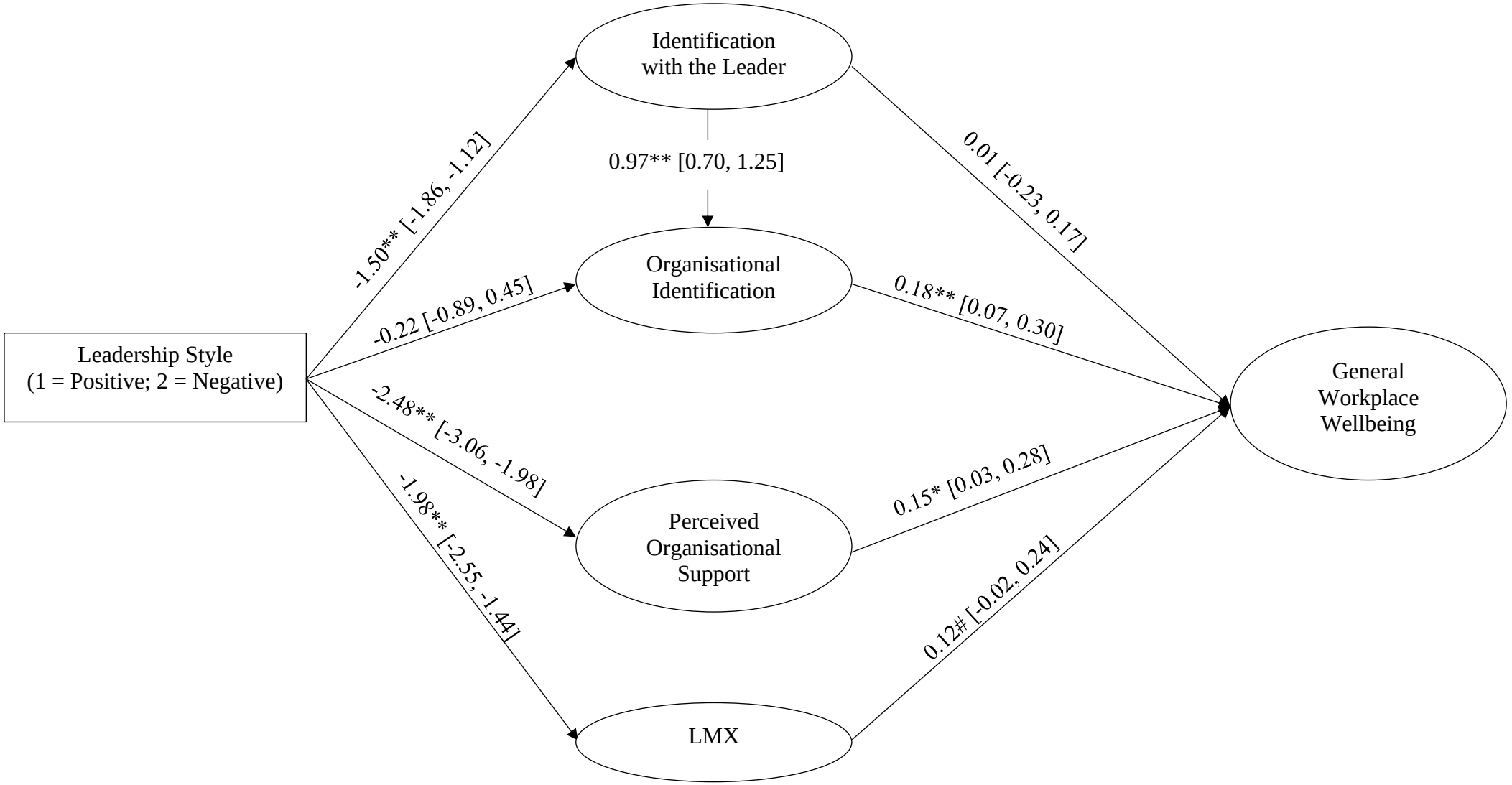
marginally significantly associated with stress. And the direct effect of leadership style on stress was significant (*b* = .33, *SE* = .15, *95CI*[.07, .67], *p* = .01; See Figure 24 for direct effects and Table 27 for all indirect effects).

Anxieties about Work due to COVID

The chi-square of the model fit was significant, $\chi 2$ (425, N= 147) = 1039.91, p < .001. However, chi-square is sensitive to sample size, so the relative chi-square was calculated (i.e. dividing chi-square index by the degrees of freedom). The relative chi-square was 2.45, so the model meets this necessary criteria for model fit. Moreover, the CFI of the model was .87and the RMSEA was .10 suggesting an acceptable fit (Hu & Bentler, 1999). Leadership style was significantly associated with identification with the leader, perceived organisational support and LMX, not with organisational identification. Identification with the leader was positively associated with organisational identification. None of the mediating variables had a significant direct effect on anxieties about work due to COVID but leadership style had a marginally significant direct effect (*b* = .88, *SE* = .47, *95CI*[-.10, 1.81], *p* = .06; See Figure 25 for direct effects and Table 27 for all indirect effects).

Figure 23

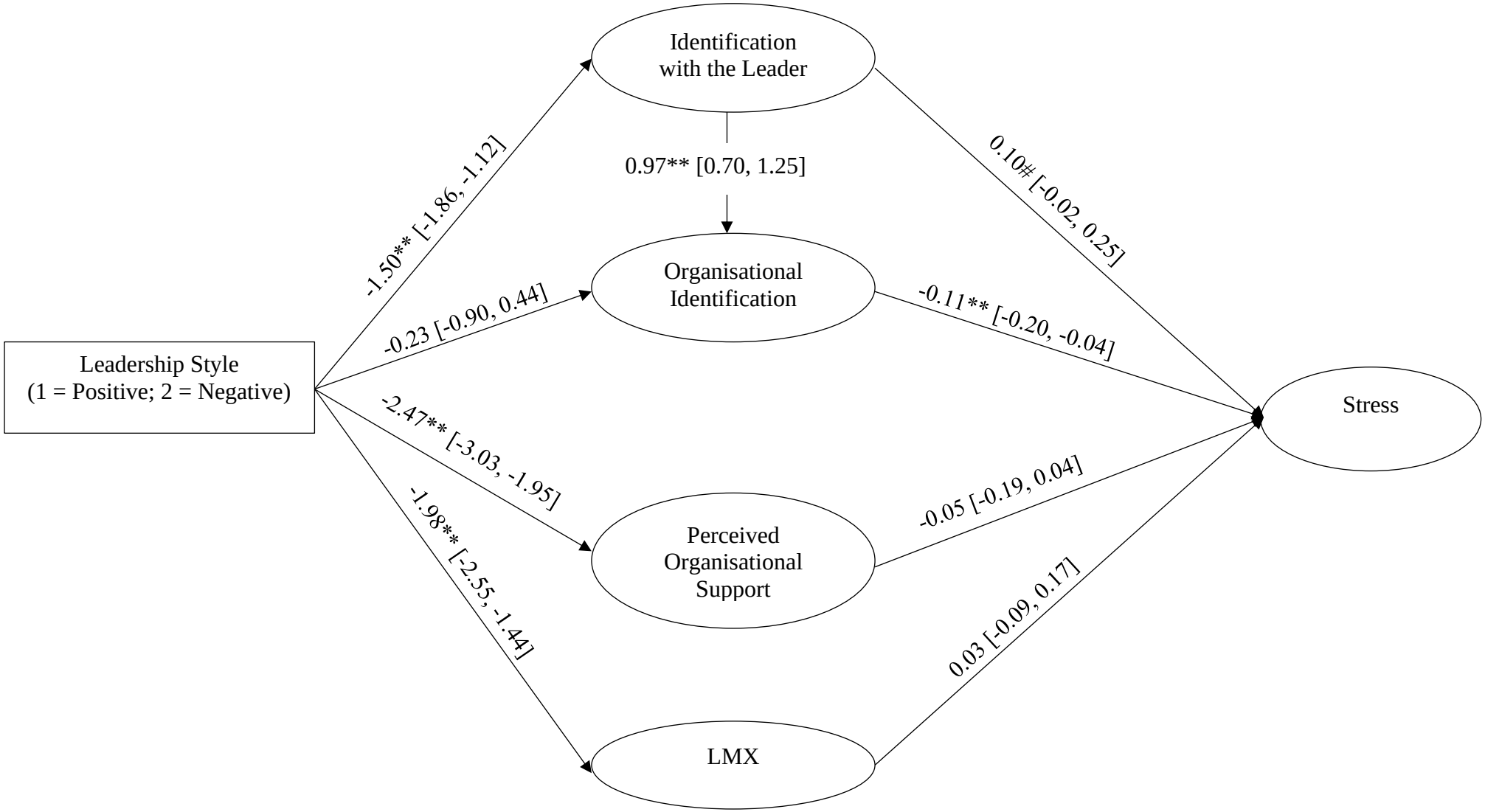
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for general workplace wellbeing (Study 8)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 24

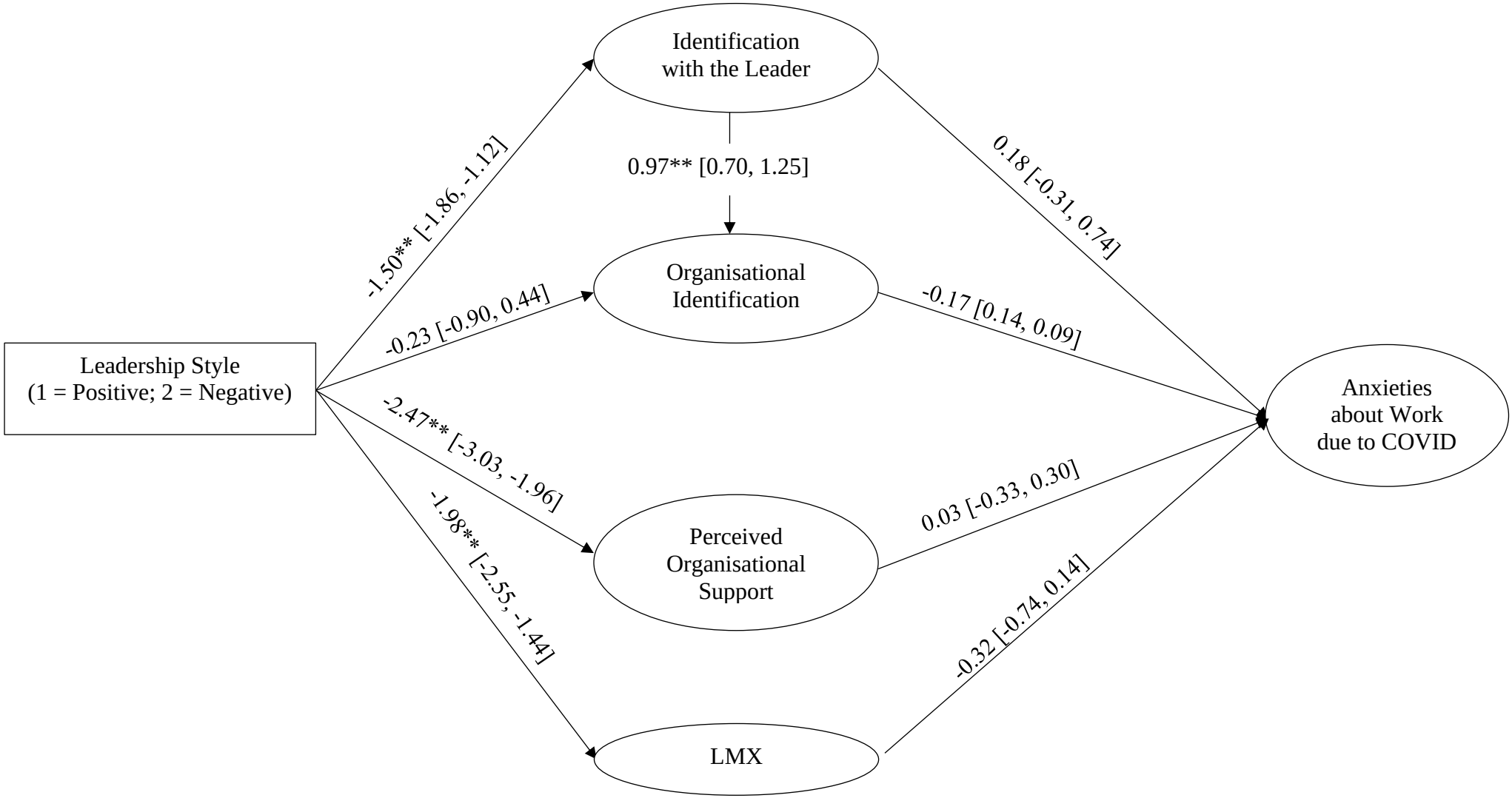
Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for stress (Study 8)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 25

Mediation analysis (using AMOS) showing the direct paths of the proposed mediation model for anxieties about work due to COVID (Study 8)



Note. Coefficients are unstandardized. 95Cis are depicted in square brackets. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 27

Summary of Indirect Effect for each of the Paths (Study 8)

Path	Indirect Effect
Positive Leadership > Identification with the Leader > General Workplace Wellbeing	*b* = .02, *SE* = .15, *95CI*[-0.26, 0.36], *p* = .82
Positive Leadership > Organisational Identification > General Workplace Wellbeing	*b* = -.04, *SE* = .07, *95CI*[-0.22, .0.08], *p* = .47
Positive Leadership > Identification with the Leader > Organisational Identification > General Workplace Wellbeing	*b* = -.27, *SE* = .10, *95CI*[-0.52, -0.11], *p* = .001
Positive Leadership > LMX > General Workplace Wellbeing	*b* = -.23, *SE* = .14, *95CI*[-0.50, 0.03], *p* = .08
Positive Leadership > Perceived Organisational Support > General Workplace Wellbeing	*b* = -.37, *SE* = .15, *95CI*[-0.71, -0.09], *p* = .01
Identification with the Leader > Organisational Identification > General Workplace Wellbeing	*b* = .18, *SE* = .06, *95CI*[0.07, 0.31], *p* = .001
Positive Leadership > Identification with the Leader > Stress	*b* = -.15, *SE* = .10, *95CI*[-0.40, 0.02], *p* = .08
Positive Leadership > Organisational Identification > Stress	*b* = .03, *SE* = .05, *95CI*[-0.05, .0.14], *p* = .46
Positive Leadership > Identification with the Leader > Organisational Identification > Stress	*b* = .16, *SE* = .07, *95CI*[-.05, 0.33], *p* = .003
Positive Leadership > LMX > Stress	*b* = -.05, *SE* = .13, *95CI*[-0.32, 0.18], *p* = .63
Positive Leadership > Perceived Organisational Support > Stress	*b* = .13, *SE* = .14, *95CI*[-0.10, 0.46], *p* = .25
Identification with the Leader > Organisational Identification > Stress	*b* = -.11, *SE* = .05, *95CI*[-0.21, -0.04], *p* = .004
Positive Leadership > Identification with the Leader > Anxieties about work due to COVID	*b* = -.27, *SE* = .40, *95CI*[-1.11, 0.48], *p* = .45
Positive Leadership > Organisational Identification > Anxieties about work due to COVID	*b* = .04, *SE* = .09, *95CI*[-0.06, .0.35], *p* = .36
Positive Leadership > Identification with the Leader > Organisational Identification > Anxieties about work due to COVID	*b* = .25, *SE* = .22, *95CI*[-0.12, 0.74], *p* = .18
Positive Leadership > LMX > Anxieties about work due to COVID	*b* = .64, *SE* = .46, *95CI*[-0.30, 1.52], *p* = .16
Positive Leadership > Perceived Organisational Support > Anxieties about work due to COVID	*b* = -.07 *SE* = .40, *95CI*[-0.76, 0.88], *p* = .89
Identification with the Leader > Organisational Identification > Anxieties about work due to COVID	*b* = -.17, *SE* = .14, *95CI*[-0.47, 0.09], *p* = .20

Notes. Bootstrap confidence bias-corrected method was used; coefficients are unstandardized.

Discussion

Overview of Results

Consistent with research on leadership and wellbeing (e.g. Barling & Frone, 2017; Kelloway et al., 2013; Kim, 2002; Lobban et al., 1998; Madlock, 2008; Men, 2014; Nevicka et al., 2013; Schoel et al., 2011), the qualitative analysis of employee responses highlighted the variety in leadership responses. Some leaders did adopt practices which were more in-line with the theory of positive leadership (Cameron 2012; 2013) such as building a sense of community, valuing health over profits, adhering to societal values to ensure they are reflected by the organisation (in this case the adherence to PPE policies), clear, consistent and repetitive messaging during this time and providing support (in particular wellbeing support) to ensure they were valuing employees. Other leaders did not adopt this approach and instead did not check in with employees, valued profits over the health of their staff, did not adhere to PPE policies to ensure staff were staff and did not contact and update employees to keep them involved during times of remote working. Indicating potentially a more negative leadership approach which could be more consistent with research on narcissistic leaders during times of uncertainty (e.g. Nevicka et al., 2013; Rast, 2015; Rast et al., 2013; Schoel et al., 2011).

Furthermore, this distinction in responses did have a clear impact on employee wellbeing and their attitudes towards their job and organisation during the pandemic. Specifically, the quantitative analysis showed that those employees coded as working with a positive leader in their qualitative responses had significantly higher quality relationships with their leaders, identified more with their leaders and the organisations they worked for, perceived themselves as having higher organisational support and reported higher level of wellbeing, lower stress and were less anxious about their work as a result of COVID. These

results signal the importance of this approach during the time of the pandemic and benefit it had on employee relations with their companies and their wellbeing during this time.

Theoretical and Applied Implications

The main contribution of these findings is the investigation of leadership approaches during COVID and the impact they have on employee wellbeing. COVID was a relevant context and a unique opportunity to examine the effects of positive leadership on employee wellbeing because it had a clear psychological impact on people generally (World Health Organisation, 2020) but also had a clear impact on employees at work and their wellbeing (Galanti et al., 2021; Trougakos et al., 2020; Yu et al., 2021). With employee wellbeing as an increased problem during COVID (Health & Safety Executive, 2020), it was important to ascertain whether leaders could adapt and take a more positive leadership approach but also to determine whether positive leadership still has an impact on employee wellbeing and job attitudes. Our results, indicate that positive leadership does look slightly different during COVID-19. While the behaviours clearly indicated key components of positive leadership (i.e., positive climate, relationships, communication, and meaning), the specific behaviours enacted during COVID were slightly different. For example, one of the behavioural indicators for positive leadership on the positive leadership assessment scale for positive climate is make gratitude visits and gratitude notes a daily practice but this was reflected in the COVID leadership behaviours by demonstrating appreciation through valuing employees over profits. Another example is in regard to the positive relationships aspect of where positive leaders would traditionally emphasise the importance of building networks between employees and providing support for each other, in the pandemic this involved leaders setting up groups on teams to enable workers to connect while working from home. Importantly, while the behaviours may have been slightly different to traditional behaviours shown in the workplace environment, those behaviours which indicated a positive leadership approach

were still linked with better employee wellbeing. This means that positive leadership may be a more appropriate style of leadership for this type of workplace crisis.

Furthermore, the use of both qualitative and quantitative data analysis allowed an in-depth understanding of leadership during COVID but also a more objective analysis of its influence on employee wellbeing and job attitudes. This combined approach has been considered important for investigating research questions (Hurmerinta-Peltomaki & Nummela, 2006) and overcoming the limitations of each individual method (Cabrera, 2011). Moreover, the qualitative analysis of leadership behaviours enabled an examination of how positive leadership approaches may look during COVID which could not accurately be captured by the use of pre-existing measures (Cameron, 2012). Therefore, this analysis did not rely on assumptions of any leader behaviours but by asking employees to indicate them themselves, makes the findings more relevant to this specific context.

Limitations and Future Research

One potential limitation of the findings in this chapter is the uneven number of positive and negative leaders identified by the coders. There was over twice as many positive leaders as there were negative leaders and therefore, this could have led to the key differences found in the results. A possible reason for the majority of positive leaders could have been due to a reporting bias. As people may have been more likely to share their experiences of working with a positive leader as they felt more comfortable. This could be a form of acquiescence response style where respondents want to focus on the positive and this has been shown to influence reporting behaviours in organisational research (e.g. Kam & Meyer, 2015). It could also be a form a social desirability bias (Edwards, 1953) because they want to be viewed in a favourable light and making their leaders seem more desirable may reflect more positively on them. Consequently, while this study provides good evidence because it collects information about specific and real behaviours experienced during the pandemic,

future research could adopt a quantitative approach and collect data on general key leadership indicators which might have been adopted by leaders in this situation.

Additionally, future research could employ experimental design manipulating leader responses to the COVID pandemic to help deal with the problem of the uneven distribution of positive and negative leaders. By manipulating leadership style, it also enables causality to be determined. The differences displayed here could have been due to differences not just in leaders responses to COVID but because of other differences in the workplaces of these two groups, such as organisational culture. Employing experimental or longitudinal designs to assess the impact of COVID on leadership styles and employee wellbeing in the future would help to control for these other explanations.

While the qualitative open-ended questions did provide more in-depth understanding of leadership styles during COVID than quantitative survey questions, a lot of the responses from participants were short. And as these responses were collected through a survey, there was no opportunity to ask participants to expand on their answers to explain what they meant in more detail or to allow for clarification. As a result, future research using interviews would provide a deeper level of data due to the conversational style and allowing for follow-up questions. This would allow for a deeper level of understanding of the employee experience during the pandemic.

Chapter Summary and Conclusions

This chapter investigated leader responses during the COVID-19 pandemic and the influence of this behaviour on indicators of employee wellbeing. Additionally, it examined the potential of three types of mediators in the relationship between leadership and employee wellbeing. The results from the qualitative analysis demonstrated that a positive leadership style was still apparent during the pandemic but these behaviours were adapted to the new working conditions. The results from the quantitative analysis provided further support for

the benefits of positive leadership during this time of uncertainty. Specifically, employees of leaders which were independently coded as positive had significantly higher identification with the leader and organisation, higher LMX, higher perceived organisational support, higher wellbeing, lower stress and lower anxieties about their work due to COVID than employees of leaders who were independently coded as negative. The mediation findings supported the role of identification variables in the link between leadership style and general workplace wellbeing and stress and indicated the role of perceived organisational support in the relationship between leadership style and general workplace wellbeing. The next chapter will provide a summary of key findings, limitations, theoretical and applied implications of the thesis overall and discuss future research directions.

Chapter 7 – General Discussion

Chapter Overview

This final chapter of the thesis provides a general discussion of the findings reported throughout this thesis. I start by reviewing the research gaps identified at the beginning of this thesis to highlight the overarching aims of this thesis. I summarise the results from the accumulation of eight studies and each is discussed in relation to the research gaps identified. The theoretical and applied implications are examined and these will incorporate the beneficial impact of positive leadership on employee wellbeing, the role of identification as a clear mediating mechanism, the consideration of positive leadership not being constrained by other leader characteristics, the differentiation of positive leadership, and the important function of leadership in dealing with the impact of COVID on employees. Strengths and limitations of the methodology and how future research could address them will be outlined. I finish with a discussion of potential future research avenues that would be useful to further our understanding of the effects of leadership on wellbeing, and some final conclusions.

Aims of Thesis Revisited

Employee wellbeing is a broad concept and there have been a number of difference conceptualisations of employee wellbeing but most researchers agree that it incorporates multiple facets rather than a single indicator (e.g. Forgeard et al., 2011; Keyes, 2007; Ryff & Keyes, 1995). Two common conceptualisation is Seligman's (2011) PERMA model and the hedonic and eudemonic distinctions from Robertson and Flint-Taylor (2008). A review of the literature on leadership and employee wellbeing demonstrated that there is too much focus on the hedonic facets of wellbeing and particularly utilising job satisfaction as the only means of measuring employee wellbeing (Inceoglu et al., 2018). Consequently, the first aim of this thesis was to address this research gap by incorporating both positive and negative indicators of wellbeing into every empirical chapter (*Chapters 2, 3, 4, 5,* and *6*) and *Chapter 5* of this thesis examined 10 indicators of wellbeing with included both hedonic and eudemonic and positive and negative indicators.

Another aim of this thesis was to examine the underlying mediating mechanisms between positive leadership and employee wellbeing. Although it is important to establish a clear link between positive leadership and employee wellbeing, it is also important to develop our understanding of why they have this influence on employee wellbeing. Understanding the mediating processes helps to develop organisational practices which allow for the process to be enacted. Furthermore, there is a lack of research investigating the mediating processes between leadership and employee wellbeing (Inceoglu et al., 2018) and the majority of research only examines one mediating mechanism and does not explore potential differences dependent on the indicator of wellbeing being predicted. Research which has examined more than one mediator demonstrated that the link between transformational leadership and eudemonic indicators of wellbeing were mediated by motivational mediators but the link between transformational leadership and hedonic indicators were mediated by identification

mediators (Nielsen et al., 2008). The role of identification mediators (i.e. identification with the leader and organisational identification) were examined in every empirical chapter of this thesis but this was also compared to the mediating role of perceived organisational support (*Chapters 4* and *6*) and leader-member exchange (*Chapters 5* and *6*).

Similarly, this thesis aimed to explore the robustness of the beneficial impact of positive leadership by examining evaluations of these types of leaders and investigated potential boundary conditions with regard to leader characteristics. Research on leadership has suggested that leader behaviour has an influence on employees' perceptions of their leaders' effectiveness and also their willingness to support them (e.g. Abrell et al., 2011; Copeland, 2016; Chou, 2018; Walumbwa et al., 2004). While my own previous research has provided initial support for the beneficial effect of positive leadership on employee wellbeing, if employees evaluations of their effectiveness are unfavourable then these types of leaders are going to struggle to hold positions where they can have their beneficial impact. Furthermore, it is suggested that evaluations of leaders are subject to bias as a result of key characteristics such as leader age (Abrams et al., 2016; Hirschfeld & Thomas, 2011; Steeden, 2021; Sun et al., 2015), leader gender (e.g. Blau & DeVaro, 2007; Eagly & Karua, 1991; Heilman, 2001; Heilman & Eagly, 2008; Koenig et al., 2001; Moss-Racusin et al., 2012), and leader group membership (Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006; Platow & van Knippenberg, 2001; Ullrich et al., 2009). In *Chapter 3* of this thesis we explored the potential boundary conditions of leader gender, leader age and group membership on evaluations of positive leaders.

It has been suggested that in leadership research there is a construct proliferation problem and there needs to be more research examining the discriminant validity of new leadership styles (Bormann & Rowold, 2018). Several leadership styles have been identified to have a positive impact on employee wellbeing, these include transformational leadership

(e.g. Ahmed et al., 2019; Arnold et al., 2007; Liu et al., 2010; McMurray et al., 2010; Munir et al., 2012; Nielsen et al., 2008), ethical leadership (e.g. Chughtai, et al., 2015; Kalshoven & Boon, 2012; Rivers et al., 2018; Sarwar et al., 2020) and also identity leadership (e.g. Fransen et al., 2020; Krug et al., 2021; Steffens et al., 2018). While some research has provided initial evidence for the effects of positive leadership on employee wellbeing even when taking into account transformational leadership (Kelloway et al., 2013), the conceptualisation of positive leadership was too vague and did not fully depict Cameron's theory (2012; 2013). To truly understand the impact of positive leadership on different indicators of wellbeing, we need to assess its unique contribution while controlling for multiple other leadership styles. This was one of the aims of this thesis and was explored in *Chapter 5* of this thesis by examining the effects of positive leadership while controlling for the effects of transformational, ethical and identity leadership.

Finally, this thesis was also interested in investigating the impact of the COVID pandemic by examining leader responses to the pandemic and its influence on employee wellbeing. There was a clear indication from reviews and commentaries during the pandemic that leadership was key in helping to deal with the negative impact of COVID on wellbeing (Ahern & Loh, 2020; CIPD, 2021b; Haque, 2021). However, there is some research which suggests that during times of uncertainty, followers prefer authoritative leaders (e.g. Hogg & Adelman, 2013; Nevicka et al., 2013; Rast, 2015; Rast et al., 2013; Schoel et al., 2011). Even though, the COVID pandemic was causing a wellbeing crisis which would indicate the need for positive leadership, there was the potential for other leadership styles to be preferred because it is argued that authoritative leaders are good at reducing uncertainty (De Hoogh et al., 2015; Rast et al., 2013; Schoel et al., 2011). Consequently, *Chapter 6* of this thesis investigated responses from leaders and the impact this had on indicators of employee wellbeing.

In summary, this thesis aimed to examine both the underlying mediating mechanisms of the link between positive leadership and employee wellbeing and potential boundary conditions of positive leadership. This thesis aimed to investigate the unique contribution of positive leadership over other well-known leadership theories and examine leader responses to COVID. Additionally, throughout this thesis, numerous different indicators of wellbeing were tested.

Summary of Findings

Positive Leadership and Employee Wellbeing

Consistently across the chapters of this thesis, the results have demonstrated the beneficial impact of positive leadership on several different indicators of employee wellbeing using varied methods. These were: job satisfaction (*Chapters 2, 3[Study 4 only], 4* and *5*), mental health (*Chapter 2*), stress (*Chapters 2, 3, 5* and *6*), general workplace wellbeing (*Chapters 3, 4, 5* and *6*), employee depression and anxiety (*Chapters 4[Study 5 only]* and *5*), emotional exhaustion (*Chapter 5*), work engagement (*Chapter 5*), psychosomatic complaints (*Chapter 5*), meaning at work (*Chapter 5*), turnover intentions (*Chapter 5*) and anxieties about work due to COVID (*Chapter 6*). This demonstrates that positive leadership has a positive impact on a variety of indicators of employee wellbeing, including both hedonic and eudemonic and both positive and negative indicators.

Mediating Processes

The mediation analysis throughout this thesis indicated that identification variables were key to explaining the underlying processes in the relationship between positive leadership and employee wellbeing. The relationship between positive leadership and job satisfaction was consistently shown to be mediated by both identification with the leader and organisational identification both individually and in sequence (*Chapters 2, 4[Study 5 only]* and *5*). The only difference was for *Study 6* in *Chapter 6* which did not show a significant

mediation through organisational identification, but this was more likely due to the manipulation used. These findings are consistent with my previous research (Marsh et al., in prep).

The results for the mediation relationships between positive leadership and stress were slightly more mixed. On the one hand, *Chapter 2* and *Study 2* from *Chapter 3* replicated previous findings (Marsh et al., in prep) by demonstrating it was only significant through identification with the leader. On the other hand, the results from *Chapter 5* and *Chapter 6* suggested that this relationship was significantly mediated by both identification with the leader and organisational identification in sequence. The results did consistently support the link mediated by identification variables only as both LMX (*Chapters 5* and *6*) and perceived organisational support (*Chapter 6*) were not significant mediators.

The majority of mediations between positive leadership and general workplace wellbeing demonstrated that it was either significantly mediated by identification with the leader only (*Chapters 3* and *4*) or through organisational identification and identification with the leader and organisational identification in sequence (*Chapters 4[Study 5 only], 5* and *6*). Again these differences tended to occur dependent on the methodology. In experimental studies, it occurred through identification with the leader only but in correlational designs, organisational identification became more important and it tended to occur through organisational identification or through both identification with the leader and organisational identification in sequence.

The mediations between both positive leadership and employee depression and anxiety showed that these relationships were significantly mediated by organisational identification or through identification with the leader and organisational identification in sequence (*Chapters 4* and *5*). The other indicators of wellbeing were only tested once in *Chapter 5* but the results indicated that the relationship between positive leadership and work

engagement, emotional exhaustion, resilience, meaning at work and turnover intentions were significantly mediated by organisational identification only and identification with the leader and organisational identification in sequence. Overall, these results indicate that both identification with the leader and organisational identification are important mediators in the relationship between positive leadership and indicators of employee wellbeing.

There was some indication of the mediating role of perceived organisational support and LMX in the link between positive leadership and employee wellbeing. For example, the relationship between positive leadership and general workplace wellbeing was significantly mediated by perceived organisational support (*Chapters 4[Study 5 only]* and *6*) and LMX (*Chapter 5*). Moreover, *Study 5* from *Chapter 4* showed that perceived organisational support significantly mediated the relationships between positive leadership and job satisfaction, employee anxiety and depression. However, due to the differences in methodology, these mediations were unable to be replicated. And the relationship between positive leadership and emotional exhaustion, resilience, meaning at work, turnover intentions and job satisfaction (*Chapter 5*) were significantly mediated by LMX. However, when these mediators were all tested in *Chapter 6,* the identification variables seemed to be the most important mediator.

Boundary Conditions

The results from *Chapter 3* demonstrated that positive leaders were more likely to receive favourable evaluations than negative leaders. For example, across the three studies (i.e. *Studies 2, 3* and *4*), positive leaders were rated as higher in leadership potential, leader effectiveness, and willingness to work with and endorse the leader. Additionally, across *Study 2* and *3,* the positive leader was rated as more competent and warm, and more communal. This highlights that they are perceived more favourably so they should not be restricted in

gaining or holding positions where they can have a positive impact on employee wellbeing. The results from these three studies also showed minimal effects of leader age, gender and group membership and the only significant interactions were for willingness to work with the leader in *Study 4* but these still indicated a preference for positive leaders before negative leaders. Therefore, these results suggest that the benefits from enacting a positive leadership style is not limited to certain individuals due to stereotypical constraints shown in previous findings (e.g. Abrams et al., 2016; Blau & DeVaro, 2007; Eagly & Karau, 1991; Heilman, 2001; Heilman & Eagly, 2008; Hirschfeld & Thomas, 2011; Koenig et al., 2011; Moss-Racusin et al., 2012; Steeden, 2021; Sun et al., 2015) or group membership (e.g. Giessner & van Knippenberg, 2008; Hains et al., 1997; Hogg et al., 2006; Platow & van Knippenberg, 2001; Ullrich et al., 2009).

Unique Effects of Positive Leadership

Chapter 5 examined the effects of positive leadership on various indicators of wellbeing and also controlled for the effects of transformational, ethical and identity leadership. The results from the first step of the hierarchical multiple regression analysis showed that positive leadership was a significant predictor of all indicators of wellbeing (except resilience) and turnover intentions. When controlling for the effects of the other leadership styles, positive leadership still had a significant effect on general workplace wellbeing, work engagement and job satisfaction and marginal effects on employee depression, anxiety and turnover intentions. This demonstrates that positive leadership does have some unique effects on employee wellbeing even when taking into consideration other well-known helpful leadership styles.

Leader Responses during COVID and wellbeing

The qualitative analysis from *Chapter 6* highlighted both positive and negative leadership responses during COVID. Importantly, the key themes drawn from this analysis with regard to the positive leader responses match with some of the aspects of the theory of positive leadership. Specifically, adherence to COVID safety measures from positive leaders can be related to the positive meaning strategy and how positive leaders should connect organisational values to personal values. The theme of health versus profits and positive leaders valuing employee health over profits demonstrates appreciation for employees which is a key part of the positive climate aspect of positive leadership. Similarly, communication from positive leaders during COVID was consistent, clear and addressed problem in a supportive manner which aligns with the positive communication component of positive leadership. Finally, the positive relationships component was apparent in the qualitative theme of social connectedness where positive leaders focused on creating online spaces for teamwork and social meetings. While positive leaders behaviours adapted to the workplace changes associated with COVID, they were still reflecting the key components of positive leadership.

Furthermore, the quantitative analysis compared employee wellbeing between leaders independently coded as either positive or negative leaders. The results revealed that general workplace wellbeing was significantly higher and employee stress and anxieties about work due to COVID were significantly lower for those who worked for leaders that were independently coded as positive leaders than those who worked for leaders independently coded as negative leaders. This demonstrates that positive leadership was still showing favourable effects on employee wellbeing during COVID (see Tables 28 and 29 for an overview of the research findings)

Table 28

A summary of the research findings from Studies 1-8

Wellbeing Outcome	Positive Influence of Positive Leadership	PL significant when controlling for other three leadership styles	Significant other leadership styles	Mediations	Thesis Study Evidence
Job Satisfaction	Yes	Yes	Transformational and ethical also significant	Through identification with the leader (Study 1, 5, 6, 7) Through organisational identification (Study 1, 5, 7) Through identification with the leader and organisational identification in sequence (Study 1, 5, 6, 7) Through perceived organisational support (Study 5 only) Through LMX (Study 7 only)	Study 1 – Longitudinal Study 5 and 7 – Cross-sectional Study 6 – Experimental
Mental Health	Yes	Not tested	Not tested	Through identification with the leader only (Model 1 only)	Study 1 – Longitudinal
Stress	Yes	No	Only ethical leadership marginally significant	Through identification with the leader only (Study 1, 2, 8) Through organisational identification (Study 7) Through identification with the leader and organisational identification in sequence (Study 7 and 8)	Study 1 – Longitudinal Study 2, 3 and 4 – Experimental Study 7 – Cross-sectional Study 8 – quasi-experimental
General Wellbeing	Yes	Yes	Only transformational	Through identification with the leader (Study 2, 3, 5 and 6) Through organisational identification (Study 1, 2, 5 and 7) Through identification with the leader and organisational identification in sequence (Study 5, 7 and 8) Through perceived organisational support (Study 5 only) Through LMX (Study 7)	Study 2, 3, 4 and 6 – Experimental Study 5 and 7 – Cross-sectional Study 8 – quasi-experimental
Depression	Yes	Yes (marginally significant)	No	Through organisational identification (Study 7) Through identification with the leader and organisational identification individually and in sequence (Study 5 and 7) Through perceived organisational support (Study 5)	Study 5 and 7 – Cross-sectional

Anxiety	Yes	Yes (marginally significant)	No	Through organisational identification (Study 7) Through identification with the leader and organisational identification individually and in sequence (Study 5 and 7) Through perceived organisational support (Study 5)	Study 5 and 7 – Cross-sectional
Emotional Exhaustion	Yes	No	Ethical and transformational marginally significant	Through organisational identification Through identification with the leader and organisational identification in sequence Through LMX	Study 7 – Cross-sectional
Resilience	No	No	No	Through organisational identification Through identification with the leader and organisational identification in sequence	Study 7 – Cross-sectional
Work Engagement	Yes	Yes	Only transformational	Through organisational identification Through identification with the leader and organisational identification in sequence	Study 7 – Cross-sectional
Psychosomatic complaints	Yes	No	Only ethical leadership marginally significant	None significant only marginal significant	Study 7 – Cross-sectional
Meaning at Work	Yes	No	Only transformational	Through organisational identification Through identification with the leader and organisational identification in sequence Through LMX	Study 7 – Cross-sectional
Anxieties about work due to COVID	Yes	Not tested	Not tested	No significant mediations	Study 8 – quasi-experimental

Table 29

Overview of experimental research findings from Studies 2-4 in Chapter 3

Outcome	Positive Influence/Rating of Positive Leadership	Was it influenced by age/gender or group identity?	Any Interactions
General Wellbeing	Yes (Study 2, 3 and 4)	No	No
Stress	Yes (Study 2, 3 and 4)	Yes – Main effect of group identity – lower stress for ingroup leader than outgroup leader (Study 4)	Yes - Significant interaction between leader age and leadership style on perceived stress scale (Study 2) Significant interaction between leader age and leadership style on perceived stress scale (Study 3)
Leadership Potential	Yes (Study 2, 3, and 4)	No	No
Leader Competency	Yes (Study 2, 3)	No	No
Leader Warmth	Yes (Study 2, 3)	Yes - Main effect of leader age – younger leader perceived as warmer (Study 2, 3)	No
Leader Agency	No – Higher agency for negative leaders than positive leaders (Study 3)	No	No
Leader Communality	Yes (Study 3)	No	No
Leader Effectiveness	Yes (Study 2, 3 and 4)	No	No
Willing to work with the leader	Yes (Study 2, 3)	No	Yes - Significant interaction between leader age and leadership style (Study 3) Significant interaction between leader gender and leadership style (Study 3)
Job Satisfaction	Yes (Study 4)	No	No
Job Appeal	Yes (Study 4)	No	No
Willingness to endorse the candidate	Yes (Study 4)	No	No

Theoretical and Applied Implications

There are several theoretical and applied implications of the findings from this thesis. This thesis replicated previous findings (Marsh et al., in prep) on the link between positive leadership and employee wellbeing and extended this initial empirical evidence by examining these links using experimental designs. These findings contribute to the literature outlining the beneficial influence of implementing positive organisational practices (e.g. Cameron et al., 2011) and the theory of positive leadership (Cameron, 2012; 2013) by demonstrating empirically that positive leadership has a beneficial impact on employee wellbeing. This is especially important considering the critiques of the application of key theories in positive psychology to the workplace and the lack of empirical evidence (Fineman, 2006; Hackman, 2009). This thesis conducted several different types of empirical investigations into the beneficial influence of positive leadership on employee wellbeing using a wider variety of different research methodologies. This thesis also extends the impact of previous findings by examining a wide variety of employee wellbeing indicators to provide a comprehensive analysis of the link between positive leadership and employee wellbeing. As this thesis demonstrated positive leadership had a clear effect on both positive and negative indicators and both hedonic and eudemonic indicators of employee wellbeing. This also has applied implications for the benefits of implementing a positive leadership style in organisations as a way of reducing stress and enhancing wellbeing at work.

This thesis provided further support for the role of identification variables in the relationship between positive leadership and employee wellbeing. Specifically, this thesis replicated the initial findings of the importance of identification variables as mediators (Marsh et al, in prep). Similarly, this thesis highlights again the importance of exploring different foci of identification at work. As some of the mediation analysis showed that for some aspects of wellbeing, identification with the leader or organisational identification were

significant mediators individually and for some they were both required in sequence to help explain the influence of positive leadership on employee wellbeing. This add to the literature which asserts that different foci of identification can have differential effects in predicting workplace outcomes (Van Dick et al., 2005) but also by expressing that different foci of identification can explain differential effects of facets of the same construct.

By examining more than one mediating process, this thesis fills gap identified in previous reviews on leadership and wellbeing literature (Inceoglu et al., 2018) and demonstrated the robustness of the identification mediating processes over other potential mediators. The results support the identification explanatory process for the majority of the indicators even when considering LMX and perceived organisational support. While LMX and perceived organisational support were also significant mediators for some of the indicators of wellbeing, this was in addition to the mediating explanation provided by identification variables. LMX and perceived organisational support did not singlehandedly mediate the relationships between leadership and wellbeing indicators but were additional significant mediators alongside identification variables. Whereas identification variables were the only significant mediators for some relationships between leadership and wellbeing indicators. Therefore, this highlights the benefits of employing a social psychological analysis to workplace questions (see Rast et al., 2016) and the importance positive leadership plays in increasing identification within the workplace and the importance of identification in explaining the effects of positive leadership on wellbeing.

By investigating the role of perceived organisational support this thesis provided some clarity to the leadership and perceived organisational support literature. Indeed, the leadership literature is mixed in terms of treating organisational support as a mediator (e.g. DeConinck et al., 2018; Milner et al., 2015; Qi et al., 2019) or a moderator (e.g., Getachew & Zhou, 2018; Saleem et al., 2017; Wang & Xu, 2019). Thus, I tested organisational support

both as a mediator and moderator of the association between positive leadership and wellbeing in *Study 5*. The results from this study supported the role of perceived organisational support as a mediator not a moderator of that association, supporting the proposal that leadership styles which display an aspect of support increase the perception that the organisation overall supports them (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). The results from this thesis indicate that perceived organisational support helps to explain the relationship between positive leadership and employee wellbeing. And, similar to organisational identification, perceived organisational support was also significantly related to positive leadership, these results show that positive leadership has an impact on perceptions of the wider organisation. This suggests that positive leaders can increase beneficial perceptions of the wider organisation so that employees may become more invested. In this case, positive leadership plays a role in enhancing perceptions of organisational support.

It is important to investigate other workplace factors because there are numerous workplace factors which have been highlighted to have an influence on employee stress and wellbeing (Baker, 1985; CIPD, 2021a; Colligan & Higgins, 2006; Health and Safety Executive, 2020). For example, other factors include work demands such as workload or working hours, organisational change, relationships at work or organisational culture and climate. While these are all factors that have an influence on workplace stress and wellbeing, leadership not only is a direct source on its own but does have an indirect effect through these other sources. For example, leaders will set employee workload, they tend to be drivers of organisational change, they can set the overall tone and climate of the organisation, and they can alter relationships at work by moving people around (i.e. positive leaders in particular are focused on relationships at work and identifying positive energizers; Cameron, 2012; 2013). Specifically, this is highlighted by the results from *Study 5* in *Chapter 4* whereby positive

leadership indirectly improved employee wellbeing through enhancing perceived organisational support (considered a key part of organisational climate and culture). Therefore, this shows that leadership is a more influential factor because it has both direct and indirect effects on the sources of employee wellbeing.

Furthermore, by examining potential boundary conditions of positive leadership, this thesis demonstrated that positive leaders benefit from favourable evaluations of their ability. This contributes to the literature on positive leadership by highlighting the wider perceptions of positive leaders' abilities and effectiveness. It also indicates that positive leaders are likely to be able to achieve promotions and gain leadership positions because they are seen more favourable by others. Moreover, irrespective of their age, gender or group membership, positive leaders were perceived more favourable and they still had a beneficial impact on follower wellbeing. This has clear applied implications because it suggests that individuals wanting to gain leadership positions may be more likely to achieve it if they display a positive leadership style or advocate for positive leadership strategies during the recruitment process.

Another theoretical implication of the results from this thesis is the unique effects of positive leadership while accounting for other good leadership styles - transformational, ethical and identity leadership. This adds to the limited research which has compared the effects more than one leadership style on employee wellbeing in one study (e.g. Gregerson et al., 2014) and addresses the suggestion from researchers that there is a construct proliferation problem in leadership research (Bormann & Rowold, 2018). As the results from this thesis clearly show that while there is some overlap between these leadership constructs they are not redundant and positive leadership has distinct effects on employee wellbeing. Additionally, it has clear applied implications for organisations as it suggests that different leadership styles may be more appropriate for dealing with specific employee wellbeing

problems. For example, if there is a problem with job satisfaction, then taking a positive leadership approach will be more appropriate than transformational, identity or ethical leadership. This has important applied implications of leadership development programmes. It would be important to highlight in these programmes that certain leadership approaches will be more effective for dealing with certain employee wellbeing problems. Moreover, for organisations that have limited resources, developing leadership skills that are the most appropriate for the problems they are facing would be more efficient and cost-effective.

A final applied implication of this thesis is the role of leadership in dealing with COVID. This supports the commentaries and reviews during COVID (Ahern & Loh, 2020; CIPD, 2021b; Haque, 2021). The results from this thesis indicate that certain leader responses lead to better wellbeing for their employees. Given the changing nature of work, especially in terms of increased remote working, this thesis demonstrated that leaders are able to adapt their behaviours in ways that help to ensure the wellbeing of followers is maintained. COVID was a unique situation for studying employee wellbeing as the pandemic had a clear psychological impact on people generally (World Health Organisation, 2020) and the results indicated that even during this time of increase pressure on people, leaders still have an important role in dealing with employee wellbeing. And while, there was a lot of stressors related to work which could not be controlled, leaders were still able to exert effort to reduce stress in new ways. Theoretically, the qualitative analysis of leader responses during COVID demonstrated other behaviours which could be incorporated into future measures of positive leadership to incorporate a situation specific example of positive leadership. For example, personally keeping in regular contact with employees while working away from the office which can encompass the communication aspect and also the relationships aspect of positive leadership.

Strengths and Limitations

There were several strengths and limitations of the research presented in this thesis and these will both be examined in this section. One major strength of the research is the use of mixed methods throughout this thesis. For example, *Chapter 6* utilised a mixed methods design which incorporated both qualitative and quantitative measures. Using a mixed methodology has been identified to increase the validity of the research (Hurmerinta-Peltomaki & Nummela, 2006) and using both qualitative and quantitative methods enables for the limitations of both these methods individually to be overcome (Cabrera, 2011). Similarly, this thesis used a combination of longitudinal, experimental, correlational design to examine the effect of positive leadership on employee wellbeing. The longitudinal study presented in *Chapter 2* allowed for the investigation of these links and incorporating the dynamics of time (Mitchell & James, 2001), experimental studies utilised in *Chapters 3* and *4* allowed for control and causal inferences to be drawn from the results (Thau et al., 2014) and the correlational studies allowed for investigation of potential links between variables from samples of employed participants which provided more ecological validity to the findings.

However there are also a few limitations. One limitation of the thesis is the use of hypothetical scenarios when manipulating leadership style in the experimental study. By using a hypothetical scenario, it was difficult to determine the wider organisational implications of leadership which helped to explain positive leadership's effect on employee wellbeing. Previous research has taken a similar approach to manipulating leadership styles using a video of an actor giving task instructions (e.g. Hoyt & Blascovich, 2003; Lyons & Schneider, 2009; Shea & Howell, 1999), but these manipulations may not provide enough information for participants to make wider inferences about the organisation. While experimental manipulations of leadership are a good way to control for extraneous variables, they do lack ecological validity. Manipulating a one off interaction between a leader and a

follower does not fully incorporate the dynamics of leadership. Employees in real-life workplaces will get to spend time observing their leaders and drawing inferences of their leadership style from more than one interaction. Consequently, it is important for future research to ensure manipulations of leadership are more reflective of workplace experiences or use field studies to examine leadership within the wider workplace context.

Although, *Chapter 2* of this thesis incorporated a longitudinal design, there is a need for more consideration of the dynamic nature of change in the workplace and more longitudinal analysis of the effects displayed in the subsequent chapters. The changing nature of work was made apparent due to the COVID pandemic but organisations are constantly evolving to deal with new situations as they operate in a VUCA environment (Bennett & Lemoine, 2014). These organisational changes have an effect on leadership, employees and the wider organisational environment such as changing internal structures and processes. Furthermore, concepts such as employee wellbeing and workplace stress can be considered a state rather than a trait variable and as such can fluctuate daily as a result of the pressures placed on individuals so a static representation presented from a cross-sectional design does not help to understand the true evolving nature (Mitchell & James, 2001). The use of more longitudinal designs can help to incorporate this dynamic nature of change and ensure that the models reflect the organisational setting.

Future Directions

This thesis provides numerous novel insights into the relationship between positive leadership and employee wellbeing but there is still more considerations to take into account. While there is substantial research on the influence of leadership on employee wellbeing (e.g. Arnold et al., 2007; Harms et al., 2017; Liu et al., 2010; Mackey et al., 2017; Men, 2014; Naeem & Khurram, 2020; Schyns & Schilling, 2013; Spain et al., 2016; Van Dierendonck et al., 2004; Zhong et al., 2020), there is little research examining the wellbeing of leaders

themselves (Skakon et al., 2010). A report from the Center for Creative Leadership in 2007 presented findings of a survey interested in learning more about leaders own stress (Campbell et al., 2007). The findings from this report revealed that 88% of leaders cited work as their primary source of stress and having a leadership positions heightens stress. Moreover, these leaders cited a variety of sources of stress which included dealing with low stress, low time constraints, high expectations and also demands related to developing others and maintaining relationships. So, it is clear that leaders themselves are likely to experience stress and poor employee wellbeing same as their employees. It is important to consider leader stress because research has shown when leaders are under stress, decision making can be negatively impacted (Ganster, 2005; Thompson, 2010), also they are likely to become more self-focused (Driskell et al., 1999; Salovey, 1992)

Leader stress can determine the behaviours or styles of leadership displayed (e.g. Harms et al., 2017; Mumford et al., 2007; Scully et al., 1994; Steele, 2011). For instance, Scully and colleagues (1994), showed that when organisations were performing poorly, CEOs engaged more in "strongman" behaviours which is similar to an authoritarian style of leadership and decreased behaviours such as developing employees. Similarly, toxic leadership styles seen in the military have been attributed to the constant high stress nature of the work (Steele, 2011). A more recent meta-analysis has shown that increased leader stress is linked with lower levels of transformational leadership and higher levels of abusive supervision (Harms et al., 2017). However, it is hard to determine the causality of this link because the data was measured from the same source so it is possible that leader stress lead to differences in leader behaviours but it could also be that leader behaviours lead to the differences in leader stress.

There are some initial proposals that certain leadership styles can induce more stress in leaders than others (Connelly & Arnold, 2011). Specifically, in an article based on the

presentation at the Academy of Management Annual Meeting, Connelly and Arnold (2011) suggest that transformational leaders may experience more stress as a result of demands exceeding their resources because transformational leadership behaviour requires more involvement of leaders and therefore more demands. This reflects later researchers who have argued that the need for leaders to uphold their reputation so that followers will still trust in their abilities can drain personal resources to the point of emotional exhaustion (Baer et al., 2015). Therefore, it is important to investigate the role of leader stress and wellbeing as well as employee stress and wellbeing. And it is important to ascertain whether the extra investment leaders must put into displaying a positive leadership style may drain them and cause the leader themselves more stress.

Another area of future research is the use of physiological measures to determine employee stress and wellbeing. A review from Podsakoff et al. (2012) highlighted potential problems of method biases and one way they highlighted to control for this is to obtain measures of the predictor and criterion from different sources. While they did not emphasise the use of physiological measures, this is one way to obtain information about stress and wellbeing from a different source. Physiological measures are more objective as they are not subject to social desirability tendencies or other response biases (Akinola, 2010). Physiological measures have previously been utilised in organisational research on job stress with a large focus on examining the influence of job demands (e.g. Ganster et al., 2001). However, there is little research in the leadership and employee wellbeing domain that has utilised physiological measures (Inceoglu et al., 2018) and therefore, it would be an interesting avenue to investigate this link using more objective measures.

Furthermore, across the studies in this thesis, participants were asked to focus on the leader which they directly report to but in organisations there tends to be several different levels of leadership and therefore is a multi-level phenomenon (Dansereau et al., 1984;

Yammarino et al., 2005). A review of leadership research has identified that the majority of research was conducted on the top level of leadership and the lower-levels but there was little research conducted on the middle-level managers (DeChurch et al., 2010). Additionally, they found numerous examples of research that did not report the level of leadership examined and DeChurch and colleagues concluded that this was an indication that researchers do not pay enough consideration of organisational levels of leadership. One study examining the influence of LMX on employee psychological health compared the effects for two levels of leaders (Karanika-Murray et al., 2015). They showed that the influence of LMX on employee psychological health for both senior and lower level leaders was mediated by different underlying processes. Consequently, the influence of positive leadership on employee wellbeing may also be affected by the hierarchical level the leader and these differences may infer different mediating processes in the link between positive leadership and employee wellbeing.

Similarly, researchers have proposed that evaluations of leaders may also be dependent on their phase of leadership (Abrams et al., 2008; Randsley de Moura et al., 2011). This means that leaders may be evaluated differently dependent on whether they are an established, new or ex-leader. For example, Abrams and colleagues (2008) examined evaluations of both normative and antinormative group members and leaders in different phases of leadership. The results from their experimental studies showed that antinormative future leaders were treated more favourably than both antinormative members and antinormative ex-leaders. Additionally, the results showed that antinormative leaders were given more licence to innovation. These findings suggest that people may trust future leaders more to go against group norms. Focusing on the influence of phases of leadership could also be applied to investigating evaluations of positive leaders. The research in this thesis did not compare the effects dependent on how long participants have worked with their leader and it

would be interesting to examine whether positive leaders are evaluated differently dependent on the phase of their leadership. Similar to the findings from Abrams and colleagues (2008), it is possible that positive leaders may be more favourably perceived if they are future leaders. However, as positive leadership (Cameron, 2012; 2013) is focused on establishing connections at work, helping to develop others, and promoting cultures of forgiveness, these effects may take time to be favourably perceived, so it is possible that positive leaders may be more favourably evaluated if they are established leaders.

Positive Psychology has been criticised for the concepts being culturally specific (Fineman, 2006) because what is viewed as positive in these theories is from a North American point of view. Different values may be more beneficial in other countries. Also, there have been calls for an increased focus of culture in leadership research generally (Ayman & Korabik, 2010). Research has shown that perceptions of leadership and how followers respond to certain leaders can change dependent on culture (Ardichvili & Kuchinke, 2002; Gerstner & Day, 1994; Jung & Avolio, 1999). This points to the increased need for future research to consider potential cultural differences in the perceptions of positive leaders as the values they uphold or the leadership behaviours they enact may be considered more favourable by Western cultures. Similarly, Positive Psychology and its application to the workplace has been critiqued for potentially causing individuals who struggle to focus on the positive as the odd one out or ill simply because they cannot have an optimistic outlook when they are struggling (Fineman, 2006). It is possible that the influence of positive leaders on employees might not always be beneficial as some people may prefer not to have a leader who tries to emphasise the positives too much and would prefer a leader who is more of a realist. Therefore, future research should examine the influence of employee personality or outlooks on the relationship between positive leadership and employee wellbeing.

Thesis Conclusion

In summary, this thesis provides empirical evidence for the benefits of positive leadership on a variety of indicators of employee wellbeing using a variety of methods including longitudinal, experimental, correlational, and qualitative. This research also examined the potential mediating processes and highlights the role of identification mediators in the relationship between positive leadership and employee wellbeing. The findings from this thesis also suggests that positive leaders are perceived more favourably which should enable them to gain leadership positions where they can exert their influence. Leader age, gender and group membership were not boundary conditions on the effectiveness or the favourable perceptions of positive leaders. Furthermore, positive leadership did show unique effects of predicting some indicators of employee wellbeing while controlling for transformational, ethical and identity leadership. This indicated that although there is some overlap between these styles of leadership they are distinct concepts. Finally, this thesis showed that leaders adapted their behaviours as a result of the pandemic. Some leaders displayed behaviours which were aligned with the theory of positive leadership such as demonstrating appreciation for employees, continuing to find ways to keep people connected and valuing consistent and supportive communication. And the leaders who still displayed behaviours which were aligned with the style of positive leadership had a more beneficial impact on their employees wellbeing during this time of uncertainty.

References

Abbink, K., & Harris, D. (2019). In-group favouritism and out-group discrimination in naturally occurring groups. *PLoS ONE*, *14*(9), 1–13. https://doi-org.chain.kent.ac.uk/10.1371/journal.pone.0221616

Abrams, D., & Hogg, M. A. (2004). Collective Identity: Group Membership and Self-conception. In M. B. Brewer & M. Hewstone (Eds.), *Self and social identity.* (pp. 147–181). Blackwell Publishing.

Abrams, D., Randsley de Moura, G., Marques, J. M., & Hutchison, P. (2008). Innovation credit: When can leaders oppose their group's norms? *Journal of Personality and Social Psychology*, *95*(3), 662–678. https://doi-org.chain.kent.ac.uk/10.1037/0022-3514.95.3.662

Abrams, D., Swift, H. J., & Drury, L. (2016). Old and unemployable? How age-based stereotypes affect willingness to hire job candidates. *Journal of Social Issues*, *72*(1), 105-121. doi:10.1111/josi.12158

Abrell, C., Rowold, J., Weibler, J., & Moenninghoff, M. (2011). Evaluation of a Long-term Transformational Leadership Development Program. *Zeitschrift Für Personalforschung*, *25*(3), 205–224. https://doi-org.chain.kent.ac.uk/10.1688/1862-0000

Agarwal, P. (2021). Shattered but smiling: Human resource management and the wellbeing of hotel employees during COVID-19. *International Journal of Hospitality Management*, *93*, 102765.

Ahern, S., & Loh, E. (2021). Leadership during the COVID-19 pandemic: building and sustaining trust in times of uncertainty. *BMJ Leader*. *5*, 266-269.

Ahmed, O. M., Ishak, A. K., & Kamil, B. A. M. (2019). Transformational Leadership and Employee Psychological Wellbeing among Faculty Staff: The Mediating Role of Self-

Efficacy. *International Journal of Management, Accounting & Economics*, *6*(2), 184–197.

Akinola, M. (2010). Measuring the pulse of an organization: Integrating physiological measures into the organizational scholar's toolbox. *Research in Organizational Behavior*, *30*, 203–223. https://doi-org.chain.kent.ac.uk/10.1016/j.riob.2010.09.003

Al-Hussami, M., Hammad, S., & Alsoleihat, F. (2018). The influence of leadership behavior, organizational commitment, organizational support, subjective career success on organizational readiness for change in healthcare organizations. *Leadership in Health Services*, *31*(4), 354–370. https://doi-org.chain.kent.ac.uk/10.1108/LHS-06-2017-0031

Anseel, F., & Lievens, F. (2007). The Long-Term Impact of the Feedback Environment on Job Satisfaction: A Field Study in a Belgian Context. *Applied Psychology: An International Review*, *56*(2), 254–266. https://doi-org.chain.kent.ac.uk/10.1111/j.1464-0597.2006.00253.x

Antino, M., Gil-Rodríguez, F., Rodríguez-Muñoz, A., & Borzillo, S. (2014). Evaluating positive leadership: Pilot study on the psychometric properties of a reduced version of the Positive Leadership Assessment Scale. *Revista de Psicologia Social, 29*, 589-608. doi:10.1080/02134748.2014.972705

Arbuckle, J. L. (2017). Amos (Version 25.0) [Computer Program]. Chicago: IBM SPSS.

Ardichvili, A., & Kuchinke, K. P. (2002). Leadership styles and cultural values among managers and subordinates: a comparative study of four countries of the former Soviet Union, Germany, and the US. *Human Resource Development International*, *5*(1), 99-117. doi:10.1080/13678860110046225

Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role

of meaningful work. *Journal of occupational health psychology, 12*, 193-203. doi: 10.1037/1076-8998.12.3.193

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in Organizations: An Examination of Four Fundamental Questions. *Journal Of Management, 34*, 325-374. doi: 10.1177/0149206308316059

Ashforth, B. E., & Johnson, S. A. (2001). Which hat to wear? The relative salience of multiple identities in organizational contexts. In M. A. Hogg & D. J. Terry (Eds.). *Social identity processes in organizational contexts* (pp. 31-48). Philadelphia: Psychology Press

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*, 20-39. doi: 10.2307/258189

Ashforth, B. E., Schinoff, B. S., & Rogers, K. M. (2016). "I identify with her,""I identify with him": Unpacking the dynamics of personal identification in organizations. *Academy of Management Review, 41*, 28-60. doi: 10.5465/amr.2014.0033

Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations.* Thousand Oaks, CA: Sage.

Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, *60*, 421–449. https://doi-org.chain.kent.ac.uk/10.1146/annurev.psych.60.110707.163621

Ayman, R., & Korabik, K. (2010). Leadership: Why gender and culture matter. *American Psychologist*, *65*(3), 157-170. doi:10.1037/a0018806

Azevedo, R. T., Bennett, N., Bilicki, A., Hooper, J., Markopoulou, F., & Tsakiris, M. (2017). The calming effect of a new wearable device during the anticipation of public

speech. *Scientific Reports*, *7*(1), 2285. https://doi-org.chain.kent.ac.uk/10.1038/s41598-017-02274-2

Baer, M. D., Dhensa-Kahlon, R. K., Colquitt, J. A., Rodell, J. B., Outlaw, R., & Long, D. M. (2015). Uneasy Lies the Head That Bears the Trust: The Effects of Feeling Trusted on Emotional Exhaustion. *Academy of Management Journal*, *58*(6), 1637–1657. https://doi-org.chain.kent.ac.uk/10.5465/amj.2014.0246

Baker, D. B. (1985). The study of stress at work. *Annual Review of Public Health*, *6*, 367–381. https://doi-org.chain.kent.ac.uk/10.1146/annurev.pu.06.050185.002055

Baker, W., Cross, R., & Wooten, A. (2003). Positive organizational network analysis and energizing relationships. In K. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 328–342). San Francisco, CA: Berrett-Koehler.

Bakker, A. B. (2009). Building engagement in the workplace. In R. J. Burke & C. L. Cooper (Eds.), *The Peak Performing Organization*. Oxon, UK: Routledge

Barling, J., & Frone, M. R. (2017). If Only my Leader Would just Do Something! Passive Leadership Undermines Employee Well-being Through Role Stressors and Psychological Resource Depletion. *Stress & Health: Journal of the International Society for the Investigation of Stress*, *33*(3), 211–222.

Basford, T. E., Offermann, L. R., & Wirtz, P. W. (2012). Considering the source: The impact of leadership level on follower motivation and intent to stay. *Journal of Leadership & Organizational Studies*, *19*(2), 202–214. https://doi-org.chain.kent.ac.uk/10.1177/1548051811436279

Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact.* Mahwah, NJ: Erlbaum.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Mahwah, NJ: Erlbaum.

Beekman, J. B., Stock, M. L., & Marcus, T. (2016). Need to Belong, Not Rejection Sensitivity, Moderates Cortisol Response, Self-Reported Stress, and Negative Affect Following Social Exclusion. *Journal of Social Psychology*, *156*(2), 131–138. https://doi-org.chain.kent.ac.uk/10.1080/00224545.2015.1071767

Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, *57*(3), 311–317. https://doi-org.chain.kent.ac.uk/10.1016/j.bushor.2014.01.001

Berdahl, J. L., & Moon, S. H. (2013). Workplace mistreatment of middle class workers based on sex, parenthood, and caregiving. *Journal Of Social Issues*, 69(2), 341-366. doi:10.1111/josi.12018

Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behaviour. *European Journal of Social Psychology*, *3*(1), 27–52. https://doi-org.chain.kent.ac.uk/10.1002/ejsp.2420030103

Blake, H., Yildirim, M., Wood, B., Knowles, S., Mancini, H., Coyne, E., & Cooper, J. (2020). COVID-Well: Evaluation of the Implementation of Supported Wellbeing Centres for Hospital Employees during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, *17*(24), 9401. doi:10.3390/ijerph1724940

Blau, F. D., & DeVaro, J. (2007). New Evidence on Gender Differences in Promotion Rates: An Empirical Analysis of a Sample of New Hires. *Industrial Relations*, *46*(3), 511–550. https://doi-org.chain.kent.ac.uk/10.1111/j.1468-232X.2007.00479.x

Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior, 119*, 103436. https://doi-org.chain.kent.ac.uk/10.1016/j.jvb.2020.103436

Bono, J. E., Foldes, H. J., Vinson, G., & Muros, J. P. (2007). Workplace emotions: The role of supervision and leadership. *Journal of Applied Psychology, 92*(5), 1357–1367. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.92.5.1357

Bormann, K. C., & Rowold, J. (2018). Construct proliferation in leadership style research: Reviewing pro and contra arguments. *Organizational Psychology Review, 8*(2-3), 149-173.

Braun, V., and Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

British Psychological Society. (2021). Code of Human Research Ethics. Retrieved from https://cms.bps.org.uk/sites/default/files/2022-06/BPS%20Code%20of%20Human%20Research%20Ethics%20%281%29.pdf

Brown, M. E. & Trevino, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly, 17*(6), 595-616.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes, 97*(2), 117–134. https://doi-org.chain.kent.ac.uk/10.1016/j.obhdp.2005.03.002

Buttelmann, D., & Böhm, R. (2014). The ontogeny of the motivation that underlies in-group bias. *Psychological Science, 25*(4), 921–927. https://doi-org.chain.kent.ac.uk/10.1177/0956797613516802

Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessment of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology, 80,* 468-478.

Cabrera, N. L. (2011). Using a sequential exploratory mixed-methods design to examine racial hyperprivilege in higher education. *New Directions for Institutional Research, 151*, 77-91. doi:10.1002/ir.400

Calder, B. J. (1977). An attribution theory of leadership. In B. M. Staw & G. R. Salancik (Eds.), *New directions in organizational behavior* (pp. 179-204). Chicago: St. Claire Press.

Cameron, K. (2012). *Positive leadership: Strategies for extraordinary performance.* California: Berrett-Koehler Publishers.

Cameron, K. (2013). *Practicing positive leadership: Tools and techniques that create extraordinary results*. California: Berrett-Koehler Publishers

Cameron, K., Dutton, J., & Quinn, R. (Eds.) (2003). *Positive Organizational Scholarship: Foundations of a New Discipline.* San Francisco: Berrett-Koehler.

Cameron, K., Mora, C., Leutscher, T., & Calarco, M. (2011). Effects of positive practices on organizational effectiveness. *Journal of Applied Behavioral Science*, *47*, 266-308. doi:10.1177/0021886310395514

Campbell, M., Baltes, J. I., Martin, A., & Meddings, K. (2007). *The Stress of Leadership: A Centre for Creative Leadership Research White Paper.*

Cano-Vindel, A., Muñoz-Navarro, R., Medrano, L. A., Ruiz-Rodríguez, P., González-Blanch, C., Gómez-Castillo, M. D., Capafons, A., Chacón, F., & Santolaya, F. (2018). A computerized version of the Patient Health Questionnaire-4 as an ultra-brief screening tool to detect emotional disorders in primary care. *Journal of Affective Disorders, 234,* 247–255. https://doi-org.chain.kent.ac.uk/10.1016/j.jad.2018.01.030

Cao, W., van der Wal, R. C., & Taris, T. W. (2021). When work relationships matter: Interpersonal forgiveness and work outcomes. *International Journal of Stress Management*, *28*(4), 266–282. https://doi-org.chain.kent.ac.uk/10.1037/str0000192

Cavallo, K., & Brienza, D. (2002). Emotional competence and leadership excellence at Johnson & Johnson: The emotional intelligence and leadership study. *Consortium for Research on Emotional Intelligence in Organizations*, *1*, 12.

Chakravarty, S., & Fonseca, M. A. (2017). Discrimination via Exclusion: An Experiment on Group Identity and Club Goods. *Journal of Public Economic Theory*, *19*(1), 244–263.

Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). *Organizational Research Methods*, *1*(4), 421–483. https://doi-org.chain.kent.ac.uk/10.1177/109442819814004

Chou, E. Y. (2018). Naysaying and negativity promote initial power establishment and leadership endorsement. *Journal of Personality and Social Psychology*, *115*(4), 638–656. https://doi-org.chain.kent.ac.uk/10.1037/pspi0000135.supp

Chughtai, A., Byrne, M., & Flood, B. (2015). Linking Ethical Leadership to Employee Well-Being: The Role of Trust in Supervisor. *Journal of Business Ethics*, *128*(3), 653–663. https://doi-org.chain.kent.ac.uk/10.1007/s10551-014-2126-7

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.). *The handbook of social psychology* (4th ed., Vol. 2, pp. 151–192). Boston: McGraw-Hill.

CIPD. (2021a). *Health and Wellbeing at Work 2021*. Retrieved from https://www.cipd.co.uk/Images/health-wellbeing-work-report-2021_tcm18-93541.pdf

CIPD. (2021b). *Responsible business through crisis: Senior leaders on building new cultures of trust Report*. Retrieved from: https://www.cipd.co.uk/Images/responsible-business-crisis-2021_tcm18-102368.pdf

Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *Journal of the American Medical Association*, *298*, 1685-1687. doi: 10.1001/jama.298.14.1685

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal Of Health And Social Behavior*, *24*(4), 385–396.

Cole, E. R. (2009). Intersectionality and research in psychology. *American psychologist*, *64*(3), 170. doi: 10.1037/a0014564

Colligan, T. W., & Higgins, E. M. (2005). Workplace Stress: Etiology and Consequences. *Journal of Workplace Behavioral Health*, *21*(2), 89–97. https://doi-org.chain.kent.ac.uk/10.1300/J490v21n02_07

Connelly, C. E., & Arnold, K. A. (2011). Transformational Leadership and Leader Stress: A Model of Reciprocal Effects. *Academy of Management Annual Meeting Proceedings*, *2011*(1), 1–6. https://doi-org.chain.kent.ac.uk/10.5465/AMBPP.2011.65869720

Copeland, M. K. (2016). The Impact of Authentic, Ethical, Transformational Leadership on Leader Effectiveness. *Journal of Leadership, Accountability & Ethics*, *13*(3), 79–97.

Cross, R., & Parker, A. (2004). Charged Up: Creating Energy in Organizations. *Journal of Organizational Excellence*, *23*(4), 3–14. https://doi-org.chain.kent.ac.uk/10.1002/npr.20021

Cuddy, A. C., Fiske, S. T., & Glick, P. (2004). When Professionals Become Mothers, Warmth Doesn't Cut the Ice. *Journal Of Social Issues*, 60(4), 701-718. doi:10.1111/j.0022-4537.2004.00381.x

Dansereau F., Alutto J. A., & Yammarino F. J. (1984). *Theory testing in organizational behavior: The varient approach.* NJ: Prentice Hall

DeChurch, L. A., Hiller, N. J., Murase, T., Doty, D., & Salas, E. (2010). Leadership across levels: Levels of leaders and their levels of impact. *The Leadership Quarterly*, *21*(6), 1069–1085. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2010.10.009

DeConinck, J. B., Moss, H. K., & Deconinck, M. B. (2018). The Relationship between Servant Leadership, Perceived Organizational Support, Performance, and Turnover among Business to Business Salespeople. *Global Journal of Management & Marketing*, *2*(1), 38–52.

De Hoogh, A. H. B., Greer, L. L., & Den Hartog, D. N. (2015). Diabolical dictators or capable commanders? An investigation of the differential effects of autocratic leadership on team performance. *The Leadership Quarterly*, *26*(5), 687–701. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2015.01.001

de Jong, J.P.J. & Den Hartog, D.N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, *10*(1), pp. 41-64. https://doi.org/10.1108/14601060710720546

Demirtas, O., & Akdogan, A. (2015). The Effect of Ethical Leadership Behavior on Ethical Climate, Turnover Intention, and Affective Commitment. *Journal of Business Ethics*, *130*(1), 59–67. https://doi-org.chain.kent.ac.uk/10.1007/s10551-014-2196-6

Derue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and Behavioral Theories of Leadership: An Integration and Meta-Analytic Test of Their Relative Validity. *Personnel Psychology*, *64*(1), 7–52. https://doi-org.chain.kent.ac.uk/10.1111/j.1744-6570.2010.01201.x

Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: revising the adaptation theory of well-being. *The American Psychologist*, *61*(4), 305–314. https://doi-org.chain.kent.ac.uk/10.1037/0003-066X.61.4.305

Driskell, J. E., Salas, E., & Johnston, J. (1999). Does stress lead to a loss of team perspective? *Group Dynamics: Theory, Research, and Practice*, *3*(4), 291–302. https://doi-org.chain.kent.ac.uk/10.1037/1089-2699.3.4.291

Drouvelis, M., & Paiardini, P. (2021). Feedback quality and performance in organisations. *The Leadership Quarterly*. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2021.101534

Duffy, R. D., Bott, E. M., Allan, B. A., Torrey, C. L., & Dik, B. J. (2012). Perceiving a Calling, Living a Calling, and Job Satisfaction: Testing a Moderated, Multiple Mediator Model. *Journal of Counseling Psychology*, *59*(1), 50–59.

Duffy, R. D., Dik, B. J., & Steger, M. F. (2011). Calling and Work-Related Outcomes: Career Commitment as a Mediator. *Journal of Vocational Behavior*, *78*(2), 210–218.

Duffy, R. D., & Sedlacek, W. E. (2007). The Presence of and Search for a Calling: Connections to Career Development. *Journal of Vocational Behavior*, *70*(3), 590–601.

Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange: Integrating the Past With an Eye Toward the Future. *Journal of Management*, *38*(6), 1715–1759. https://doi-org.chain.kent.ac.uk/10.1177/0149206311415280

Dulebohn, J. H., & Hoch, J. E. (2017). Virtual teams in organizations. *Human Resource Management Review*, *27*(4), 569–574. https://doi-org.chain.kent.ac.uk/10.1016/j.hrmr.2016.12.004

Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment. *Academy of Management Journal*, *45*(4), 735–744. https://doi-org.chain.kent.ac.uk/10.5465/3069307

Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology*, *60*(5), 685–710. https://doi-org.chain.kent.ac.uk/10.1037/0022-3514.60.5.685

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573-598. doi:10.1037//0033-295X.109.3.573

Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, *108*(2), 233–256. https://doi-org.chain.kent.ac.uk/10.1037/0033-2909.108.2.233

Eden, D., & Leviatan, U. (1975). Implicit Leadership Theory as a Determinant of the Factor Structure Underlying Supervisory Behavior Scales. *Journal of Applied Psychology*, *60*(6), 736–741. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.60.6.736

Edwards, A. L. (1953). The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. *Journal of Applied Psychology*, *37*(2), 90–93. https://doi-org.chain.kent.ac.uk/10.1037/h0058073

Edwards, M. R. (2009). HR, perceived organisational support and organisational identification: an analysis after organisational formation. *Human Resource Management Journal*, *19*(1), 91–115. https://doi-org.chain.kent.ac.uk/10.1111/j.1748-8583.2008.00083.x

Edwards, M. R., & Peccei, R. (2007). Organizational identification: Development and testing of a conceptually grounded measure. *European Journal of Work & Organizational Psychology, 16,* 25-57. doi:10.1080/13594320601088195

Edwards, M. R., & Peccei, R. (2010). Perceived organizational support, organizational identification, and employee outcomes: Testing a simultaneous multifoci model. *Journal Of Personnel Psychology, 9,* 17-26. doi:10.1027/1866-5888/a000007

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology, 71*(3), 500–507. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.71.3.500

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.75.1.51

Else-Quest, N. M., & Hyde, J. S. (2016). Intersectionality in quantitative psychological research: II Methods and techniques. *Psychology of Women Quarterly*, *40*(3), 319–336. https://doi-org.chain.kent.ac.uk/10.1177/0361684316647953

Embry, A., Padgett, M. Y., & Caldwell, C. B. (2008). Can leaders step outside of the gender box? An examination of leadership and gender role stereotypes. *Journal of Leadership & Organizational Studies*, *15*(1), 30–45. https://doi-org.chain.kent.ac.uk/10.1177/1548051808318412

Epitropaki, O., Kark, R., Mainemelis, C., & Lord, R. G. (2017). Leadership and followership identity processes: A multilevel review. *The Leadership Quarterly, 28*(1), 104–129. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2016.10.003

Erdogan, B., & Bauer, T. N. (2015). Leader-Member Exchange Theory. *International Encyclopedia of the Social and Behavioral Sciences. 2*(13), 641-647. https://doi.org/10.1016/B978-0-08-097086-8.22010-2

Fineman, S. (2006). On Being Positive: Concerns and Counterpoints. *Academy of Management Review*, *31*(2), 270–291. https://doi-org.chain.kent.ac.uk/10.5465/AMR.2006.20208680

Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). Age Discrimination in Simulated Employment Contexts: An Integrative Analysis. *Journal of Applied Psychology*, *80*(6), 652–663. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.80.6.652

Fiske, S. T., Cuddy, A. J. C., Glick, P. Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, *82*(6), 878-902. doi:10.1037/0022-3514.82.6.878

Forgeard, M. J. C., Jayawickreme, E., Kern, M. & Seligman, M. E. P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1(1), 79-106. doi:10.5502/ijw.v1i1.15

Fransen K., Mcewan D., & Sarkar M. (2020). The impact of identity leadership on team functioning and well-being in team sport: is psychological safety the missing link? *Psychol. Sport Exerc.* 51:101763. 10.1016/j.psychsport.2020.101763

Frone, M. R. (2008). Are work stressors related to employee substance use? The importance of temporal context assessments of alcohol and illicit drug use. *Journal of Applied Psychology*, *93*, 199-206. doi:10.1037/0021-9010.93.1.199

Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work From Home During the COVID-19 Outbreak: The Impact on Employees' Remote Work

Productivity, Engagement, and Stress. *Journal of Occupational and Environmental Medicine*, *63*(7), e426–e432. https://doi-org.chain.kent.ac.uk/10.1097/JOM.0000000000002236

Ganster, D. C. (2005). Executive Job Demands: Suggestions from a Stress and Decision-Making Perspective. *Academy of Management Review*, *30*(3), 492–502. https://doi-org.chain.kent.ac.uk/10.5465/AMR.2005.17293366

Ganster, D. C., Fox, M. L., & Dwyer, D. J. (2001). Explaining Employee's Health Care Costs: A Prospective Examination of Stressful Job Demands, Personal Control, and Physiological Reactivity. *Journal of Applied Psychology*, *86*(5), 954–964. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.86.5.954

Gaucher, D., Friesen, J., & Kay, A. C. (2011). Evidence that gendered wording in job advertisements exists and sustains gender inequality. *Journal of Personality and Social Psychology*, *101*(1), 109-128. doi:10.1037/a0022530

Gelaidan, H. M., Al-Swidi, A., & Mabkhot, H. A. (2018). Employee Readiness for Change in Public Higher Education Institutions: Examining the Joint Effect of Leadership Behavior and Emotional Intelligence. *International Journal of Public Administration*, *41*(2), 150–158. https://doi-org.chain.kent.ac.uk/10.1080/01900692.2016.1255962

Geng, X. (2021). The Effects of Perceived Leader Emotional Intelligence and Group Prototypicality on Subordinate Whistleblowing Intentions. *Journal of Forensic Accounting Research*, *6*(1), 87–110. https://doi-org.chain.kent.ac.uk/10.2308/JFAR-19-037

Gerbasi, A., Porath, C. L., Parker, A., Spreitzer, G., & Cross, R. (2015). Destructive de-energizing relationships: How thriving buffers their effect on performance. *Journal of*

Applied Psychology, *100*(5), 1423–1433. https://doi-org.chain.kent.ac.uk/10.1037/apl0000015

Gerpott, F. H., Van Quaquebeke, N., Schlamp, S., & Voelpel, S. C. (2019). An Identity Perspective on Ethical Leadership to Explain Organizational Citizenship Behavior: The Interplay of Follower Moral Identity and Leader Group Prototypicality. *Journal of Business Ethics*, *156*(4), 1063–1078. https://doi-org.chain.kent.ac.uk/10.1007/s10551-017-3625-0

Gerstner, C. R., & Day, D. V. (1994). Cross-cultural comparison of leadership prototypes. *The Leadership Quarterly*, *5*(2), 121–134. https://doi-org.chain.kent.ac.uk/10.1016/1048-9843(94)90024-8

Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues. *Journal of Applied Psychology*, *82*(6), 827–844. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.82.6.827

Getachew, D. S., & Zhou, E. (2018). The Influences of Transformational Leadership on Collective Efficacy: The Moderating Role of Perceived Organizational Support. *International Journal of Organizational Innovation*, *10*(4), 7–15.

Giessner, S. R., & van Knippenberg, D. (2008). "License to Fail": Goal definition, leader group prototypicality, and perceptions of leadership effectiveness after leader failure. *Organizational Behavior & Human Decision Processes*, *105*(1), 14–35. https://doi-org.chain.kent.ac.uk/10.1016/j.obhdp.2007.04.002

Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, *61*, 227-271. doi:10.1111/j.1744-6570.2008.00113.x

Gittell, J, H., Cameron, K., Lim, S., & Rivas, V. (2006). Relationships, Layoffs, and Organizational Resilience. *Journal of Applied Behavioral Science*, *42*(3), 300–329. https://doi-org.chain.kent.ac.uk/10.1177/0021886306286466

Goff, P. A., & Kahn, K. B. (2013). How Psychological Science Impedes Intersectional Thinking. *Du Bois Review: Social Science Research on Race*, *10*(2), 365–384. https://doi-org.chain.kent.ac.uk/10.1017/S1742058X13000313

Gorman, E. H. (2005). Gender Stereotypes, Same-Gender Preferences, and Organizational Variation in the Hiring of Women: Evidence from Law Firms. *American Sociological Review*, *70*(4), 702–728. https://doi-org.chain.kent.ac.uk/10.1177/000312240507000408

Graen, G., Novak, M. A., & Sommerkamp, P. (1982). The Effects of Leader-Member Exchange and Job Design on Productivity and Satisfaction: Testing a Dual Attachment Model. *Organizational Behavior & Human Performance*, *30*(1), 109–131. https://doi-org.chain.kent.ac.uk/10.1016/0030-5073(82)90236-7

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, *6*(2), 219–247. https://doi-org.chain.kent.ac.uk/10.1016/1048-9843(95)90036-5

Grant, A. M., & Gino, F. (2010). A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. *Journal of Personality and Social Psychology*, *98*(6), 946–955. https://doi-org.chain.kent.ac.uk/10.1037/a0017935

Gregersen, S., Vincent-Höper, S., & Nienhaus, A. (2014). Health--relevant leadership behaviour: A comparison of leadership constructs. *Zeitschrift Für Personalforschung*, *28*(1/2), 117–138. https://doi-org.chain.kent.ac.uk/10.1688/ZfP-2014-01-Gregersen

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463-488. doi: 10.1177/014920630002600305

Guchait, P., Abbott, J. L., Lee, C.-K., Back, K.-J., & Manoharan, A. (2019). The influence of perceived forgiveness climate on service recovery performance: The mediating effect of psychological safety and organizational fairness. *Journal of Hospitality and Tourism Management, 40*, 94–102. https://doi-org.chain.kent.ac.uk/10.1016/j.jhtm.2019.06.007

Gupta, V. (2020). Relationships between leadership, motivation and employee-level innovation: Evidence from India. *Personnel Review*, *49*(7), 1363–1379. https://doi-org.chain.kent.ac.uk/10.1108/PR-11-2019-0595

Hackman, J. R. (2009). The perils of positivity. *Journal of Organizational Behavior*, *30*(2), 309–319.

Hains, S. C., Hogg, M. A., & Duck, J. M. (1997). Self-categorization and leadership: Effects of group prototypicality and leader stereotypicality. *Personality and Social Psychology Bulletin*, *23*(10), 1087–1099. https://doi-org.chain.kent.ac.uk/10.1177/01461672972310009

Haque, A. (2021). The COVID-19 pandemic and the role of responsible leadership in health care: thinking beyond employee well-being and organisational sustainability. *Leadership in Health Services. 38*(1) 52-68. https://doi.org/10.1108/LHS-09-2020-0071

Harms, P. D., Credé, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. *Leadership Quarterly*, *28*(1), 178–194. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2016.10.006

Haslam, S. A. (2004). *Psychology in organizations: The Social Identity Approach*. London: Sage Publications Inc

Haslam, S. A., & Platow, M. J. (2001). The link between leadership and followership: How affirming social identity translates vision into action. *Personality and Social Psychology Bulletin, 27,* 1469–1479

Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. London & New York: Psychology Press

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guildford Press

Health and Safety Executive. (2018). *Work-related stress, anxiety or depression statistics in Great Britain, 2018*. Retrieved from www.hse.gov.uk/statistics

Health and Safety Executive. (2019). *Health and Safety at Work Summary Statistics for Great Britain, 2019*. Retrieved from www.hse.gov.uk/statistics/

Health and Safety Executive. (2020). *Work-related stress, anxiety or depression statistics in Great Britain, 2020*. Retrieved from www.hse.gov.uk/statistics

Heilman, M. E. (1983). Sex Bias in Work Settings: The Lack of Fit Model. *Research in Organizational Behavior*, *5*, 269.

Heilman, M. E. (2001). Description and Prescription: How Gender Stereotypes Prevent Women's Ascent Up the Organizational Ladder. *Journal of Social Issues*, 57(4), 657.

Heilman, M. E., & Eagly, A. H. (2008). Gender stereotypes are alive, well, and busy producing workplace discrimination. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *1*(4), 393–398. https://doi-org.chain.kent.ac.uk/10.1111/j.1754-9434.2008.00072.x

Heilman, M. E., & Wallen, A. S. (2010). Wimpy and undeserving of respect: Penalties for men's gender-inconsistent success. *Journal of Experimental Social Psychology*, *46*(4), 664–667. https://doi-org.chain.kent.ac.uk/10.1016/j.jesp.2010.01.008

Highhouse, S. (2009). Designing Experiments That Generalize. *Organizational Research Methods*, *12*(3), 554–566. https://doi-org.chain.kent.ac.uk/10.1177/1094428107300396

Hirschfeld, R. R., & Thomas, C. H. (2011). Age- and gender-based role incongruence: Implications for knowledge mastery and observed leadership potential among personnel in a leadership development programme. *Personnel Psychology, 64*, 661-692. doi:10.1111/j.1744-6570.2011.01222.x

Hirschi, A., & Herrmann, A. (2013). Calling and Career Preparation: Investigating Developmental Patterns and Temporal Precedence. *Journal of Vocational Behavior*, *83*(1), 51–60.

Hirschi, A., Keller, A. C., & Spurk, D. M. (2018). Living one's calling: Job resources as a link between having and living a calling. *Journal of Vocational Behavior, 106*, 1–10. https://doi-org.chain.kent.ac.uk/10.1016/j.jvb.2017.12.001

Hobman, E. V., Jackson, C. J., Jimmieson, N. L., & Martin, R. (2011). The effects of transformational leadership behaviours on follower outcomes: An identity-based analysis. *European Journal of Work and Organizational Psychology*, *20*(4), 553–580. https://doi-org.chain.kent.ac.uk/10.1080/1359432X.2010.490046

Hogg, M. A. (2001). A Social Identity Theory of Leadership. *Personality & Social Psychology Review (Lawrence Erlbaum Associates)*, *5*(3), 184–200. https://doi-org.chain.kent.ac.uk/10.1207/S15327957PSPR0503_1

Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 462–479). The Guilford Press.

Hogg, M. A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes.* Taylor & Frances/Routledge

Hogg, M. A., & Adelman, J. (2013). Uncertainty-Identity Theory: Extreme Groups, Radical Behavior, and Authoritarian Leadership. *Journal of Social Issues*, *69*(3), 436–454. https://doi-org.chain.kent.ac.uk/10.1111/josi.12023

Hogg, M. A., Fielding, K. S., Johnson, D., Masser, B., Russell, E., & Svensson, A. (2006). Demographic category membership and leadership in small groups: A social identity analysis. *The Leadership Quarterly*, *17*(4), 335–350. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2006.04.007

Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 1–52). San Diego, CA: Academic Press.

Hoyt, C. L., & Blascovich, J. (2003). Transformational and transactional leadership in virtual and physical environments. *Small Group Research*, *34*(6), 678–715. https://doi-org.chain.kent.ac.uk/10.1177/1046496403257527

Hsieh, H. H., Wang, Y. C., & Huang, J. T. (2019). Core self-evaluations, perceived organizational support, and work-related well-being. *Personnel Review*, *48*(3), 659–671. https://doi-org.chain.kent.ac.uk/10.1108/PR-04-2018-0128

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55. https://doi.org/10.1080/10705519909540118

Hurmerinta-Peltomaki, L., and Nummela, N., (2006). Mixed methods in international business research: A value-added perspective. *Management International Review, 46(4)*, 439-459. doi:10.1007/s11575-006-0100-z

Inceoglu, I., Thomas, G., Chu, C., Plans, D., & Gerbasi, A. (2018). Leadership behavior and employee well-being: An integrated review and a future research agenda. *Leadership Quarterly*, *29*(1), 179–202. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2017.12.006

Iqbal, Z. A., Abid, G., Contreras, F., Hassan, Q., & Zafar, R. (2020). Ethical Leadership and Innovative Work Behavior: The Mediating Role of Individual Attributes. *Journal of Open Innovation*, *68*(3), 68. https://doi-org.chain.kent.ac.uk/10.3390/joitmc6030068

Jadon, P. S., & Upadhyay, B. K. (2016). Job Satisfaction, Perceived Organizational Support and Subjective Well-Being of Medical and Paramedical Staffs of Hospitals in Public and Private Sector. *Journal of Organisation & Human Behaviour*, *5*(4), 30–46.

Jain, A. K., Giga, S. I., & Cooper, C. L. (2013). Perceived organizational support as a moderator in the relationship between organisational stressors and organizational citizenship behaviors. *International Journal of Organizational Analysis*, *21*(3), 313–334. https://doi-org.chain.kent.ac.uk/10.1108/IJOA-Mar-2012-0574

Jaussi, K. S., & Dionne, S. D. (2004). Unconventional leader behavior, subordinate satisfaction, effort and perception of leader effectiveness. *Journal of Leadership & Organizational Studies*, *10*(3), 15–26. https://doi-org.chain.kent.ac.uk/10.1177/107179190401000302

Jetten, J., Haslam, S. A., Cruwys, T., Greenaway, K. H., Haslam, C., & Steffens, N. K. (2017). Advancing the social identity approach to health and well-being: Progressing the social cure research agenda. *European Journal of Social Psychology*, *47*(7), 789–802. https://doi-org.chain.kent.ac.uk/10.1002/ejsp.2333

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376 – 407. doi: 10.1037/0033-2909.127.3.376

Jung, D. I., & Avolio, B. J. (1999). Effects of Leadership Style and Followers' Cultural Orientation on Performance in Group and Individual Task Conditions. *Academy of Management Journal*, *42*(2), 208–218. https://doi-org.chain.kent.ac.uk/10.2307/257093

Kalimo, R., Tenkanen, L., Härmä, M., Poppius, E., & Heinsalmi, P. (2000). Job stress and sleep disorders: Findings from the Helsinki Heart Study. *Stress Medicine, 16*, 65-75. doi:10.1002/(SICI)1099-1700(200003)16:2<65::AID-SMI834>3.0.CO;2-8

Kalshoven, K., & Boon, C. T. (2012). Ethical leadership, employee well-being, and helping: The moderating role of human resource management. *Journal of Personnel Psychology*, *11*(1), 60–68. https://doi-org.chain.kent.ac.uk/10.1027/1866-5888/a000056

Kam, C. C. S., & Meyer, J. P. (2015). How Careless Responding and Acquiescence Response Bias Can Influence Construct Dimensionality: The Case of Job Satisfaction. *Organizational Research Methods*, *18*(3), 512–541. https://doi-org.chain.kent.ac.uk/10.1177/1094428115571894

Kang, J. H., Solomon, G. T., & Choi, D. Y. (2015). CEOs' Leadership Styles and Managers' Innovative Behaviour: Investigation of Intervening Effects in an Entrepreneurial Context. *Journal of Management Studies*, *52*(4), 531–554. https://doi-org.chain.kent.ac.uk/10.1111/joms.12125

Karanika-Murray, M., Bartholomew, K. J., Williams, G. A., & Cox, T. (2015). Leader-Member Exchange across two hierarchical levels of leadership: concurrent influences on work characteristics and employee psychological health. *Work & Stress*, *29*(1), 57–74. https://doi-org.chain.kent.ac.uk/10.1080/02678373.2014.1003994

Kark, R., & Shamir, B. (2002). The Influence of Transformational Leadership on Followers' Relational Versus Collective Self-Concept. *Academy of Management*

Proceedings & Membership Directory, D1–D6. https://doi-org.chain.kent.ac.uk/10.5465/APBPP.2002.7517557

Kark, R.,& Shamir, B. (2013). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In B. J. Avolio & F. J. Yammarino (Eds.). *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition* (pp. 77-101). Emerald Group Publishing Limited

Kelloway, E. K., Weigand, H., McKee, M. C., & Das, H. (2013). Positive leadership and employee well-being. *Journal of Leadership & Organizational Studies*, *20*, 107-117. doi:10.1177/1548051812465892

Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62*(2), 95–108. https://doi-org.chain.kent.ac.uk/10.1037/0003-066X.62.2.95

Khan, S. N., Qureshi, I. M., & Ahmad, H. I. (2010). Abusive supervision and negative employee outcomes. *European journal of social sciences*, *15*(4), 490-500.

Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. *Public Administration Review*, *62*, 231-241. doi: 10.1111/0033-3352.00173

Klein, K. J., & D'Aunno, T. A. (1986). Psychological Sense of Community in the Workplace. *Journal of Community Psychology, 14*(4), 365–377. https://doi-org.chain.kent.ac.uk/10.1002/1520-6629(198610)14:4<365::AID-JCOP2290140405>3.0.CO;2-H

Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are Leader Stereotypes Masculine? A Meta-Analysis of Three Research Paradigms. *Psychological Bulletin*, *137*(4), 616–642.

Korac-Kakabadse, A., Korac-Kakabadse, N., & Myers, A. (1998). Demographics and leadership philosophy: Exploring gender differences. *Journal of Management Development*, *17*(5), 351–388. https://doi-org.chain.kent.ac.uk/10.1108/02621719810220225

Kristensen, T. S., Hannerz, H., Høgh, A., & Borg, V. (2005). The Copenhagen psychosocial questionnaire: A tool for the assessment and improvement of the psychosocial work environment. *Scandinavian Journal of Work, Environment & Health*, 31, 438-449. doi:10.5271/sjweh.948

Kroenke, K., Spitzer, R. L., Williams, J. B. W., & Löwe, B. (2009). An ultra-brief screening scale for anxiety and depression: The PHQ-4. *Psychosomatics: Journal of Consultation and Liaison Psychiatry*, *50*(6), 613–621

Krug, H., Haslam, S. A., Otto, K., & Steffens, N. K. (2021). Identity Leadership, Social Identity Continuity, and Well-Being at Work During COVID-19. *Frontiers in Psychology, 12*, 684475. https://doi-org.chain.kent.ac.uk/10.3389/fpsyg.2021.684475

Kula, S. (2016). Occupational stress, supervisor support, job satisfaction, and work-related burnout: Perceptions of Turkish National Police (TNP) members. *Police Practice and Research*, 18(2), 146-159. doi:10.1080/15614263.2016.1250630

Kuoppala, J., Lamminpää, A., Liira, J., & Vainio, H. (2008). Leadership, job well-being, and health effects—A systematic review and a meta-analysis. *Journal of Occupational and Environmental Medicine*, *50*(8), 904–915. https://doi-org.chain.kent.ac.uk/10.1097/JOM.0b013e31817e918d

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, *43*(6), 1854–1884. https://doi-org.chain.kent.ac.uk/10.1177/0149206315575554

Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifociapproach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal Of Management*, *33*, 841-866. doi:10.1177/0149206307307635

Lewis, K. M. (2000). When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, *21*(Spec Issue), 221–234. https://doi-org.chain.kent.ac.uk/10.1002/(SICI)1099-1379(200003)21:2<221::AID-JOB36>3.0.CO;2-0

Li, Y., Xu, J., Tu, Y., & Lu, X. (2014). Ethical Leadership and Subordinates' Occupational Well-Being: A Multi-level Examination in China. *Social Indicators Research*, *116*(3), 823–842. https://doi-org.chain.kent.ac.uk/10.1007/s11205-013-0321-z

Li, Z., Liang, L., Zhang, X., & Li, J. (2022). Impact of environmentally specific transformational leadership on organizational citizenship behavior for the environment: the role of moral reflectiveness and leader group prototypicality. *Journal of Environmental Planning & Management*, 1–18. https://doi-org.chain.kent.ac.uk/10.1080/09640568.2022.2027748

Lian, H., Brown, D. J., Tanzer, N. K., & Che, H. (2011). Distal charismatic leadership and follower effects: An examination of Conger and Kanungo's conceptualization of charisma in China. *Leadership*, *7*(3), 251–273. https://doi-org.chain.kent.ac.uk/10.1177/1742715011407386

Liao, C., Wayne, S. J., Liden, R. C., & Meuser, J. D. (2016). Idiosyncratic deals and individual effectiveness: The moderating role of leader-member exchange differentiation. *The Leadership Quarterly, 28*, 438–450. http://dx.doi.org/10.1016/j.leaqua.2016.10.014.

Liu, J., Siu, O. L., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology*, 59, 454-479. doi: 10.1111/j.1464-0597.2009.00407.x

Lobban, R. K., Husted, J., & Farewell, V. T. (1998). A comparison of the effect of job demand, decision latitude, role and supervisory style on self-reported job satisfaction. *Work & Stress, 12*, 337-350. doi: 10.1080/02678379808256871

Lord, R. G., & Brown, D. J. (2003). *Leadership processes and follower self-identity*. Mahwah, NJ: Lawrence Erlbaum.

Lord, R., Brown, D., &Freiberg, S. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior And Human Decision Processes*, *78*, 167-203. doi: 10.1006/obhd.1999.2832

Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A Test of Leadership Categorization Theory: Internal Structure, Information Processing, and Leadership Perceptions. *Organizational Behavior & Human Performance*, *34*(3), 343–378. https://doi-org.chain.kent.ac.uk/10.1016/0030-5073(84)90043-6

Lyness, K. S., & Heilman, M. E. (2006). When Fit Is Fundamental: Performance Evaluations and Promotions of Upper-Level Female and Male Managers. *Journal of Applied Psychology*, *91*(4), 777–785. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.91.4.777

Lyons, J. B., & Schneider, T. R. (2009). The effects of leadership style on stress outcomes. *The Leadership Quarterly, 20*(5), 737–748. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2009.06.010

Maak, T., & Pless, N. (2009). Business Leaders as Citizens of the World. Advancing Humanism on a Global Scale. *Journal of Business Ethics*, *88*(3), 537–550. https://doi-org.chain.kent.ac.uk/10.1007/s10551-009-0122-0

Mackay, C., Cox, T., Burrows, G., & Lazzerini, T. (1978). An inventory for the measurement of self-reported stress and arousal. *British Journal of Social & Clinical Psychology*, *17*(3), 283–284. https://doi-org.chain.kent.ac.uk/10.1111/j.2044-8260.1978.tb00280.x

Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2017). Abusive supervision: A meta-analysis and empirical review. *Journal of Management, 43*, 1940-1965.doi:10.1177/0149206315573997

Madlock, P. E. (2008). The link between leadership style, communicator competence and employee satisfaction. *Journal of Business Communication, 45*, 61-78. doi: 10.1177/0021943607309351

Mael, F. A., & Ashforth, B. E. (1992). Alumni and their almamatter: a partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*, 103-23. doi: 10.1002/job.4030130202

Malik, S., & Noreen, S. (2015). Perceived Organizational Support as a Moderator of Affective Well-being and Occupational Stress among Teachers. *Pakistan Journal of Commerce & Social Sciences*, *9*(3), 865–874.

Malinen, S. K., Wong, J. H. K., & Naswall, K. (2020). Effective workplace strategies to support employee wellbeing during a pandemic. *New Zealand Journal of Employment Relations, 45*(2), 17–32. https://search.informit.org/doi/10.3316/informit.776957653685214

Marcus, J., Fritzsche, B. A., Le, H., & Reeves, M. D. (2016). Validation of the work-related age-based stereotypes (WAS) scale. *Journal of Managerial Psychology*, *31*(5), 989–1004. https://doi-org.chain.kent.ac.uk/10.1108/JMP-11-2014-0320

Marsh, C. J., Leite, A. C., Hopthrow, T., & Randsley de Moura, G. (in prep). Leading the way to Wellness: The Role of Identification on the Effects of Positive Leadership on Employee Wellbeing. Manuscript in preparation.

Martin, R., & Epitropaki, O. (2001). Role of organizational identification on implicit leadership theories (ILTs), transformational leadership and work attitudes. *Group Processes & Intergroup Relations*, *4*(3), 247–262. https://doi-org.chain.kent.ac.uk/10.1177/1368430201004003005

Martin-Fernandez, S., de los Rios, I., Cazorla, A., & Martinez-Falero, E. (2009). Pilot study on the influence of stress caused by the need to combine work and family on occupational accidents in working women. *Safety Science, 47*(2), 192-198. doi:10.1016/j.ssci.2008.03.003

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, *2*, 99-113. doi: 10.1002/job.4030020205

McKinsey (2021). *Women in the Workplace 2021*. Retrieved from https://wiw-report.s3.amazonaws.com/Women_in_the_Workplace_2021.pdf

McMurray, A. J., Pirola-Merlo, A., Sarros, J. C., & Islam, M. M. (2010). Leadership, climate, psychological capital, commitment, and wellbeing in a non-profit organization. *Leadership & Organization Development Journal*, *31*(5), 436–457. https://doi-org.chain.kent.ac.uk/10.1108/01437731011056452

Melamed, S., Shirom, A., Toker, S., Berliner, S., & Shapira, I. (2006). Burnout and risk of cardiovascular disease: evidence, possible causal paths, and promising research directions. *Psychological Bulletin*, *132*, 327-353. doi: 10.1037/0033-2909.132.3.327

Men, L. R. (2014). Strategic internal communication: Transformational leadership, communication channels, and employee satisfaction. *Management Communication Quarterly, 28,* 264-284. doi:10.1177/0893318914524536

Milner, K., Greyling, M., Goetzel, R., Da Silva, R., Kolbe-Alexander, T., Patel, D., Nossel, C., & Beckowski, M. (2015). The relationship between leadership support, workplace health promotion and employee wellbeing in South Africa. *Health Promotion International*, *30*(3), 514–522. https://doi-org.chain.kent.ac.uk/10.1093/heapro/dat064

Minear, M. & Park, D. C. (2004). A lifespan database of adult facial stimuli. *Behavior Research Methods, Instruments, & Computers, 36,* 630-633.

Mitchell, T.R., Holton, B.C., Lee, T. L., Sablynski, C.J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44,* 1102–1121. doi: 10.2307/3069391

Mitchell, T. R., & James, L. R. (2001). Building Better Theory: Time and the Specification of When Things Happen. *Academy of Management Review*, *26*(4), 530–547. https://doi-org.chain.kent.ac.uk/10.5465/AMR.2001.5393889

Mohr, G., & Müller, A. (2005). Psychosomatic complaints in a non-clinical context. In A. Glöckner-Rist (Ed.), *ZUMA-information system. Digital handbook of measures in the social sciences.* (Vol. ZIS 8.00). Mannheim, Germany: Zentrum für Umfragen, Methoden und Analysen.

Moore, C., Mayer, D. M., Chiang, F. F. T., Crossley, C., Karlesky, M. J., & Birtch, T. A. (2019). Leaders matter morally: The role of ethical leadership in shaping employee moral cognition and misconduct. *Journal of Applied Psychology, 104*(1), 123–145. https://doi-org.chain.kent.ac.uk/10.1037/apl0000341

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor male students. *PNAS Proceedings*

of the National Academy of Sciences of the United States of America, *109*(41), 16474–16479. https://doi-org.chain.kent.ac.uk/10.1073/pnas.1211286109

Mumford, M., Murphy, S., Connelly, S., Hill, J., Antes, A., Brown, R., & Devenport, L. (2007). Environmental Influences on Ethical Decision Making: Climate and Environmental Predictors of Research Integrity. *Ethics & Behavior*, *17*(4), 337–366. https://doi-org.chain.kent.ac.uk/10.1080/10508420701519510

Munir, F., Nielsen, K., Garde, A. H., Albertsen, K., & Carneiro, I. G. (2012). Mediating the effects of work–life conflict between transformational leadership and health-care workers' job satisfaction and psychological wellbeing. *Journal of Nursing Management*, *20*(4), 512–521. https://doi-org.chain.kent.ac.uk/10.1111/j.1365-2834.2011.01308.x

Murphy, K. R., & Cleveland, J. N. (1991). *Performance appraisal: An organizational perspective*. Allyn & Bacon.

Murphy, L. R., DuBois, D., & Hurreu, J. J. (1986). Accident reduction through stress management. *Journal of Business & Psychology*, *1*, 5-18. doi: 10.1007/BF01014163

Naeem, F., & Khurram, S. (2020). Influence of Toxic Leadership on Turnover Intention: The Mediating Role of Psychological Wellbeing and Employee Engagement. *Pakistan Journal of Commerce & Social Sciences*, *14*(3), 682–713.

Nevicka, B., De Hoogh, A. H. B., Van Vianen, A. E. M., & Ten Velden, F. S. (2013). Uncertainty enhances the preference for narcissistic leaders. *European Journal of Social Psychology*, *43*(5), 370–380. https://doi-org.chain.kent.ac.uk/10.1002/ejsp.1943

Nielsen, K., Yarker, J., Brenner, S.-O., Randall, R., & Borg, V. (2008). The importance of transformational leadership style for the well-being of employees working with older

people. *Journal of Advanced Nursing*, *63*, 465–475. http://dx.doi.org/10.1111/j.1365-2648.2008.04701.x.

Nye, J. L., & Forsyth, D. R. (1991). The effects of prototype-based biases on leadership appraisals. *Small Group Research*, *22*(3), 360. https://doi-org.chain.kent.ac.uk/10.1177/1046496491223005

Office for National Statistics. (2020). *Coronavirus and homeworking in the UK: April 2020*. Retrieved from https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavirusandhomeworkingintheuk/april2020

Ogbonnaya, C., Tillman, C. J., & Gonzalez, K. (2018). Perceived Organizational Support in Health Care: The Importance of Teamwork and Training for Employee Well-Being and Patient Satisfaction. *Group & Organization Management*, *43*(3), 475–503. https://doi-org.chain.kent.ac.uk/10.1177/1059601118767244

Oshagbemi, T. (2004). Age influences on the leadership styles and behaviour of managers. *Employee Relations*, *26*(1), 14–29. https://doi-org.chain.kent.ac.uk/10.1108/01425450410506878

Ouakouak, M. L., Zaitouni, M. G., & Arya, B. (2020). Ethical leadership, emotional leadership, and quitting intentions in public organizations: Does employee motivation play a role? *Leadership & Organization Development Journal*, *41*(2), 257–279. https://doi-org.chain.kent.ac.uk/10.1108/LODJ-05-2019-0206

Page, K., & Vella-Brodrick, D. (2013). The Working for Wellness Program: RCT of an Employee Well-Being Intervention. *Journal of Happiness Studies*, *14*(3), 1007–1031. https://doi-org.chain.kent.ac.uk/10.1007/s10902-012-9366-y

Palanski, M., Avey, J., & Jiraporn, N. (2014). The Effects of Ethical Leadership and Abusive Supervision on Job Search Behaviors in the Turnover Process. *Journal of Business Ethics*, *121*(1), 135–146. https://doi-org.chain.kent.ac.uk/10.1007/s10551-013-1690-6

Palich, L. E., & Hom, P. W. (1992). The Impact of Leader Power and Behavior on Leadership Perceptions: A LISREL test of an expanded categorization theory of leadership model. *Group & Organization Management*, *17*(3), 279. https://doi-org.chain.kent.ac.uk/10.1177/1059601192173007

Parker, A., Gerbasi, A., & Porath, C. L. (2013). The effects of de-energizing ties in organizations and how to manage them. *Organizational Dynamics*, *42*(2), 110–118. https://doi-org.chain.kent.ac.uk/10.1016/j.orgdyn.2013.03.004

Peters, A., McEwen, B. S., & Friston, K. (2017). Uncertainty and stress: Why it causes diseases and how it is mastered by the brain. *Progress in Neurobiology*, *156*, 164–188. https://doi-org.chain.kent.ac.uk/10.1016/j.pneurobio.2017.05.004

Petersen, L.E., & Blank, H. (2003). Ingroup bias in the minimal group paradigm shown by three-person groups with high or low state self-esteem. *European Journal of Social Psychology*, *33*(2), 149–162. https://doi-org.chain.kent.ac.uk/10.1002/ejsp.137

Piccolo, R. F., Bono, J. E., Heinitz, K., Rowold, J., Duehr, E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most? *The Leadership Quarterly*, *23*(3), 567–581. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2011.12.008

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, *1*(2), 107–142. https://doi-org.chain.kent.ac.uk/10.1016/1048-9843(90)90009-7

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, *26*, 513–563. doi: 10.1177/014920630002600307

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539–569. https://doi-org.chain.kent.ac.uk/10.1146/annurev-psych-120710-100452

Platow, M. J., McClintock, C. G., & Liebrand, W. B. G. (1990). Predicting intergroup fairness and ingroup bias in the minimal group paradigm. *European Journal of Social Psychology*, *20*(3), 221–239. https://doi-org.chain.kent.ac.uk/10.1002/ejsp.2420200304

Platow, M. J., & van Knippenberg, D. (2001). A social identity analysis of leadership endorsement: The effects of leader ingroup prototypicality and distributive intergroup fairness. *Personality and Social Psychology Bulletin*, *27*(11), 1508–1519. https://doi-org.chain.kent.ac.uk/10.1177/01461672012711011

Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal Research: The Theory, Design, and Analysis of Change. *Journal of Management*, *36*(1), 94–120. https://doi-org.chain.kent.ac.uk/10.1177/0149206309352110

Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PLoS ONE*, *14*(2), 1–14. https://doi-org.chain.kent.ac.uk/10.1371/journal.pone.0212091

Randsley de Moura, G., Abrams, D., Marques, J. M., & Hutchison, P. (2011). Innovation credit: When and why do group members give their leaders license to deviate from

group norms? In J. Jetten & M. J. Hornsey (Eds.), *Rebels in groups: Dissent, deviance, difference and defiance.* (pp. 238–257). Wiley Blackwell.

Randsley de Moura, G., Abrams, D., Retter, C., Gunnarsdottir, S., & Ando, K. (2009). Identification as an organizational anchor: How identification and job satisfaction combine to predict turnover intention. *European Journal of Social Psychology, 39*, 540-557. doi:10.1002/ejsp.553

Randsley de Moura, G., Leicht, C., Leite, A.C., Crisp, R. J., & Gocowska, M. A. (2018). Leadership Diversity: Effects of Counterstereotypical Thinking on the Support for Women Leaders under Uncertainty. *Journal of Social Issues*, 74 (1). pp.165-183.

Rast, D. E. (2015). Leadership In Times Of Uncertainty: Recent Findings, Debates, And Potential Future Research Directions. *Social & Personality Psychology Compass*, *9*(3), 133–145. https://doi-org.chain.kent.ac.uk/10.1111/spc3.12163

Rast, D. E., Axtell, C., & McGlynn, S. (2016). (Re)Applying social psychology to organizational work, well-being, and leadership. *Journal Of Applied Social Psychology*, *46*(1), 3-6. doi:10.1111/jasp.12363

Rast, D. E., Hogg, M., & Giessner, S. (2013). Self-uncertainty and Support for Autocratic Leadership. *Self & Identity, 12*(6), 635–649. https://doi-org.chain.kent.ac.uk/10.1080/15298868.2012.718864

Reicher, S. D., Haslam, S. A., & Hopkins, N. (2005). Social identity and the dynamics of leadership: Leaders and followers as collaborative agents in the transformation of social reality. *The Leadership Quarterly, 16*, 547–568.

Reicher, S. D., & Hopkins, N. (1996). Seeking influence through characterizing self-categories: An analysis of anti-abortionist rhetoric. *British Journal of Social Psychology, 35*, 297–311.

Reicher, S. D., & Hopkins, N. (2001). *Self and nation: Categorization, contestation, and mobilisation*. London: Sage.

Reicher, S. D., & Hopkins, N. (2003). On the science of the art of leadership. In D. van Knippenberg & M. A. Hogg (Eds.), *Leadership and power: Identity processes in groups and organisations* (pp. 197-209). London: Sage

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, *87*(4), 698–714. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.87.4.698

Ridgeway, C. L. (2011). *Framed by Gender: How Gender Inequality Persists in the Modern World*. New York, NY: Oxford University Press.

Rivers, J., Thompson, N., & Jeske, D. (2018). Dedicated but exhausted? The role of ethical leadership for employee wellbeing in UK student unions. *Journal of HRM, 21*(2), 16–27.

Robertson, I. T., & Flint-Taylor, J. (2008). Leadership, psychological well-being and organisational outcomes. In S. Cartwright & C. L. Cooper (Eds.), *Oxford Handbook on Organisational Well-being*. Oxford: Oxford University Press.

Rosch, E. (1978). Principles of categorization. In E. Rosch, & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27–48). Hillsdale, NJ: Erlbaum.

Rudman, L. A., & Glick, P. (2001). Prescriptive Gender Stereotypes and Backlash Toward Agentic Women. *Journal Of Social Issues*, *57*(4), 743.

Rush, M. C., & Russell, J. E. (1988). Leader prototypes and prototype-contingent consensus in leader behavior descriptions. *Journal of Experimental Social Psychology*, *24*(1), 88–104. https://doi-org.chain.kent.ac.uk/10.1016/0022-1031(88)90045-5

Rush, M. C., Thomas, J. C., & Lord, R. G. (1977). Implicit Leadership Theory: A Potential Threat to the Internal Validity of Leader Behavior Questionnaires. *Organizational*

Behavior & Human Performance, *20*(1), 93–110. https://doi-org.chain.kent.ac.uk/10.1016/0030-5073(77)90046-0

Ryff, C. D., & Keyes, C. L. M. (1995). The Structure of Psychological Well-Being Revisited. *Journal of Personality & Social Psychology*, *69*(4), 719–727. https://doi-org.chain.kent.ac.uk/10.1037/0022-3514.69.4.719

Saleem, Z., Batool, S., & Khattak, S. R. (2017). Relationship between Leadership Styles and Organizational Commitment: Moderating Role of Emotional Intelligence and Organizational Support. *Journal of Managerial Sciences*, *11*(1), 71–84.

Salovey, P. (1992). Mood-Induced Self-Focused Attention. *Journal of Personality & Social Psychology*, *62*(4), 699–707. https://doi-org.chain.kent.ac.uk/10.1037/0022-3514.62.4.699

Santiago, J. K. (2020). The influence of internal communication satisfaction on employees' organisational identification: Effect of perceived organisational support. *Journal of Economics & Management*, *42*(4), 70–98. https://doi-org.chain.kent.ac.uk/10.22367/jem.2020.42.04

Sarwar, H., Ishaq, M. I., Amin, A., & Ahmed, R. (2020). Ethical leadership, work engagement, employees' well-being, and performance: a cross-cultural comparison. *Journal of Sustainable Tourism*, *28*(12), 2008–2026. https://doi-org.chain.kent.ac.uk/10.1080/09669582.2020.1788039

Scandura, T. A., & Graen, G. B. (1984). Moderating Effects of Initial Leader-Member Exchange Status on the Effects of a Leadership.. *Journal of Applied Psychology*, *69*(3), 428–436. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.69.3.428

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement with a Short Questionnaire: A Cross-National Study. *Educational and Psychological Measurement*, *66*(4), 701–716.

Schein, V. E. (1975). Relationships Between Sex Role Stereotypes and Requisite Management Characteristics Among Female Managers. *Journal of Applied Psychology*, *60*(3), 340–344. https://doi-org.chain.kent.ac.uk/10.1037/h0076637

Schoel, C., Bluemke, M., Mueller, P., & Stahlberg, D. (2011). When autocratic leaders become an option—Uncertainty and self-esteem predict implicit leadership preferences. *Journal of Personality and Social Psychology*, *101*(3), 521–540. https://doi-org.chain.kent.ac.uk/10.1037/a0023393

Schubert, J. N. (1988). Age and Active-Passive Leadership Style. *American Political Science Review*, *82*(3), 763–772. https://doi-org.chain.kent.ac.uk/10.2307/1962489

Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modelling*. Psychology Press.

Schyns, B., & Schilling, J. (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. *Leadership Quarterly*, *24*, 138-158. doi:10.1016/j.leaqua.2012.09.001

Scully, J. A., Sims, H. P., Olian, J. D., Schnell, E. R., & Smith, K. A. (1994). Tough times make tough bosses: A meso analysis of CEO leader behavior. *The Leadership Quarterly*, *5*(1), 59–83. https://doi-org.chain.kent.ac.uk/10.1016/1048-9843(94)90006-X

Seligman, M. E. P. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being.* New York, NY: Free Press.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *The American Psychologist, 55*, 5-14. doi: 10.1037/0003-066X.55.1.5

Sessa, V. I., Kabacoff, R. I., Deal, J., & Brown, H. (2007). Generational differences in leader values and leadership behaviors. *The Psychologist-Manager Journal*, *10*(1), 47–74. https://doi-org.chain.kent.ac.uk/10.1080/10887150709336612

Shaffer, J. A., DeGeest, D., & Li, A. (2016). Tackling the Problem of Construct Proliferation. *Organizational Research Methods*, *19*(1), 80–110. https://doi-org.chain.kent.ac.uk/10.1177/1094428115598239

Shamir, B., Zakay, E., Breinin, E., & Popper, M. (1998). Correlates of charismatic leader behavior in military units: Subordinates' attitudes, unit characteristics, and superiors' appraisals of leader performance. *Academy of Management Journal, 41*, 387-409. doi:10.2307/257080

Shea, C. M., & Howell, J. M. (1999). Charismatic leadership and task feedback: A laboratory study of their effects on self-efficacy and task performance. *The Leadership Quarterly*, *10*(3), 375–396. https://doi-org.chain.kent.ac.uk/10.1016/S1048-9843(99)00020-X

Shore, L. M., & Wayne, S. J. (1993). Commitment and Employee Behavior: Comparison of Affective Commitment and Continuance Commitment With Perceived Organizational Support. *Journal of Applied Psychology*, *78*(5), 774–780. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.78.5.774

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis.* New York: Oxford University Press.

Skakon J, Nielsen K, Borg V, & Guzman J. (2010). Are leaders' well-being, behaviours and style associated with the affective well-being of their employees? A systematic review

of three decades of research. *Work & Stress*, *24*(2), 107–139. https://doi-org.chain.kent.ac.uk/10.1080/02678373.2010.495262

Slater, M. J., Turner, M. J., Evans, A. L., & Jones, M. V. (2018). Capturing hearts and minds: The influence of relational identification with the leader on followers' mobilization and cardiovascular reactivity. *The Leadership Quarterly*, *29*(3), 379–388. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2017.08.003

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. https://doi-org.chain.kent.ac.uk/10.1080/10705500802222972

Smith, K. J., Rosenberg, D. L., & Timothy Haight, G. (2014). An Assessment of the Psychometric Properties of the Perceived Stress Scale-10 (PSS10) with Business and Accounting Students. *Accounting Perspectives*, *13*(1), 29–59. https://doi-org.chain.kent.ac.uk/10.1111/1911-3838.12023

Spain, S. M., Harms, P. D., & Wood, D. (2016). Stress, well-being, and the dark side of leadership. In W. A. Gentry & C. Clerkin (Eds.), *The role of leadership in occupational stress.* (Vol. 14, pp. 33–60). Emerald Group Publishing. https://doi-org.chain.kent.ac.uk/10.1108/S1479-355520160000014002

Sparr, J. L., & Sonnentag, S. (2008). Fairness perceptions of supervisor feedback, LMX, and employee well-being at work. *European Journal of Work & Organizational Psychology*, *17*(2), 198–225. https://doi-org.chain.kent.ac.uk/10.1080/13594320701743590

Spector, P. (1997). *Job satisfaction: Applications, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications

Steeden, B. (2021). *The Potential of Youth: Age and the Preference for Leadership Potential.* Doctor of Philosophy (PhD) thesis, University of Kent. doi:10.22024/UniKent/01.02.89761

Steele, J. P. (2011). *Antecedents and consequences of toxic leadership in the US Army: A two year review and recommended solutions*. Center for Army Leadership Fort Leavenworth KS.

Steffens, N. K., Haslam, S. A., Reicher, S. D., Platow, M. J., Fransen, K., Yang, J., Ryan, M. K., Jetten, J., Peters, K., & Boen, F. (2014). Leadership as social identity management: Introducing the Identity Leadership Inventory (ILI) to assess and validate a four-dimensional model. *The Leadership Quarterly*, *25*(5), 1001–1024. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2014.05.002

Steffens, N. K., Haslam, S. A., Schuh, S. C., Jetten, J., & van Dick, R. (2017). A meta-analytic review of social identification and health in organizational contexts. *Personality and Social Psychology Review*, *21*(4), 303–335. https://doi-org.chain.kent.ac.uk/10.1177/1088868316656701

Steffens, N. K., Yang, J., Jetten, J., Haslam, S. A., Lipponen J. (2018). The unfolding impact of leader identity entrepreneurship on burnout, work engagement, and turnover intentions. *J. Occup. Health Psychol. 23* 373–387. 10.1037/ocp0000090

Sun, R., & Wang, W. (2017). Transformational leadership, employee turnover intention, and actual voluntary turnover in public organizations. *Public Management Review*, *19*(8), 1124–1141. https://doi-org.chain.kent.ac.uk/10.1080/14719037.2016.1257063

Sun, X, Xu, D., Luo, F. Wei, Zihan, Wei, Cong, and Xue, G. (2015). A cross-cultural perspective on the preference for potential effect: An individual participant data (IPD) meta-analysis approach (Cross-cultural perspective on the preference for potential effect. *PLoS ONE 10*(3): e0124170. doi:10.1371/journal.pone.0124170

Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: impact of the leader's mood on the mood of group members, group affective tone, and group processes. *The Journal of Applied Psychology*, *90*(2), 295–305. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.90.2.295

Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American*, *223*(5), 96-103.

Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & L. W. Austin (eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago: Nelson-Hall.

Tepper, B. J. (2000). Consequences of Abusive Supervision. *Academy of Management Journal*, *43*(2), 178–190. https://doi-org.chain.kent.ac.uk/10.5465/1556375

Thau, S., Pitesa, M., & Pillutla, M. (2014). Experiments in organizational behavior. In M. Webster Jr. & J. Sell (Eds.), *Laboratory experiments in the social sciences.*, (2nd ed., pp. 433–447). Elsevier Academic Press. https://doi-org.chain.kent.ac.uk/10.1016/B978-0-12-404681-8.00019-4

The Economist. (2020). *Is the office finished? The fight over the future of the workplace.* Retrieved from https://www.economist.com/leaders/2020/09/12/is-the-office-finished

Thompson, H. L. (2010). *The stress effect: Why smart leaders make dumb decisions—and what to do about it*. San Francisco, CA: Jossey-Bass.

Thompson, B. S., & Korsgaard, M. A. (2019). Relational identification and forgiveness: Facilitating relationship resilience. *Journal of Business and Psychology*, *34*(2), 153–167. https://doi-org.chain.kent.ac.uk/10.1007/s10869-018-9533-1

Thompson, E. R., & Phua, F. T. T. (2012). A Brief Index of Affective Job Satisfaction. *Group & Organization Management*, *37*(3), 275–307. https://doi-org.chain.kent.ac.uk/10.1177/1059601111434201

Travaglino, G. A., Abrams, D., & Randsley de Moura, G. (2016). Men of Honor Don't Talk: The Relationship Between Masculine Honor and Social Activism Against Criminal Organizations in Italy. *Political Psychology, 37*(2), 183–199. https://doi-org.chain.kent.ac.uk/10.1111/pops.12226

Tresh, F., Steeden, B., Randsley de Moura, G., Leite, A. C., Swift, H. J., & Player, A. (2019). Endorsing and reinforcing gender and age stereotypes: The negative effect on self-rated leadership potential for women and older workers. *Frontiers in Psychology, 10.* https://doi-org.chain.kent.ac.uk/10.3389/fpsyg.2019.00688

Trougakos, J. P., Chawla, N., & McCarthy, J. M. (2020). Working in a pandemic: Exploring the impact of COVID-19 health anxiety on work, family, and health outcomes. *Journal of Applied Psychology, 105*(11), 1234–1245. https://doi-org.chain.kent.ac.uk/10.1037/apl0000739

Tse, H. H. M., Huang, X., & Lam, W. (2013). Why does transformational leadership matter for employee turnover? A multi-foci social exchange perspective. *Leadership Quarterly, 24*(5), 763–776. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2013.07.005

Turner, J. C. (1985). Social categorization and the self-concept: A cognitive theory of group behaviour. In E. J. Lawler (Ed.), *Advances in group processes* (pp. 77–122). Greenwich CT US: JAI Press.

Turner, J. C. (1991). *Social influence.* Milton Keynes: Open University Press

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D. and Wetherell, M. S. (1987). In Turner, J. C. (Eds) *Rediscovering the Social Group*: *A Self-categorization Theory,* Basil Blackwell, Oxford/New York

Ullrich, J., Christ, O., & van Dick, R. (2009). Substitutes for procedural fairness: Prototypical leaders are endorsed whether they are fair or not. *Journal of Applied Psychology*, *94*(1), 235–244. https://doi-org.chain.kent.ac.uk/10.1037/a0012936

UN Women (2021). *Facts and figures: Women's leadership and political participation.* Retrieved from https://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures

van Dick, R., Ciampa, V., & Liang, S. (2017a). Shared identity in organizational stress and change. *Current Opinion in Psychology*, 2320-25. doi:10.1016/j.copsyc.2017.11.005

Van Dick, R., Ketturat, C., Häusser, J. A., & Mojzisch, A. (2017b). Two sides of the same coin and two routes for improvement: Integrating resilience and the social identity approach to well-being and ill-health. *Health Psychology Open*, *4*(2), 2055102917719564. https://doi-org.chain.kent.ac.uk/10.1177/2055102917719564

Van Dick, R., Wagner, U., Stellmacher, J., Christ, O., & Tissington, P. A. (2005). To Be(long) or Not to Be(long): Social Identification in Organizational Contexts. *Genetic, Social & General Psychology Monographs*, *131*(3), 189–218. https://doi-org.chain.kent.ac.uk/10.3200/MONO.131.3.189-218

Van Dierendonck, D., Haynes, C., Borrill, C., & Stride, C. (2004). Leadership behavior and subordinate well-being. *Journal of Occupational Health Psychology*, *9*, 165. doi: 10.1037/1076-8998.9.2.165

van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, *49*, 357. doi: 10.1111/1464-0597.00020

van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in Organizational Behavior, 25*, 243–295

van Knippenberg, B., & van Knippenberg, D. (2005). Leader Self-Sacrifice and Leadership Effectiveness: The Moderating Role of Leader Prototypicality. *Journal of Applied Psychology*, *90*(1), 25–37. https://doi-org.chain.kent.ac.uk/10.1037/0021-9010.90.1.25

van Knippenberg, D., & van Schie, E. M. (2000). Foci and correlates of organizational identification. *Journal of Occupational and Organizational Psychology*, 73, 137-147. doi: 10.1348/096317900166949

Walters, G., & Raybould, M. (2007). Burnout and perceived organisational support among front-line hospitality employees. *Journal of Hospitality and Tourism Management*, *14*(2), 144–156. https://doi-org.chain.kent.ac.uk/10.1375/jhtm.14.2.144

Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader–member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, *115*(2), 204–213. https://doi-org.chain.kent.ac.uk/10.1016/j.obhdp.2010.11.002

Walumbwa, F. O., Wu, C., & Ojode, L. A. (2004). Gender and instructional outcomes: The mediating role of leadership style. *Journal of Management Development*, *23*(2), 124–140. https://doi-org.chain.kent.ac.uk/10.1108/02621710410517229

Walvekar, S. S., Ambekar, J. G., & Devaranavadagi, B. B. (2015). Study on Serum Cortisol and Perceived Stress Scale in the Police Constables. *Journal of Clinical & Diagnostic Research*, *9*(2), 10–14. https://doi-org.chain.kent.ac.uk/10.7860/JCDR/2015/12015.5576

Wang, G., Oh, I., Courtright, S. H., & Colbert, A. E. (2011). Transformational Leadership and Performance Across Criteria and Levels: A Meta-Analytic Review of 25 Years of

Research. *Group & Organization Management*, *36*(2), 223–270. https://doi-org.chain.kent.ac.uk/10.1177/1059601111401017

Wang, Z., & Xu, H. (2019). When and for Whom Ethical Leadership is More Effective in Eliciting Work Meaningfulness and Positive Attitudes: The Moderating Roles of Core Self-Evaluation and Perceived Organizational Support. *Journal of Business Ethics*, *156*(4), 919–940. https://doi-org.chain.kent.ac.uk/10.1007/s10551-017-3563-x

Wann, D. L., & Grieve, F. G. (2005). Biased Evaluations of In-Group and Out-Group Spectator Behavior at Sporting Events: The Importance of Team Identification and Threats to Social Identity. *The Journal of Social Psychology*, *145*(5), 531–545. https://doi-org.chain.kent.ac.uk/10.3200/SOCP.145.5.531-546

Warr, P. (2013). How to think about and measure psychological well-being. In R. R. Sinclair, M. Wang, & L. E. Tetrick (Eds.), *Research methods in occupational health psychology: Measurement, design, and data analysis.* (pp. 76–90). Routledge/Taylor & Francis Group.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, *52*, 129-148. doi: 10.1111/j.2044-8325.1979.tb00448.x

Wattoo, M. A., Zhao, S., & Xi, M. (2018). Perceived organizational support and employee well-being. *Chinese Management Studies*, *12*(2), 469–484. https://doi-org.chain.kent.ac.uk/10.1108/CMS-07-2017-0211

Wegge, J., Shemla, M., & Haslam, S. A. (2014). Leader behavior as a determinant of health at work: Specification and evidence of five key pathways. *Zeitschrift Für Personalforschung*, *28*(1/2), 6–23. https://doi-org.chain.kent.ac.uk/10.1688/ZfP-2014-01-Wegge

Wegge, J., van Dick, R., Fisher, G. K., Wecking, C., & Moltzen, K. (2006). Work motivation, organisational identification, and well-being in call centre work. *Work & Stress*, *20*(1), 60-83. doi:10.1080/02678370600655553

Wikhamn, W., & Hall, A. T. (2014). Accountability and satisfaction: organizational support as a moderator. *Journal of Managerial Psychology*, *29*(5), 458–471. https://doi-org.chain.kent.ac.uk/10.1108/JMP-07-2011-0022

Willett, J. B. (1989). Some results on reliability for the longitudinal measurement of change: Implications for the design of studies of individual growth. *Educational and Psychological Measurement*, *49*(3), 587–602. https://doi-org.chain.kent.ac.uk/10.1177/001316448904900309

Williams, M. J., & Tiedens, L. Z. (2016). The subtle suspension of backlash: A meta-analysis of penalties for women's implicit and explicit dominance behavior. *Psychological Bulletin*, *142*(2), 165-197. doi:10.1037/bul0000039

Willis, K. D., & Burnett, H. J., Jr. (2016). The power of stress: Perceived stress and its relationship with rumination, self-concept clarity, and resilience. *North American Journal of Psychology*, *18*(3), 483–498.

Winkler, E., Busch, C., Clasen, J., & Vowinkel, J. (2014). Leadership behavior as a health-promoting resource for workers in low-skilled jobs and the moderating role of power distance orientation. *Zeitschrift Für Personalforschung*, *28*(1/2), 96–116. https://doi-org.chain.kent.ac.uk/10.1688/ZfP-2014-01-Winkler

Wirtz, P. H., & von Känel, R. (2017). Psychological Stress, Inflammation, and Coronary Heart Disease. *Current Cardiology Reports*, *19*(11), 111. https://doi-org.chain.kent.ac.uk/10.1007/s11886-017-0919-x

Witt, P., Brown, K., Roberts, J., Weisel, J., Sawyer, C., & Behnke, R. (2006). Somatic Anxiety Patterns Before, During, and After Giving a Public Speech. *Southern*

Communication Journal, *71*(1), 87–100. https://doi-org.chain.kent.ac.uk/10.1080/10417940500503555

World Health Organization (2020). *Physical and Mental Health Key to Resilience During COVID-19 Pandemic.* Retrieved from https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/statements/statement-physical-and-mental-health-key-to-resilience-during-covid-19-pandemic

Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology, 5,* 84-94. doi: 10.1037//1076-8998.5.1.84

Xu, X., Bao, H., Strait, K. M., Edmondson, D. E., Davidson, K. W., Beltrame, J. F., Bueno, H., Lin, H., Dreyer, R. P., Brush, J. E., Spertus, J. A., Lichtman, J. H., D'Onofrio, G., & Krumholz, H. M. (2017). Perceived stress after acute myocardial infarction: A comparison between young and middle-aged women versus men. *Psychosomatic Medicine*, *79*(1), 50–58. https://doi-org.chain.kent.ac.uk/10.1097/PSY.0000000000000429

Yamane, T., Nakadoi, Y., Takagi, M., & Morita, M. (2021). Simple Wearable Device to Reduce Stress When Delivering a Speech without Pre-training. *Healthcare Informatics Research*, *27*(3), 231–240. https://doi-org.chain.kent.ac.uk/10.4258/hir.2021.27.3.231

Yammarino, F. J., Dionne, S. D., Uk Chun, J., & Dansereau, F. (2005). Leadership and levels of analysis: A state-of-the-science review. *Leadership Quarterly*, *16*(6), 879–919. https://doi-org.chain.kent.ac.uk/10.1016/j.leaqua.2005.09.002

Yu, J., Park, J., & Hyun, S. S. (2021). Impacts of the COVID-19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behavior, and employee-customer identification. *Journal of Hospitality Marketing &*

Management, *30*(5), 529–548. https://doi-org.chain.kent.ac.uk/10.1080/19368623.2021.1867283

Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of Leadership & Organizational Studies*, *20*(1), 38–48. https://doi-org.chain.kent.ac.uk/10.1177/1548051811429352

Zbierowski, P. (2016). Positive Leadership - Attempt to Clarification and Assessment of Novelty. *Journal of Positive Management*, *7*(4), 61–70. https://doi-org.chain.kent.ac.uk/10.12775/JPM.2016.023

Zenger, J., & Folkman, J. (2019). Women score higher than men in most leadership skills. *Harvard Business Review*, 1-8.

Zhong, J., Zhang, L., Li, P., & Zhang, D. Z. (2020). Can leader humility enhance employee wellbeing? The mediating role of employee humility. *Leadership & Organization Development Journal*, *41*(1), 19–36. https://doi-org.chain.kent.ac.uk/10.1108/LODJ-03-2019-0124

Appendices

Appendix A

Age Manipulation Study 2:

Younger Leader



Older Leader



Appendix B

Leadership Style Manipulation Study 2:

Negative Leadership Style

Leader Briefing message:
The School of Psychology wants to expand, and has set up a project group to work on attracting new students. Like you, I am a School of Psychology student and I have been told I have to lead you on a key task as part of this project. As the task leader, I have been asked to organise a video campaign on student experience. As part of this, you are required to plan and deliver a presentation on your experience of the School of Psychology.

The presentation will be video-recorded by the Kent Media team in the next couple of weeks and shown to prospective students. The length of your presentation is up to you, I am not really concerned with how long it takes.

It needs to have two messages. Firstly, you must talk about the School of Psychology. Secondly, you obviously need to include something about your experience as a student. I think this is a self-explanatory task, and want you to work on your own on this.
I have to talk to you about the task today in an online chatroom. In the chatroom, I will try to answer any questions you have about the task.

After we've had the opportunity to talk, you will be able to get started on the task and then I will come along in person later to check how the task is progressing. The important thing is that I am happy with what you are working on.

Enter Chatroom

1 Participant chooses their first greeting:

A) Hi
B) Hello
C) Hey

2 Leader (Alex) replies: Hello, I'm Alex. I am the student leader for this task. I do not have much time today.

3 Participant chooses reply:

A) Fine. Is there a specific format for the presentation?
B) OK. Do you have any guidelines for the structure of the presentation?
C) Good. Does the presentation need to be structured in a particular way?

4 Leader (Alex) replies: I want you to keep it simple. I have to work with you on this and I would hope you have some ideas to create a good enough video to show future students.

5 Participant chooses reply:

A) Ok, so what do you want me to do during this workshop?
B) Alright, what can I get started on in this workshop?
C) Ok, what should I do in this workshop?

6 Leader (Alex) replies: For this workshop, obviously you must start planning the presentation. You will have the chance to make notes for the presentation soon.

7 Participant chooses reply:

A) Is there anything else I need to know?
B) Is there anything you need to tell me?
C) What else is important?

8 Leader (Alex) continues: It is also important to note, that there will be no access to technology during recording so you're just going to have to make do without.

9 Participant chooses reply:

A) Great. What is the presentation for?
B) Right. What is the point of it?
C) Ok. Why do I need to do this?

10 Leader (Alex) replies: This is a task where you must say about your own views and experiences and tell future students to study Psychology here at Kent. Prospective students might not like the videos and find them boring, so they will not be an integral part of upcoming events.

11 Participant chooses reply:

A) I'm not that comfortable being filmed…
B) I get nervous being filmed…
C) I am anxious about the filming…

12 Leader (Alex) responds: Not everyone is comfortable being filmed, but that's not my concern. I need you to put that to one side. All I ask is that you just get on with it.

13 Participant chooses reply:

A) What if I make a mistake?
B) I am worried about messing up!
C) Can mistakes be edited out?

14 Leader (Alex) continues: Mistakes must be avoided and for the purpose of this task, I do not want you to mess up because we not be able to edit them out. I will not be there to help you!

15 Participant chooses reply:

A) Thanks for that
B) I hope it goes well!
C) I will start working on it now.

16 Leader (Alex) replies: I hope you can do a great job! If you can follow my instructions properly, the task will get done.

17 Participant chooses reply:

A) Thank you, I hope you like it.
B) Thank you, I will try my best.
C) Thanks, I hope it will be good.

18 Leader (Alex) replies: I have to come along to your workshop soon to see how the task is progressing and see if I need to take control.

Chatroom now closed

Positive Leadership Style

Positive Leader Condition
Leader Briefing message:
The School of Psychology wants to expand, and has set up a project group to work on attracting new students. Like you, I am a School of Psychology student and I have been asked to work with you on a key task as part of this project. As the task leader, I have been asked to organise a video campaign on student experience. As part of this, I would be really grateful if you could plan and deliver a presentation on your experience of the School of Psychology.

The presentation will be video-recorded by the Kent Media team in the next couple of weeks and shown to prospective students. The length of your presentation is up to you, I trust you to decide what is best.

It needs to have two clear messages. Firstly, you need to explain why you chose the School of Psychology. Secondly, we're really interested in hearing about your experience as a student. I think this is an exciting task, and am excited about us working together on this.
I'm delighted to connect with you about the task today in an online chatroom. In the chatroom, I'm happy to answer any questions you have about the task.

After we've had the opportunity to talk, you will be able to get started on the task and then I will come along in person later to see how you're doing. The important thing is that you are happy with what you are working on.

Enter Chatroom

1 Participant chooses their first greeting:
A) Hi
B) Hello
C) Hey

2 Leader (Alex) responds: Hello, I am Alex, the student leader for this task. I hope you are well today.

3 Participant chooses reply:
A) Fine. Is there a specific format for the presentation?
B) OK. Do you have any guidelines for the structure of the presentation?
C) Good. Does the presentation need to be structured in a particular way?

4 Leader (Alex) replies: I want you to be creative. I value your input on this and I am sure you have some fantastic ideas to create a very inspiring video to show future students.

5 Participant chooses reply:

A) Ok, so what do you want me to do during this workshop?
B) Alright, what can I get started on in this workshop?
C) Ok, what should I do in this workshop?

6 Leader (Alex) replies: For this workshop, it would be great if you could start planning the presentation. You will have the chance to make notes for the presentation soon.

7 Participant chooses reply:
A) Is there anything else I need to know?
B) Is there anything you need to tell me?
C) What else is important?

8 Leader (Alex) continues: It is also important to note, that there will be no access to technology during recording but I am sure it will be much more interesting and personal without it.

9 Participant chooses reply:
A) Great. What is the presentation for?
B) Right. What is the point of it?
C) Ok. Why do I need to do this?

10 Leader (Alex) replies: This is a great opportunity to share your own views and experiences and encourage future students to study Psychology here at Kent. Prospective students will love the videos and find them insightful, so they will be an integral part of upcoming events.

11 Participant chooses reply:
A) I'm not that comfortable being filmed…
B) I get nervous being filmed…
C) I am anxious about the filming…

12 Leader (Alex) responds: Not everyone is comfortable being filmed, and I completely understand that. I need to thank you for putting that to one side. All I ask is that you try your best.

13 Participant chooses reply:
A) What if I make a mistake?
B) I am worried about messing up!
C) Can mistakes be edited out?

14 Leader (Alex) continues: Everyone makes mistakes and for the purpose of this task, I do not want you to worry because we will be able to edit them out. I will be there to help you!

15 Participant chooses reply:
A) Thanks for that
B) I hope it goes well!
C) I will start working on it now.

16 Leader (Alex) replies I know you are going to do a great job! If you use your individual strengths you will be a great success.

17 Participant chooses reply:

A) Thank you, I hope you like it.
B) Thank you, I will try my best.
C) Thanks, I hope it will be good.

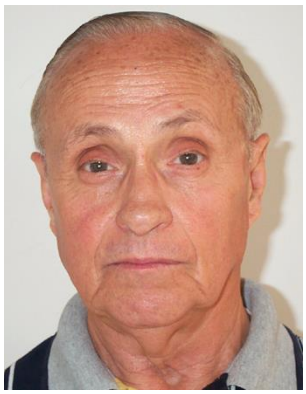
18 Leader (Alex) replies: I look forward to coming along to your workshop soon to see how you are getting on and see if I can offer any help.

Chatroom now closed

Appendix C

Age and Gender Manipulations Study 3:

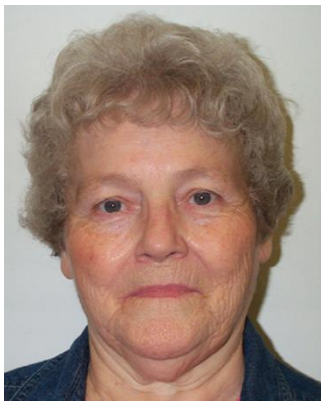
Older Male Leader



Younger Male Leader



Older Female Leader



Younger Female Leader



Appendix D

Leadership Style Manipulation Study 4 and 6

High Positive Leadership Style

Foster information sharing so that people become aware of colleagues' difficulties and, therefore, can express compassion

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	○	◉

Ensure that employees have an opportunity to provide emotional, intellectual or physical support to others in addition to receiving support from others.

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	◉	○

Provide opportunities for employees to receive best self-feedback and develop best self-portraits.

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	○	◉

Establish, recognise, reward and maintain accountability for goals that contribute to human benefit, so that the effects on other people are obvious.

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	○	◉

Meet at least monthly in one-on-one meetings with their direct reports.

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	◉	○

Any Other Comments:

Alex is a really positive leader who is always connecting with employees and helping us. We always receive constructive feedback and Alex continuously treats us with compassion and understanding.

Low Positive Leadership Style

Foster information sharing so that people become aware of colleagues' difficulties and, therefore, can express compassion

Never	Sometimes	About half the time	Most of the time	Always
○	◉	○	○	○

Ensure that employees have an opportunity to provide emotional, intellectual or physical support to others in addition to receiving support from others.

Never	Sometimes	About half the time	Most of the time	Always
◉	○	○	○	○

Provide opportunities for employees to receive best self-feedback and develop best self-portraits.

Never	Sometimes	About half the time	Most of the time	Always
○	◉	○	○	○

Establish, recognise, reward and maintain accountability for goals that contribute to human benefit, so that the effects on other people are obvious.

Never	Sometimes	About half the time	Most of the time	Always
◉	○	○	○	○

Meet at least monthly in one-on-one meetings with their direct reports.

Never	Sometimes	About half the time	Most of the time	Always
◉	○	○	○	○

Any Other Comments:

Alex is a really negative leader who is never connecting with employees or helping us. We never receive constructive feedback and Alex rarely treats us with compassion and understanding.