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Autonomy and Competence Frustration in Young Adolescent Classrooms:
Different Associations with Active and Passive Disengagement

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Abstract

Background

Pupil disengagement is a primary concern for classroom teachers, yet few studies have attempted to identify distinct psychological correlates of different forms of classroom disengagement.

Aims

Drawing from basic psychological needs theory, this study investigated two novel and divergent mechanisms whereby pupils’ autonomy frustration was expected to be directly associated with active disengagement (e.g. talking and making noise), whereas competence frustration would be associated with passive disengagement (e.g. daydreaming in class) via reports of reduced vitality. We further hypothesised that these two processes would be associated with pupil perceptions of teacher psychological control.

Sample

Participants were 647 pupils (age = 11–14 years) and their respective teachers (N = 22) from three secondary schools in the United Kingdom.

Methods

This study was a cross-sectional survey with pupil questionnaires administered during a single school lesson, and teachers rating each pupil’s active and passive disengagement in their class.

Results

Using structural equation modelling, perceptions of teacher control positively predicted pupils’ autonomy and competence frustration in class. Pupils’ competence frustration was indirectly and positively associated with teacher-rated passive disengagement, via reduced subjective vitality. Pupils’ autonomy frustration directly and positively predicted active disengagement but was not explained by reduced vitality.
Conclusions

The proposal that autonomy and competence frustration have different correlates may be important for the advancement of basic psychological needs theory (Deci & Ryan, 2000). The distinct mechanisms proposed have important implications for teachers and schools, including potential causes of different forms of pupil disengagement and the importance of avoiding psychological control in classrooms.

Keywords: teacher control, motivation, psychological needs, frustration, disengagement.
Engaging school pupils is a principal goal for most teachers in schools classrooms. As such, theoretical and empirical research has investigated the adaptive teacher behaviours (e.g., Ames, 1992; Assor, Kaplan, & Roth, 2002) and pupil perceptions of learning contexts (e.g., Fall & Roberts, 2012; Hafen et al., 2012; Patrick, Ryan, & Kaplan, 2007) that may effectively promote pupil engagement. Teachers are, however, often confronted with pupils that do not participate, become disruptive, and withdraw themselves from classroom activities. Despite the presence of these behaviours, there seems a lack of conceptual understanding and theoretical evidence concerning the negative processes underpinning classroom disengagement. In the present work, we investigated whether the frustration of two candidate basic psychological needs (i.e., autonomy and competence) were associated with distinct disengagement processes.

Classroom disengagement reflects negative classroom conduct and detachment from learning activities (Fredricks, Blumenfeld & Paris, 2004). Disengaged pupils will typically not try hard, give up easily in the face of challenges, and alienate themselves in the classroom by withdrawing from learning activities (Reeve 2006; Skinner & Belmont, 1993). These behaviours are often accompanied by negative emotions, such as boredom, anxiety, frustration or anger in the classroom (Connell & Wellborn, 1991; Furrer & Skinner, 2003; Skinner, Furrer, Marchland, & Kindermann, 2008).

A closer examination of these maladaptive reactions to classroom activity suggests two different forms of academic disengagement. Pupils can actively disengage by detaching themselves from classroom activities in an energetic and reactive manner, such as disrupting the class, talking over or arguing with others, or disobeying the teacher (Way, 2011). Alternatively, pupils may passively disengage by withdrawing in an inactive manner, signified by lethargy, daydreaming, tiredness and becoming unresponsive in class. Researchers have not explored the distinction between these two types of pupil
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disengagement or the associated social and cognitive correlates, despite the clear differences in their respective characteristics. For instance, pupils that passively disengage do not impose an immediate problem in classrooms and often do not receive the same focus from educators as actively disruptive pupils (Paulsen, Bru, & Murberg, 2006). Consequently, passive pupils may exist in classrooms without teachers identifying these pupils as disengaged. Adopting a generic disengagement perspective does not allow for targeted interventions aimed at minimising passive or active disengagement and this may stunt theoretical advancement.

When examining the social and intrapersonal processes associated with pupil behaviour, self-determination theory (SDT; Ryan & Deci, 2002) has gained extensive empirical support within the domains of education and human motivation. In particular, it is posited within SDT that pupils will function less effectively in classroom environments that are perceived as psychologically controlling (Assor et al., 2002; Deci & Ryan, 1987). Psychologically controlling teachers attempt to direct, manipulate or pressure students’ thoughts, feelings, and behaviours by disregarding pupils’ perspective and adopting a teacher centred agenda, typically using external sources to motivate pupil behaviour (e.g. deadlines, incentives, threats of punishment, criticism; Deci, & Ryan, 1987; Reeve, 2009; Reeve, Deci, & Ryan, 2004; Reeve & Jang, 2006). SDT posits that pupils’ basic psychological needs will be frustrated when they perceive their teacher as psychologically controlling (Niemac & Ryan, 2009; Ryan & Deci, 2000; Vansteenkiste & Ryan, 2013). We further propose that the frustration of two needs, namely autonomy and competence, may be differentially associated with active and passive disengagement in the classroom. The need for autonomy refers to the experience of volition and psychological freedom towards one’s behaviour (deCharms, 1968). Frustration of this need, therefore, concerns feeling oppressed and pressured to behave in certain ways (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011). The need for competence refers to the experience of effectiveness in one’s pursuits (White, 1959). Thus
competence frustration concerns feelings of inadequacy or failure (Bartholomew, Ntoumanis, Ryan et al., 2011).

Attempts to cope with experiences of need frustration typically provoke defensive and compensatory behaviours such as passivity, misbehaviour, resistance, and defiance (Ryan & Deci, 2000; Vansteenkiste & Ryan, 2013). School classrooms represent contexts where learners face regular elicit pressures and demands relating to their performance and ability (Reis, Sheldon, Gable, Roscoe & Ryan, 2000). In such environments, it will be difficult for pupils who experience competence frustration to maintain active and energetic involvement in activities (Nicholls, 1989). In fact, when pupils perceive themselves to lack competence in the classroom, they are likely to withdraw from class activities in a passive manner. A lack of competence has been associated with greater amotivation in education settings (Legault, Green-Demers & Pelletier, 2006; Standage, Duda & Ntoumanis, 2003; Vallerand et al., 1993), which is characterised by an absence of effortful behaviour (Deci & Ryan, 2000). Similarly, students that were passively detached from school have reported little belief in their capability of being successful at school (Patrick, Skinner, & Connell, 1993). This process is analogous to learned helplessness, where pupils develop a belief that they cannot influence or bring about a desired outcome and develop self-defeating behaviour patterns, such as giving up, withdrawing effort and passive avoidance of tasks (Abramson, Seligman, & Teasdale, 1978; Alderman, 2008; Elliot & Dweck, 1988). Collectively this evidence suggests that if competence is frustrated in the classroom, it will result in learners withdrawing their effort and demonstrating passive, avoidance type behaviours in attempts to evade demonstrating their perceived incapableness.

In contrast to the relationship between competence frustration and passive behaviours, an active and disruptive response may be more likely associated with the frustration of ones’ autonomy. Research in the parenting domain indicates that children tend to have actively
adverse responses to an absence of autonomy, including higher levels of delinquency (Barber, 1996), problem behaviours (Pettit, Laird, Dodge, Bates & Criss, 2001), and aggressive behaviour (Joussemet et al., 2008). Young adolescents have also been found to reject parental authority when prevented from acting volitionally (i.e. in line with endorsed values and interests; Van Petegem, Vansteenkiste, Soenens, Beyers, & Aelterman, 2014). Extrapolating from this knowledge base, we propose that the frustration of autonomy in classrooms is likely to lead to more energetic disengagement and avoidance which manifests itself as making noise or talking to other pupils. In contrast, frustrated competence may be a stronger correlate of passive disengagement in class. Exploring potentially distinct correlates of autonomy and competence frustration is required to identify theoretical mechanisms that explain different types of disengagement.

Our portrayal of the two types of disengagement processes suggests that different levels of energy, or vitality, may underpin each process. Subjective vitality refers to the psychological experience of having positive energy available to one’s self (Ryan & Frederick, 1997). Pupils that are high in subjective vitality will have more feelings of energy, arousal and aliveness, whereas pupils low in vitality will have a lower sense of personal energy, often appearing drained (Ryan & Frederick, 1997). From a broad perspective, SDT posits that the frustration of autonomy and competence will decrease feelings of subjective vitality (Ryan & Deci, 2008). Nonetheless, research in adolescent athletes and physical education students has evidenced a stronger association between competence and feelings of vitality, compared to autonomy (Adie, Duda, & Ntoumanis, 2012; Reinboth, Duda, & Ntoumanis, 2004; Taylor & Lonsdale, 2010). These studies examined autonomy and competence satisfaction; however, investigating classroom disengagement may be better understood by measuring competence and autonomy frustration, which may appropriately tap into the intensity associated with negative psychological experiences (Bartholomew,
Ntoumanis, Ryan et al., 2011). No educational study to date has assessed the maladaptive, and potentially different, correlates of competence and autonomy frustration.

**The Present Research**

On the basis of the foregoing considerations, the aim of this study was to assess the maladaptive processes that underlie active and passive disengagement in class. In accordance with SDT (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Ryan & Deci, 2000; Vansteenkiste & Ryan, 2013), we hypothesised that teacher psychological control will be positively associated with pupils’ perceived autonomy and competence frustration. Concordant with learned helplessness processes (Abramson et al., 1978; Alderman, 2008; Elliot & Dweck, 1988) and previous evidence (Adie et al., 2012; Reinboth et al., 2004; Taylor & Lonsdale, 2010), we proposed that the frustration of competence will be associated with teacher ratings of passive disengagement via decreased feelings of vitality. In contrast, the frustration of autonomy in class will be directly associated with teacher ratings of active disengagement and not explained by pupils’ subjective vitality.

**Method**

**Participants**

Six hundred and forty seven secondary school pupils (60% male, mean age = 12.59 years, SD = 0.93 years, age range = 11 – 14 years old) and their teachers (N = 22) participated in the study, coming from three schools in the United Kingdom (two selective grammar schools and one comprehensive school). All three schools catered for pupils ageing from 11-18 years of age, with total pupil numbers for each school ranging from 1,277 up to 1,935. Participating class sizes ranged from 17 to 31 pupils per class.

**Measures**

**Perceptions of Teacher Psychological Control.** Pupil perceptions of their teacher’s psychological control in a specific class were measured using 10 items previously used by
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Madjar, Nave, and Hen (2013) (e.g. “My teacher does not allow me to work at my own pace” and “My teacher makes me feel guilty when I do not please them”). Items were rated using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale authors demonstrated satisfactory factorial structure and internal consistency (Madjar et al., 2013).

**Autonomy and Competence Frustration.** Pupil perceptions of autonomy and competence frustration during the class were measured using the respective subscales of the Psychological Need Thwarting Scale (Bartholomew, Ntoumanis, Ryan et al., 2011). Items were adapted to an educational context with some words simplified for use with secondary school children. These items were also checked by teachers and modified where necessary to ensure pupils’ understanding of each item’s terminology and phrasing. For instance, the original questionnaire stem “In my sport” was changed to “In this class”, with any original item relating to training (e.g. “I feel prevented from making choices with regard to the way I train”) modified to represent learning (e.g. “I feel prevented from making choices about the way I learn”). Both subscales consisted of four items: autonomy (e.g. “I feel forced to follow decisions made for me,”); competence (e.g. “There are situations where I am made to feel I am not good enough”). Items were rated on a 7 point scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Both subscales have previously demonstrated satisfactory internal consistency and factorial validity (Bartholomew, Ntoumanis, Ryan et al., 2011).

**Subjective Vitality.** Pupils’ feelings of aliveness and energy available to the self in the class were measured using a five item version of the Subjective Vitality Scale (Ryan & Frederick, 1997), previously used by Bartholomew, Ntoumanis, Ryan, Bosch et al., (2011). Items were rated on a 7 point scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Example items include “I have energy and spirit” and “I nearly always feel alert and awake”. All original items demonstrated good internal consistency (α =.92) and factorial validity, with
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all items used in this study loading above .50 onto their respective latent factor (Ryan & Frederick, 1997).

**Active Disengagement.** Teacher perceptions of pupils’ active disengagement in class were assessed using two adapted items from the disrespect subscale of the Pupil Behaviour Patterns Scale (Friedman, 1995; see Hastings & Bham, 2003, for construct validity). These items were selected to assess active disobedience (e.g., “Student X in my class argues with other students”) and active inattentiveness (i.e., “Student X in my class often speaks over others and makes a lot of noise”). Both items were rated on a 6 point scale ranging from 1 (never) to 6 (always). The original scale demonstrated good internal consistency ($\alpha = .87$; Freidman, 1995), with the two items used in this study loading .60 and .51 onto their respective latent factor (Hastings & Bham, 2003).

**Passive Disengagement.** Teacher perceptions of pupils’ passive disengagement in class were measured using two items designed for the purpose of this study: “To what extent does Student X daydream” and “To what extent does Student X switch off in class”. Each item was rated on a 6 point scale ranging from 1 (never) to 6 (always). These items were designed to reflect teachers’ general perceptions of pupils’ withdrawal from both social and performance situations, typically associated with pupil passivity (Paulsen et al., 2006). Internal consistency and factor loadings are presented in Table 1.

**Procedure**

Full ethical approval was obtained from the principal researcher’s university ethics committee. Pupils and teachers were provided with details of the study both verbally and in writing prior to the study commencing. All teachers provided written consent, with parental opt-out forms provided to enable parents to indicate if they did not wish for their child to participate. Four pupils opted out of the study. All pupils were instructed that they did not have to complete the questionnaire if they did not wish to. The pupil questionnaire was
administered by the principal researcher at the beginning of a school lesson and collected once each pupil had completed the questionnaire. The taught subject varied between classes (Physical Education = 41%; Humanities = 24%; Citizenship = 21%; Sciences = 14%). Prior to administering the questionnaire, it was explained to the pupils and teachers that all items referred to the specific class that the questionnaire was administered in. Once the questionnaires had been administered, the principal researcher explained the instructions to each class and allowed the opportunity for pupils to ask any additional questions. The pupil questionnaire took approximately ten minutes for pupils to complete. To ensure confidentiality, pupils were asked to direct any questions regarding the study to the principal researcher and not the class teacher (who remained a passive observer during data collection).

The teacher rated pupil disengagement questionnaires were provided to teachers prior to the school lesson and were completed and returned to the principal researcher within a week of being administered.

Data Analysis

Preliminary analysis involved calculation of descriptive statistics, Cronbach’s alpha coefficients, and bivariate correlations (see Table 1). We also conducted confirmatory factor analysis using Mplus software (Version 7.2; Muthén & Muthén, 1998 - 2012) to test the item factor loadings on their respective latent factor. Given our relatively large sample size and the distribution of data, we used maximum likelihood (ML) estimation as it has been demonstrated to be robust to deviations from normality (Olsson, Foss, Troye, & Howell, 2000). Each item was used as an indicator of its respective subscale latent factor (e.g. the four autonomy items were indicators of the autonomy frustration latent factor). The indices used for estimating goodness of fit of the models were the Standardised Root Mean Square Residual (SRMR < .06), Root Mean Square Error of Approximation (RMSEA < .08) and Comparative Fit Index (CFI > .90). Whilst CFI values greater than .90 are considered
representative of a well-fitting model (Bentler, 1992), values closer to .95 have been recommended as indicative of good model fit (Hu & Bentler, 1999). Standardised factor loadings, residual variances and modification indices were analysed to monitor for potential model improvement following any misspecification.

After the confirmation of acceptable factorial structure for all latent variables, structural equation modelling was conducted to analyse the study’s main hypotheses and indirect effects among latent variables. Our aim was to test the process model (shown in Figure 1) which depicts the independent processes of active and passive disengagement. Both psychological needs were allowed to co-vary in our hypothesised model. Given our prediction that autonomy frustration would have little or no association with vitality, we compared our hypothesised model to one with an additional path estimated from autonomy frustration to subjective vitality. We also tested and compared a third model with the direct path from autonomy to active disengagement removed and two paths between autonomy and subjective vitality, and subjective vitality and active disengagement estimated, to test the indirect relationship between autonomy frustration and active disengagement via vitality.

**Results**

**Descriptive Statistics**

Means, standard deviations, internal consistency values, and bivariate correlations for all measurement scales are presented in Table 1. All mean values, with the exception of subjective vitality, were below the midpoint of their scales. Cronbach’s alpha values all demonstrated satisfactory internal consistency ($\alpha > .70$). Teacher control was found to correlate positively with the frustration of both needs and both types of disengagement, and negatively with vitality. In accordance with SDT, autonomy and competence frustration were positively correlated with each other. Both autonomy and competence frustration negatively correlated with vitality. The frustration of competence negatively correlated with vitality and
positively with passive disengagement, but did not correlate with active disengagement.

Autonomy frustration was found to positively correlate with both types of disengagement.

Active and passive disengagement were moderately and positively correlated with each other.

**Insert Table 1 Here**

**Confirmatory Factor Analysis**

Standardised factor loadings, residual variances and model fit values for each latent variable are presented in Table 2. Autonomy and competence frustration variables were analysed together to confirm the existence of two distinguishable latent factors. Each disengagement factor had only two items and therefore model fit indices could not be computed. Nonetheless, each item loaded strongly onto their respective latent factor. The fit indices and factor loadings of the remaining CFAs indicated that all latent variables were found to have acceptable factorial structure.

**Insert Table 2 Here**

**Primary Analysis**

Our hypothesised model (Figure 1) demonstrated acceptable fit to the data; $\chi^2 = 7340.39$; SRMR = .06; CFI = .93; RMSEA = .05 (90% confidence intervals: 0.046 - 0.054).

As illustrated in Figure 1, standardised coefficients indicated that teacher psychological control strongly and positively predicted the frustration of both autonomy and competence. Furthermore, and in line with our hypothesis, competence frustration negatively predicted feelings of pupil vitality which, in turn, negatively predicted passive disengagement. Autonomy frustration positively predicted active disengagement directly.

To rebut the competing hypothesis that autonomy frustration would be associated with reduced vitality, we added a direct pathway between these two factors. The relationship was not significant ($\beta = -.08$, $p = .57$), model fit was not improved based on $\Delta$CFI $\geq .01$ (Cheung & Rensvold, 2002) ($\chi^2 = 7340.39$; SRMR = .06; CFI = .93; RMSEA = .05), and all originally
hypothesised relationships remained significant. Finally, to rebut a third possible model, we removed the direct path between autonomy frustration and active disengagement and added paths from autonomy frustration to vitality, and vitality to active disengagement. Again model fit was not improved ($\chi^2 = 7340.39; \text{SRMR} = .07; \text{CFI} = .93; \text{RMSEA} = .05$), and paths between autonomy frustration and vitality ($\beta = -.08, p = .56$) and vitality to active disengagement ($\beta = -.03, p = .58$) were not significant. All originally hypothesised relationships remained significant.

**Indirect Effects**

To provide further support for our hypotheses, we calculated relevant indirect effects within the model. Teacher psychological control negatively predicted pupils’ subjective vitality through competence frustration ($\beta = -.38, p < .001$). Teacher psychological control positively predicted pupil active disengagement through the autonomy frustration ($\beta = .07, p < .05$). Teacher psychological control predicted passive disengagement through competence frustration and reduced feelings of vitality ($\beta = .06, p < .001$). Competence frustration was found to predict pupil passive disengagement through reduced subjective vitality ($\beta = .08, p < .001$).

**Discussion**

The purpose of this study was to determine if passive and active disengagement were associated with perceived teacher control, and to examine if the frustration of pupils’ basic psychological needs of autonomy and competence would associate differentially with separate disengagement responses. No research to date has explored if the frustration of these psychological needs may trigger different maladaptive processes in school settings. The findings of the present study provide cross-sectional evidence for an association between these needs and distinct active and passive disengagement processes.
The present findings demonstrate that pupil disengagement is indirectly associated with teachers’ psychological controlling strategies, such as adopting guilt inducing tactics, disregarding pupil opinions and using criticism to pressure pupils. The use of teacher psychological control has been associated with a range of maladaptive learning outcomes including pupil amotivation and resistance to authority (Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem, 2015), decreased academic engagement (Assor, Kaplan, Kanat-Maymon & Roth, 2005), and reduced enjoyment (Reeve & Jang, 2006). Yet despite this evidence, educators still regularly demonstrate, and often prefer, the use of psychological controlling strategies in the classroom (Newby, 1991; Reeve, 2009; Reeve & Assor, 2011; Taylor, Ntoumanis & Smith, 2009). The findings in the present study extend current knowledge by detailing potential mechanisms which explain how psychologically controlling teaching may lead to passive withdrawal or active disengagement in classrooms. Specifically teachers’ use of psychological control will thwart, rather than support, pupils’ needs of autonomy and competence in the classroom. As a consequence, pupils that perceived their autonomy to be frustrated may become disruptive and disobedient, whereas perceived competence frustration may lead to pupil passivity in class.

Our findings illustrate that pupils who perceived that their competence was frustrated were rated as passive, daydreaming pupils by their teacher. Low perceived competence has been previously associated with feelings of learned helplessness (Elliot & Dweck, 1988), amotivation (Vallerand et al., 1993), and passive detachment from school (Patrick et al., 1993). In other words, pupils that feel they do not have the ability to be successful in the classroom may withdraw passively from learning activities in an attempt to hide their perceived incompetency and avoid failure. These pupils may avoid attention and become unwilling to answer questions or offer their opinion in class. Our results also show that this relationship between competence frustration and passive disengagement may be a
consequence of reduced feelings of vitality. That is, pupils that perceive themselves as a
failure or being incapable in class will likely experience reductions in their vital energy,
resulting in passive, unenergetic behaviour. These pupils will typically avoid difficult tasks,
have reduced concentration, participate less in activities, and appear tired in class. As a result,
such passive behaviours may impede pupils’ academic development and progression, often
without the teacher’s awareness.

In line with previous evidence found within the parenting domain (Barber, 1996; Pettit et
al., 2001), autonomy frustration positively predicted active disengagement. Pupils lacking in
autonomy will struggle to apply social rules and standards to their behaviour in the classroom
(Rimm-Kaufman et al., 2002; Weinstein, Przybylski, & Ryan, 2012). For instance, pupils that
feel forced to behave in regimented ways may become restless, disobedient and disruptive.
The finding that vitality did not play a role in this process suggests that, unlike competence
frustration, perceived heteronomy does not lead to reduced energy in the classroom.
Therefore, pupils’ experience of autonomy frustration manifests as active disengagement,
disobedience and disruption. Pupils that experience autonomy frustration may actively
disengage as a method of distraction from any negative feelings associated with perceived
coercion (Skinner & Wellborn, 1997).

From a theoretical perspective, the different relationships of autonomy and
competence frustration with subjective vitality are noteworthy. Previous studies exploring
basic need satisfaction with child and adolescent samples (Adie et al., 2012; Reinboth et al.,
2004; Taylor & Lonsdale, 2010), illustrated that young learners’ vitality is more strongly
influenced by satisfying competence rather than autonomy. Our findings add to this by
suggesting that it is the frustration of competence and not autonomy that produces reduced
vitality. From an applied perspective, the different associations of autonomy and competence
frustration with vitality could be of critical importance for educators aiming to reduce
specific types of classroom disengagement. Some teachers may interpret psychological control as an effective method of engaging pupils (Reeve et al., 2014), as a response to poor pupil behaviour (Reeve, 2009) or motivation (Pelletier, Seguin Levesque, & Legault, 2002). The present work highlights reasons why this approach may be counterproductive and may result in both active and passive disengaged pupils. Thus, teacher directed interventions may be required to help teachers understand the consequences of employing psychological control and methods to avoid such strategies (Reeve & Assor, 2011). Teachers should not force pupils to do activities, but demonstrate the relevance of learning activities, and provide the opportunity for pupils to give their opinion without using controlling language (e.g. “you must” or “have to”; Assor, et al., 2002; Reeve & Jang, 2006; Reeve & Assor, 2011; Ryan & Niemiec, 2009).

**Direction for Future Research**

This study presented a number of findings concerning maladaptive teacher behaviours and internal processes that lead to different types of pupil disengagement. A particular strength of this study is the use of teacher reported pupil disengagement as it provides an observed assessment of pupil disengagement, rather than relying on a self-report measure. Nevertheless, the addition of independent classroom observations in future research may also offer an alternative account of pupil disengagement (Allen et al., 2013; Hafen et al., 2012).

Second, the cross-sectional nature of this study allowed us to explore associations with the frustration of autonomy and competence. Future studies may adopt a longitudinal method to explore if different disengaging processes are indicators of prolonged academic problems. For example, longitudinal work could investigate if the passive responses associated with competence frustration result in increased class truancy levels, school drop-out or decreased performance expectations over a longer time period. Similarly, active disengagement
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associated with autonomy frustration may be associated with increased classroom punishments, school suspensions and even school exclusions.

Finally, the concept of engagement versus disengagement is considered as a multidimensional paradigm comprising behavioural, cognitive, and emotional components (Fredericks et al., 2004; Skinner & Belmont, 1993; Skinner, Kindermann, Connell & Wellborn, 2009). The present study exclusively focused on teacher perceptions of behavioural components. The addition of emotional and cognitive components may also provide educators and researchers an understanding of negative feelings that may accompany these maladaptive behaviours. For instance, previous work found perceived competence to be the only significant predictor of anxiety whilst autonomy was the only significant predictor of frustration (Skinner et al., 2008). It may be that anxiety is associated with passive disengagement whilst feelings of frustration contribute to active disengagement. Thus, the addition of emotional responses to future work may provide a more comprehensive understanding of the concept of classroom disengagement.

Conclusions

The findings from the current study highlight distinct correlates of autonomy and competence and identify different mechanisms underpinning two separate types of pupil disengagement. Teacher psychological control was found to be associated with both processes, stressing the importance for schools and educators to avoid applying such psychological control in classrooms. Whilst most teachers may apply controlling strategies with the well-meaning intention of engaging pupils, the adoption of such control may promote pupils to become passively or actively disengaged in classrooms.
References


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### Table 1
Descriptive Statistics and Bivariate Correlations Among Study Variables

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<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
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<tr>
<td>1. Teacher Control</td>
<td>1-5</td>
<td>2.19</td>
<td>0.77</td>
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<td>2. Autonomy Frustration</td>
<td>1-7</td>
<td>2.45</td>
<td>0.96</td>
<td>.78</td>
<td>.69**</td>
<td>-</td>
<td></td>
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<td>3. Competence Frustration</td>
<td>1-7</td>
<td>2.24</td>
<td>1.01</td>
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<td>.61**</td>
<td>.70**</td>
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<tr>
<td>4. Vitality</td>
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<td>4.69</td>
<td>1.36</td>
<td>.82</td>
<td>-.32**</td>
<td>-.41**</td>
<td>-.44**</td>
<td>-</td>
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<td>5. Active Disengagement</td>
<td>1-6</td>
<td>1.65</td>
<td>0.99</td>
<td>.84</td>
<td>.25**</td>
<td>.10*</td>
<td>.07</td>
<td>-.02</td>
<td>-</td>
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<tr>
<td>6. Passive Disengagement</td>
<td>1-6</td>
<td>1.92</td>
<td>1.06</td>
<td>.84</td>
<td>.23**</td>
<td>.18**</td>
<td>.15**</td>
<td>-.17**</td>
<td>.47**</td>
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Note: *p< .05. **p< .01.
### Table 2
Standardised Factor Loadings and Model Fit Values for Latent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor Loading</th>
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Figure 1. Structural equation model depicting two separate processes predicting active and passive classroom disengagement. For brevity, latent factor indicators are not shown.

***p<.001, **p<.01, *p<.05