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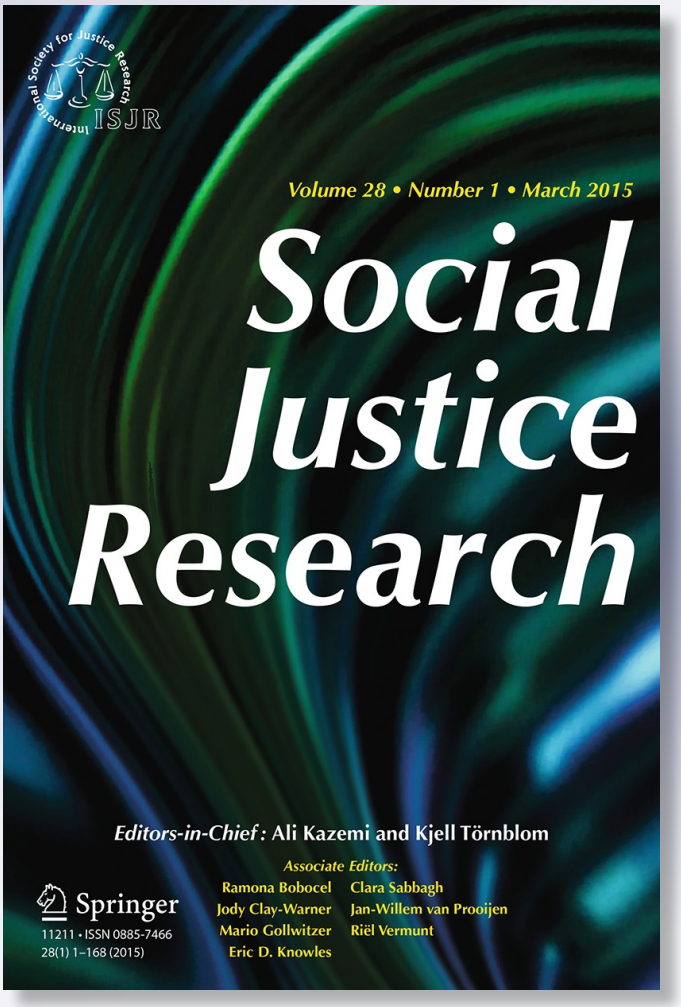

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Predicting Protests by Disadvantaged Skilled Immigrants: A Test of an Integrated Social Identity, Relative Deprivation, Collective Efficacy (SIRDE) Model

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Abstract In Canada, skilled immigrants with foreign credentials tend to experience difficulty in obtaining a suitable job in their chosen profession. This is because employers do not recognize the full value of such qualifications. We used structural equation modeling to test a social identity, relative deprivation, collective efficacy model in a prospective study of a sample of skilled immigrants ($N = 234$) disadvantaged by this "credentialing" problem. In this model, variables measured at time 1 successfully predicted participation in protest actions during the following 4 months, measured at time 2. First, we conceptualized the affective component of collective relative deprivation (CRD) as (i) the perception of discrimination by the majority group and (ii) the emotional reaction of anger, resentment and frustration in response to that discrimination. The results suggested that the latter positively influenced participation in protest actions but, unexpectedly, the former had the opposite effect. Second, the evidence suggested that respondents' identification with Canada, but not their cultural group, indirectly influenced such participation through collective efficacy and the two components of affective CRD. Third, the novel hypothesis that status insecurity mediates the relationship between cognitive CRD and the two components of affective CRD was supported. Finally, the results suggest that collective efficacy was a strong and direct determinant of participation in protest actions. The implications of these results for the development of an integrated social psychological theory that can predict participation in political protests are discussed.

Jana Garay is now working as a consultant in Mexico.

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Keywords Protest · Relative deprivation · Identity · Collective efficacy · Immigrants · Discrimination

Introduction

> "The attainment of a just society is the cherished hope of civilized men." Prime Minister Pierre Trudeau's Speech from the Throne, House of Commons, Ottawa, September 12, 1968.

The freedom to participate in peaceful protest actions in response to an injustice is the hallmark of a mature democratic society. Such actions are extremely important because they represent collective, grass-roots efforts to achieve social change for disadvantaged groups. Indeed, regardless of the success of such efforts, supporters of democracy wish to encourage and empower those who feel mistreated so that society is held accountable and can change to become more just when grievances are legitimate. Hence, understanding the social psychological factors that facilitate participation in collective protest actions is of great interest.

This paper examines the protest actions of skilled immigrants who, after moving to Canada, are experiencing "credentialing" problems; that is, they are having difficulty obtaining a suitable job because their foreign credentials and work experience are not fully recognized by Canadian employers (Grant & Nadin, 2007). This current and persistent social problem in Canada has been characterized as *brain waste* (Bauder, 2003; Reitz, 2001). It is the cause of serious concern within contemporary Canadian society because it undermines current immigration policies designed to fill existing skilled labour shortages within Canada's modern knowledge economy (Li, 2003; Li & Li, 2013; Simmons, 2010). From a social psychological perspective, skilled immigrants experiencing this "credentialing" problem share a common grievance because they can only obtain jobs for which they are overqualified; therefore, they are likely to engage in collective protest actions directed at righting this injustice. Studying these immigrants represents an opportunity to test relative deprivation theory in relation to an important contemporary problem that affects Canada and many other immigrant-receiving countries in the Western world.

Individuals who migrate as adults are permanently relocating to a new and very different cultural environment and often, in the process, become bicultural as they develop a new national identity while maintaining a strong cultural identity (Amiot & de la Sablonniere, 2010; Brown & Zagefka, 2011; Deaux, 2006; Grant, 2007; Verkuyten & Martinovic, 2012). This is one of the important reasons why people choose to immigrate to Canada: Their desire is for full social inclusion into Canada's multicultural society where they can maintain their cultural heritage in this democratic, multicultural country. Indeed, research has shown that members of non-Caucasian minority groups in Canada are chronically aware of their cultural minority status and tend to make intergroup comparisons between their cultural group and the dominant group in society (Lalonde, 2002; Matthews, 2006). Further,

informal discussions with local immigrant leaders and representatives of local immigrant-serving agencies in the city in which this study took place indicated that skilled immigrants usually take part in protest actions on behalf of members of their cultural group rather than on behalf of skilled immigrants as a whole. Therefore, this study also gave us the opportunity to examine how both the cultural identity and the new national identity of skilled immigrants with credentialing problems influence their involvement in protest actions.

The Social Identity, Relative Deprivation, Collective Efficacy (SIRDE) Model

In the field of social psychology, three theoretical perspectives have often been used to explain involvement in collective protest actions (Abrams & Randsley de Moura, 2002). The social identity, relative deprivation, collective efficacy (SIRDE) model combines these perspectives in a particular way. In this paper, we describe the model and report tests of its plausibility and of specific hypotheses derived from it using data from a prospective study of skilled Canadian immigrants disadvantaged by their credentialing problems. We begin by explaining how the model extends previous theories and by setting out each of its major components in the form of four sets of hypotheses—relative deprivation, social identity, status insecurity and collective efficacy, respectively. The model is illustrated in Fig. 1.

Relative Deprivation Hypotheses

Relative deprivation theory posits that collective relative deprivation (CRD) will result in protest actions. This type of relative deprivation is evoked by the perception that, in general, members of a disadvantaged minority group are treated less well than members of the majority in important ways (cognitive collective relative deprivation—cogCRD). Cognitive relative deprivation results in negative emotions, particularly anger, frustration and resentment (affective collective relative deprivation—affCRD). This emotional reaction motivates support for collective actions designed to address the inequity (Abrams & Grant, 2012; Dion, 1986; Dube-Simard & Guimond, 1986; Grant & Brown, 1995; Kawakami & Dion, 1995; Pettigrew, 2002; Runciman, 1966; Walker & Pettigrew, 1984; Walker & Smith, 2002).

In a study that is the precursor to the present research, Grant (2008) proposed and tested a model integrating relative deprivation theory with social identity theory to predict the protest intentions of skilled immigrants with credentialing problems. In his model, Grant postulated that the affective component of CRD should be conceptualized as a combination of both the belief that the disadvantaged group is being treated unfairly (discriminated against) by the majority group in society and negative emotional reactions to cogCRD. This conceptualization is echoed in a recent comprehensive, meta-analytic review of the relative deprivation literature which included 210 studies published from 1961 to January 2010 (Smith, Pettigrew, Pippin, & Bialosiewicz, 2012). Smith et al. posit a three-step process which results in members of disadvantaged minority groups taking part in protest actions:

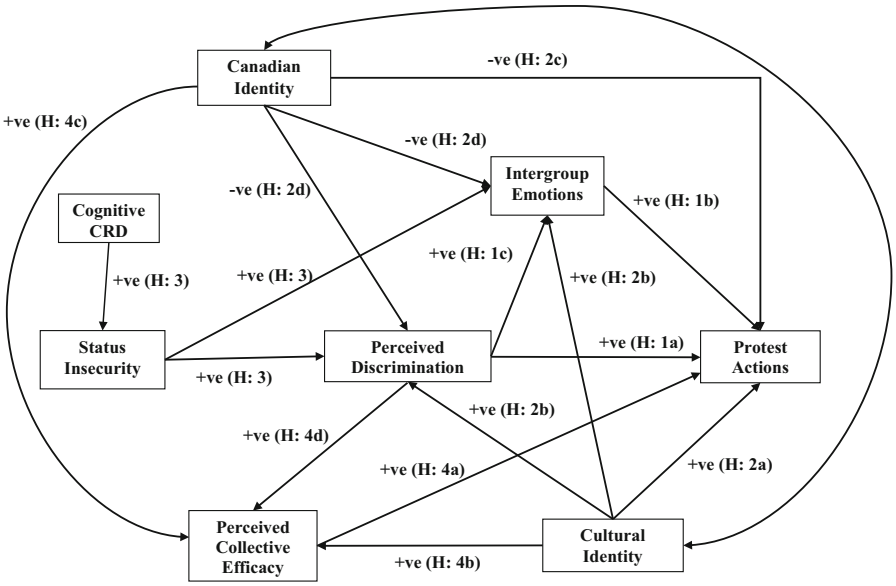

Fig. 1 The theoretical model for SIRDE used to predict participation in protest actions. The valence of the hypothesized causal relationship is either positive (+ve), or negative (−ve)

disadvantaged group members (1) compare their group with another group, (2) perceive that their group is disadvantaged and (3) feel anger and resentment because they judge this disadvantage to be unfair.

Although Smith et al. 2012 showed that justice-related affective measures were most strongly related to engagement in protest actions, they found that these affective measures could be either the respondent's emotional reaction to their group's disadvantage or their feeling that this disadvantage was unfair. However, to our knowledge, only Grant's (2008) cross-sectional study has measured both of these components of affective CRD separately. The present prospective study, therefore, moves beyond this earlier work by examining the influence of both components of affCRD measured at time 1 on the protest actions of skilled immigrants with credentialing problems in the 3–5 months that followed. Our first set of hypotheses, the *deprivation hypotheses*, concern the relation between perceptions and feelings about inequity at time 1 and protest actions between time 1 and 2 (Fig. 1). We tested hypothesis 1a: *the more strongly that skilled immigrants with credentialing problems perceive that their group is being treated unfairly (discriminated against), the more likely they are to take part in protest actions* and hypothesis 1b: *the stronger that skilled immigrants with credentialing problems feel anger, frustration, and resentment at their group's unfair treatment, the more likely they are to take part in protest actions.*

In addition, we tested hypothesis 1c: *the more that skilled immigrants with credentialing problems perceives that their group is being treated unfairly (discriminated against), the stronger will be their anger, frustration, and*

resentment. This hypothesis is derived from intergroup emotions theory (Devos, Silver, Mackie, & Smith, 2003) where it is argued that if a majority group, through discrimination, unfairly disadvantages a minority group then members of this group feel frustration and resentment because the legitimate goals of their group are blocked and anger because discrimination is unfair and illegitimate.

Social Identity Hypotheses

Social identity theory, a more general theory of intergroup relations, adds to the relative deprivation perspective by suggesting that disadvantaged minority group members will be more likely to take part in protest actions when they strongly identify with their group (Hogg & Abrams, 1988; Kelly & Breinlinger, 1996; Klandermans, 2014; Tajfel, 1978; Tajfel & Turner, 1986). This is because having a strong group identity means that belonging to a group is an important part of a person's self-concept. Hence, individuals who strongly identify with a disadvantaged group are predisposed to loyally represent the interests of that group rather than their personal interests and to actively engage in protest actions in order to enhance its social status, a status which reflects upon their own social standing. Further, the more strongly disadvantaged group members identify with their group, the more intensely they will react with anger, frustration, and resentment at their group's unfair treatment.

Recently, van Zomeren, Postmes and Spears (2008) conducted a meta-analysis and proposed a social identity model of collective action (SIMCA). Consistent with social identity theory and the SIMCA model, the evidence showed that group identification has direct and indirect influences on collective action. The evidence showed that indirect influence could occur through perceptions of injustice, emotional reactions to injustice or both. The evidence also showed that either perceived unfairness (discrimination) or negative emotions such as anger, frustration and resentment influenced collective actions and that studies that measured the negative emotions yielded significantly stronger effect sizes than studies that measured unfairness.

An important issue for the present research, not addressed in the SIMCA model, is whether more than one social identity is relevant. Specifically, we distinguish predictions relating to identity as a member of a cultural minority group from predictions relating to identity as a member of a newly acquired national group. Therefore, our second set of hypotheses (the *identity hypotheses*) focused on the role of both the immigrants' cultural group identity and their national identity with their adopted country, Canada, in motivating involvement in protest actions (Fig. 1). Specifically, regarding cultural identity, hypothesis 2a is *the more that skilled immigrants with credentialing problems identify with their disadvantaged cultural group, the more likely they are to take part in protest actions,* and, hypothesis 2b is *the more that skilled immigrants with credentialing problems identify with their cultural group, the more likely they are to believe that their group is being treated unfairly (discriminated against) and to react emotionally with anger, frustration and resentment.*

Even while sustaining identification with their culture of origin, most immigrants to Canada quickly develop a new national identity (Amiot & de la Sablonniere, 2010; Grant, 2007). Potentially then, these two identities could both influence involvement in protest actions, but in opposite ways. This is because the more strongly immigrants identify with Canada, the more they will consider themselves to be part of a superordinate national ingroup. Their growing sense of national identity would imply that they are less likely to take part in protest actions because such actions could potentially be construed as unpatriotic and as an expression of disloyalty and disrespect towards their new country (Klandermans, 2014; Klandermans, van der Toorn, & van Stekelenburg, 2008). We, therefore, tested hypothesis 2c: *the more that skilled immigrants with credentialing problems identify with their new country, Canada, the less likely they are to take part in protest actions* and hypothesis 2d: *the more immigrants identify with their new country, Canada, the less likely they are to believe that their cultural group is being treated unfairly (discriminated against) and to react emotionally with anger, resentment, and frustration.*

We note that the *identity hypotheses* do not consider the role played by immigrants' dual identity which Simon and his colleagues (Simon & Grabow, 2010; Simon & Klandermans, 2001; Simon & Ruhs, 2008) have shown motivates involvement in normative protest actions. This is because all the respondents in the present study are painfully aware that their shared grievance is caused by a lack of recognition for their foreign credentials within Canadian society. Therefore, we considered that the immigrants' national and cultural identities are separated and somewhat opposing motivational forces influencing protest actions (Grant, 2008; Klandermans, 2014) and we did not include a measure of the respondents' dual identity. As Wiley, Figueroa, and Lauricella (2014) have recently shown, a dual identity does not predict protest intentions under such circumstances perhaps because, as these authors argue, society's position on the issue is a threat to the immigrants' cultural identity.

Status Insecurity Hypothesis

Social identity theory recognizes that people are unlikely to participate in protest actions so as to achieve social change if they have the opportunity to take individual actions which maximizes their chances of upward social mobility (Taylor & McKirnan, 1984; Taylor & Moghaddam, 1994). Therefore, disadvantaged group members tend to take part in protest actions when they find it difficult to achieve upward mobility because they face discrimination due to their minority group membership (boundary impermeability). Further, SIT states that disadvantaged group members are most likely to participate in protest actions when they believe that their group has an insecure social status. That is, when their group's status is both illegitimately low and unstable (Hogg & Abrams, 1988; Tajfel, 1978; Tajfel & Turner, 1986). Similarly, as Smith and her colleagues (2012) note in their recent quantitative review, individuals will only believe that their group has been treated unfairly and feel anger, frustration and resentment (the components of affCRD) when they believe that their group's disadvantage is illegitimate. And, they will

only take collective action when such action can potentially rectify this unfairness; that is, specifically when the social situation has the potential to change (is unstable) and when group members believe that, if they act together, they can effect such change (they feel a sense of collective efficacy). This provides another way in which SIT and RDT can be integrated. It may be that minority group members react emotionally to a perceived inequity as a function of the extent to which the differential and more negative treatment of their group (cogCRD) is interpreted as indicating that the disadvantaged group's status is insecure (Fig. 1). Hypothesis 3 (the *status insecurity hypothesis*) is, therefore, that *skilled immigrants belief that their cultural group's disadvantaged status is insecure mediates the relationship between the perception of a disadvantage (cognitive CRD) and both attributing this disadvantage to unfair treatment (discrimination) and feeling anger, frustration, and resentment at this injustice (the two components of affCRD).*

The status insecurity hypothesis is speculative as neither RDT nor SIT explicitly states that status insecurity is a mediator. Indeed, cogCRD and status insecurity could independently affect affCRD. We, therefore, examined this possibility as well.

Collective Efficacy Hypotheses

Group members are rational actors who know that involvement in protest actions may result in negative personal consequences for themselves and for their families, as well as possible retaliatory actions against their group by the dominant majority group (Sturmer & Simon, 2004). Hence, they will only take part in protest actions if, through a subjective cost-benefit analysis, they come to believe that these actions are likely to be efficacious (perceived collective efficacy). This resource mobilization theory perspective (Klandermans, 1984, 1997, 2004) has recently been integrated with the relative deprivation—social identity perspective by authors who suggest that each represents a different pathway towards taking part in protest actions (Sturmer & Simon, 2004). Moreover, van Zomeren et al.'s (2008) meta-analysis supported the SIMCA prediction that identification with a disadvantaged group influences both perceived injustice and perceived collective efficacy, and all three influence involvement in collective action directly. Our fourth set of hypotheses (the *collective efficacy hypotheses*), therefore, focused on how involvement in collective protest actions is influenced by the perception that these actions will be efficacious (Fig. 1). Hypothesis 4a is that *the more that skilled immigrants with credentialing problems believe that their collective protest actions will be efficacious, the more they will take part in such actions*, and hypothesis 4b is that *the more that skilled immigrants with credentialing problems identify with their cultural group, the more they will perceive that their collective actions will be efficacious.*

Further, identification with the superordinate group should also enhance the perception of collective efficacy because then the respondents are participating in legitimate protest actions as citizens of their new country and, therefore, believe that they will receive support for these action from their new ingroup. Hence, hypothesis 4c is that *the more that skilled immigrants with credentialing problems identify with*

their new country, Canada, the more they will perceive that their collective actions will be efficacious.

Finally, conceptualizing affective CRD as the perception of unfairness (discrimination) and the negative emotional reaction to that unfairness led us to consider the connection between the two components of affCRD and collective efficacy. Specifically, we speculated that members of a disadvantaged group are more likely to perceive collective protest action as efficacious when they believe that their group is being treated unfairly. This is because individual actions to combat systemic discrimination are likely to be costly and unsuccessful. Experiencing this, disadvantaged group members may come to believe that it is much more likely that they will effect social change if they work together as a group (a belief in their group's collective efficacy). Therefore, hypothesis 4d is that *the more that skilled immigrants with credentialing problems believe that their group is discriminated against, the more that they will believe that collective protest actions will be efficacious.*

Figure 1 depicts all the hypotheses within a social psychological model which specifies the determinants of involvement in collective protest actions. This SIRDE model is a particular integration of Social Identity theory, Relative Deprivation theory, and a social psychological form of resource mobilization theory which stresses the importance of perceived collective Efficacy. It goes beyond existing theory to provide testable hypotheses regarding (1) the specific nature of the affective component of CRD; namely that it consists of a belief that the disadvantaged ingroup is being treated unfairly by the majority group (perceived discrimination) as well as anger, frustration and resentment at their group's unfair treatment, (2) the possibility that more than one group identity can influence participation in collective action and (3) whether the perception that the social status of a disadvantaged group is insecure mediates the relationship between cognitive CRD and both components of affective CRD.

To our knowledge, only one study by Grant (2008) has examined the protest actions of skilled immigrants with credentialing problems. Indeed, Grant's study was the first to measure both components of affective CRD and examine their influence on protest intentions separately. Grant's (2008) study tested a restricted model that did not include perceived collective efficacy and had no separate measure of cognitive CRD. Most importantly, Grant's (2008) study employed a cross-sectional design which only allowed the predictors of current protest intentions to be examined. The present study substantially extends that work and provides an opportunity to test the entire SIRDE model by measuring all of the key constructs within a prospective design. We test whether the social psychological variables specified by the model and measured at time 1 would predict actual protest behaviour during the following 4 months.

Method

Respondents

The participants in this study consisted of 234 skilled, mostly professionally trained, workers with foreign credentials and work experience, who were experiencing

credentialing problems when they answered the questionnaire. All respondents were living in a moderate size city in the prairie region of Canada. Almost all of these respondents were from Asia (74.0 %) or Africa (16.7 %), and just over half (52.2 %) were women. Most of the respondents (85.9 %) were married. The large majority of respondents were between the ages of 30 and 39 years (48.9 %) or 40 and 49 years (28.4 %), with most of the remainder in their 20s (12.7 %) or 50s (10.0 %). The most common countries of origin were Bangladesh (25.6 %), the Philippines (22.0 %), Nigeria (11.5 %), Pakistan (10.1 %), India (6.2 %) and China (6.2 %). The respondents were either Christian (51.8 %) or Muslim (40.5 %) or Hindu (5.6 %).

Over two-thirds of the respondents (69.4 %) had lived in Canada for 4 years or less (median = 30 months). Because it is necessary to live in Canada for at least 3 years before applying for citizenship, most respondents had permanent residency status as landed immigrants (74.8 %) and only one-fifth of the respondents (20.8 %) had become Canadian citizens.[1]

Two-thirds of the respondents had a personal income of less than $30,000 a year (64.9 %) and many respondents indicated that their entire family income was under $30,000 a year (38.8 %). This provides objective evidence that these families were experiencing serious financial problems as, in 2011, an annual income of $30,707 was the Canadian low-income cut-off for a married couple with one child (Statistics Canada, 2012, Table 2).

Procedure

Most participants (88.9 %) were recruited by five research assistants (RAs) who had recently immigrated to Canada from Asia and Africa.[2] Three quarters (73.5 %) of the data in the first wave (time 1) were collected in October and November of 2010 by four RAs. Subsequently, a research assistant from the Philippines recruited more respondents in the summer of 2011. The research assistants were trained and then asked to use their extensive community contacts in order to recruit recent skilled immigrants to Canada who, at time 1, were experiencing difficulty entering the Canadian labour market. Specifically, they were given written instructions to ensure that "*everyone* in the sample *must* be experiencing difficulties obtaining a job *because their foreign qualifications and/or work experience are not recognized by Canadian employers or Canadian professional organizations when they are first interviewed*". Approximately three to 6 months later ($M = 20.8$, SD = 5.4 weeks), the participants were re-contacted and asked to complete a version of the questionnaire which included the participants' political protest actions between the first and second wave. Just over half of the participants (52.6 %, $N = 123$) took part in this second wave of data collection (time 2). The questionnaire was written in English because all respondents, as economic class immigrants to Canada, have to

[1] A few respondents were on a visa (3.0 %) or were refugees (1.3 %). They were included in the study because they indicated their firm intention to become a permanent resident.

[2] In an initial run of the study, data from 26 respondents (11.1 %) were collected by two of the authors (Garay and Robertson) in October and November of 2009. This run tested the procedure which proved to be successful.

Table 1 Means, standard deviations and correlations among the variables included in the SIRDE model (Fig. 2)

Variable name	1	2	3	4	5	6	7	8	9
1. CogCRD									
2. Status insecurity	.31***/.22*								
3. Perceived discrimination	.08/−.01	.27***/.15^{+}							
4. Negative emotions	.11^{+}/.12	.30***/.22*	.35***/.27**						
5. Canadian identity	.00/.06	−.03/.00	−.16*/−.11	−.10^{+}/−.22*					
6. Cultural identity	.07/.06	.05/−.04	.09/.00	.08/.01	.13*/.29**				
7. Collective efficacy	−.04/−.11	−.04/−.09	.43***/.44**	.20**/.11	.18**/.22*	.12^{+}/.10			
8. Protest actions T1 to T2	NA/−.03	NA/−.03	NA/−.14^{+}	NA/.22*	NA/.03	NA/−.01	NA/.17*		
9. Protest actions prior to T1	.03/−.06	−.04/−.06	.02/.03	.15*/.21*	.13*/.06	−.01/−.02	.15*/.21*	NA/.47***	
Mean	3.23	1.73	3.70	2.28	4.65	5.64	4.18	0.37	0.50
Standard deviation	1.06	0.85	0.62	0.82	1.30	1.15	0.60	0.59	0.66
N	234	216	231	228	230	215	232	117	223

The first correlation in each entry is based upon the responses of the 168 respondents who were included in the structural equation modeling analysis for the manifest variables measured at time 1. The second correlation is based upon the responses of 106 of these respondents who, at time 2, described their protest actions between the first and second wave of data collection. The means and standard deviations and *N* are for the respondents who answered each measure at time 1. A higher score indicates more cogCRD, a more insecure social status, more discrimination, more intense negative emotions, stronger Canadian and cultural identity, more collective efficacy, and more protest actions

* $p < .05$; ** $p < .01$; *** $p < .001$

meet an English language requirement which includes being able to speak, read and write English to a given standard.

Usually, envelopes containing the questionnaire and a consent form were given to the respondents during a gathering or a meeting of a local organization. After reading through the questionnaire and signing the consent form, the respondents could take the questionnaire home to complete (a popular option), or they could complete it with the research assistant present at a mutually convenient time. In either case, the research assistant was available to help the respondent with difficult questions in-person and by telephone. The questionnaire took about an hour to complete ($M_{\text{time 1}} = 57.9$ min; $M_{\text{time 2}} = 54.3$ min) although time for completion varied widely and ranged from 15 to 120 min.

Measures

The questionnaire consisted of a mixture of well-established, multi-item scales developed primarily by researchers in the social identity theory (SIT) tradition and questions designed to probe the nature and extent of the respondents' credentialing problems. In this paper, we will only describe those measures that are specified by the theoretical model as shown in Fig. 1 (see Table 1 for their means, standard deviations and inter-correlations). These and the many other measures included in the study are described in detail elsewhere (Grant, 2008; Grant & Nadin, 2007). Unless noted otherwise, the measures were responded to on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree".

Status Insecurity

According to social identity theory, a group's status is insecure if it is perceived to be both illegitimately low and unstable. Thus, perceived illegitimacy and instability of the respondents' cultural group status were measured by the two parallel questions: "In general, is the social status of immigrants from your country of origin relative to other Canadians legitimate (stable) or not?" Respondents answered on a 5-point scale ranging from very legitimate (stable) to very illegitimate (unstable). The scores from these questions were then multiplied and divided by 5 so that the higher the score, the more the respondent thought that the social status of their cultural group was insecure (see Grant, 2008).

Cognitive CRD

The cognitive component of collective relative deprivation was indexed by three questions: "How much do you feel that immigrants from your country of origin earn in comparison to Canadians (1) who were born in Canada, (2) with the same training who were educated in Canada and (3) with a similar amount of Canadian work experience?" These questions were responded to on a 5-point scale labelled "much less", "less", slightly less", "about the same", "they earn more". These items form a reliable scale (time 1: $\alpha = .78$; time 2: $\alpha = .80$).

Affective CRD

In this study, the affective component of CRD was conceptualized as having two components: the belief that the disadvantaged group is being treated unfairly (discriminated against) by the majority group in society and the negative intergroup emotions of anger, frustration and resentment at this unfair treatment.

Perceived Discrimination Perceived discrimination against immigrants was assessed by a 10-item perceived discrimination scale with two highly interrelated ($r = .64$, $p < .001$) subscales (Grant & Nadin, 2007). Four items measure discrimination against immigrants in the Canadian labour market—e.g. "In Canada, immigrants face discrimination from potential employers because they do not have Canadian work experience" (time 1: $\alpha = .75$; time 2: $\alpha = .92$). The other six items measure more general perceptions of discrimination against immigrants—e.g. "In Canada, immigrants face discrimination because of their race" (time 1: $\alpha = .80$; time 2: $\alpha = .86$). The overall reliability of the entire scale was excellent (time 1: $\alpha = .86$; time 2: $\alpha = .92$).

Negative Intergroup Emotions Because all respondents were experiencing credentialing problems, their negative emotional reactions to this stressful situation were assessed. Specifically, they indicated the degree to which they felt angry, frustrated and resentful when "you hear about the problems skilled immigrants, like you, have when they try to gain recognition from Canadian employers for credentials and work experience obtained in your country of origin". Respondents indicated the intensity of their negative emotions on 4-point scales which ranged from "not at all" to "very" (e.g. not at all angry, a little angry, angry and very angry). The reliability of this scale was good (time 1: $\alpha = .86$; time 2: $\alpha = .83$).

Identifications

The respondents' strength of identity with Canada and with their cultural group was measured using 6-item scales adapted from a scale developed by Brown et al. (1986) which has been used extensively by intergroup relations researchers and which has good reliability and validity (Jackson & Smith, 1999). These 6-item scales were used in two previous studies of immigrants to measure their cultural and national identity and were shown to be both reliable and valid (Grant, 2007, 2008). The respondents used the scale twice: once to rate their strength of identification with Canadians (time 1: $\alpha = 0.86$, time 2: $\alpha = 0.92$) and a second time to rate their strength of identification with members of their cultural group (time 1: $\alpha = 0.87$, time 2: $\alpha = 0.93$) using a 7-point response format; they identified quite strongly with Canada ($M = 4.70$), but significantly more strongly with their heritage culture ($M = 5.63$); $t(213) = 8.65$, $p < .001$ at time 1.

Collective Efficacy

Three items measured respondents collective efficacy (time 1: $\alpha = 0.81$, time 2: $\alpha = 0.96$). Respondents were asked to indicate the extent of their (dis)agreement

with the following statements, "If they work together, skilled immigrants can influence government leaders and policy makers recognize the value of their non-Canadian credentials and work experience", "Skilled immigrants with credentialing problems can improve their employment situation in Canada through their collective efforts" and "If they work together, skilled immigrants can make the Canadian public more aware of how important it is to recognize the value of their non-Canadian credentials and work experience".

Protest Actions

In this study, ten protest actions taken by the respondents to improve the employment prospects of skilled immigrants from their cultural group were measured (see "Appendix"). These protest actions are legal and are normative within Canada's democratic society. Sample items include "I have worked for a Canadian political party because one of its main objectives is to improve the employment situation of skilled immigrants from my cultural group" and "I have participated in peaceful demonstrations to improve the employment situation of skilled immigrants from my cultural group". At time 1, the research participants indicated whether or not they had taken part in these protest actions during the last year; at time 2, the participants indicated whether or not they had taken part in the same protest actions since they had "*filled out the first questionnaire for Dr. Grant 3 to 5 months ago*". Not many respondents engaged in each of these protest behaviours so a measure was created by summing the scores for the respondents across the ten protest actions and then taking the square root so as to reduce the skewness of this variable.

Analysis

EQS 6.2 was the structural equation modeling program used to test the theoretical model shown in Fig. 1 (Bentler & Wu, 2002). Because many of the variables in this study did not have a normal distribution, the Satorra–Bentler scaled χ^2_{S-B} and adjustments to the standard errors of the path coefficients were calculated so as to correct their statistical significance using the maximum likelihood criterion for convergence (Hu, Bentler, & Kano, 1992; Tabachnick & Fidell, 2013).

The analysis strategy was first to estimate the strength of the paths among the variables measured at time 1 using past protest behaviours as a marker dependent variable because it was also measured at time 1. This allowed these parameter estimates to be based upon data from 168 respondents (71.8 % of the sample). Subsequently, the main analysis was conducted on 106 respondents (86.2 % of the sample who answered the follow-up questionnaire) in order to rigorously test the model using the causal determinants specified by the model and measured at time 1 to explain protest behaviour occurring between times 1 and 2.

For the SEM analysis predicting protest behaviours between time 1 and time 2, the sample size was too small to include a measurement model for the variables in the analysis.

The sample size for the SEM analysis of past protest behaviours at time 1 is larger, but still relatively small ($N = 168$). In order to estimate the relationships among latent variables specified by theory (see Fig. 1), we needed to balance the need to include enough measured variables to adequately specify the measurement model for each of these latent variables with the need to restrict the number of parameters estimated by the model as a whole. The solution is to create a small number of "parcels" made up by averaging the responses to several of the original questionnaire items (Tabachnick & Fidell, 2013). Therefore, three parcelled measures of Canadian identity, cultural identity and perceived discrimination were created and used in the SEM analyses reported here.[3] These parcels were constructed using the item-to-construct balance method (Little, Cunningham, Shahar, & Widaman, 2002). The three individual items measuring anger, frustration and resentment (the emotional component of affective CRD) and three items measuring perceived efficacy were the measures used to index these latent variables in this analysis.

Results

Before describing the results of the structural equation modelling analyses, it is important to note that many respondents agreed or strongly agreed that, generally, skilled immigrants are treated unfairly by potential employers (36.7 %) and that immigrants are accorded a lower status than other Canadians (72.2 %). Further, many respondents often felt that their foreign qualifications (44.2 %) and foreign work experience (43.5 %) were not valued by Canadian employers, and a similar number (40.5 %) often feared that they would have to settle for an unskilled job if they wanted to remain in Canada. This means that relative deprivation theory can be used to interpret the responses of the research participants because clearly they felt that they are members of a disadvantaged cultural group in Canadian society.

The correlation matrix showing the relationships among the variables is given in Table 1. EQS version 6.2 was used to test the model specified in Fig. 1 twice: first, and most importantly, when examining the variables measured at time 1 that influence protest behaviours between time 1 and 2 and second, when examining the predictors of past protest behaviours.[4]

[3] Five of the six items in the Canadian identity scale were used to create parcels because the sixth item, "When you hear someone who is not Canadian criticize Canadians, to what extent do you feel personally criticized?" did not load as strongly on the factor (.41) as the other five items (.75 to .83). Similar parcels were created for the cultural identity scale. For the perceived discrimination scale the three parcels were created as follows. First, the scores on the four items which make up the perceived discrimination in the labour force subscale were averaged to form an index of this type of perceived discrimination. Then two indices of the perceived general discrimination subscale were created by averaging the scores on two sets of three items selected using the item-to-construct balance method.

[4] This model constrained the relationship between strength of Canadian identity and cogCRD and strength of cultural identity and cogCRD to zero because, in an early run of the model, these relationships were estimated and were found to be small and non-significant (predicting protest actions between times 1 and 2: $r = 0.02$, $r = .04$, respectively, predicting past protest actions: $r = 0.01$, $r = -.08$, respectively).

The results from both analyses show that the model is a good fit and models the variance–covariance matrix among the measured variables well (protest actions between times 1 and 2: robust CFI = 1.00 and sRMR = .040, χ^2_{S-B} (11, $N = 106$) = 6.95, *ns*; past protest actions measured at time 1: robust CFI = 0.95 and sRMR = .063, χ^2_{S-B} (155, $N = 168$) = 225.54, $p < .001$). Further, the estimates of the strength of the causal paths among the variables used to predict past protest behaviour based upon the sample size at time 1 ($N = 168$) tended to be similar to those obtained in the analysis predicting protest behaviours between times 1 and 2 which was based upon the smaller number of respondents who completed the questionnaire at time 2 ($N = 106$). Figure 2 shows this model with the estimated standardized path coefficients.[5]

Although the overall goodness of fit of the model shown in Fig. 2 is good, the particular causal paths specified in the sets of hypotheses still need to be examined to see if they are consistent with theory. First, consider the *deprivation hypotheses* (1a through 1c). The results show that the direct path from the emotions of anger, frustration and resentment to participation in protest actions was significant as the classic theory of relative deprivation would predict (hypothesis 1b). That is, this result replicates the findings of much previous research on the role of affective CRD as a proximal causal determinant of future protest actions (see Smith et al., 2012). In the present study, however, we also tested the notion that affective CRD consists of these negative emotions *and* the perception that this differential treatment is discriminatory. In support of this theorizing and of hypothesis 1c, the more that respondents felt that immigrants are discriminated against, the more they felt anger, frustration and resentment at this unfair treatment. The results for perceived discrimination were unexpected, however, as this variable was negatively and not positively related to involvement in protest actions, a result that is directly counter to hypothesis 1a (Fig. 1). That is, the more that respondents felt that immigrants are discriminated against in Canadian society, the less likely they were to take part in protest actions.

Now consider the *identity hypotheses* (2a–2d) which are relevant to the respondents' cultural and Canadian identities. This analysis showed that none of the

[5] An additional analysis was conducted in which missing values were estimated using the maximum likelihood estimation procedure ($N = 123$). This analysis also showed that the model was a good fit; robust CFI = 1.00 and sRMR = .031, $\chi^2_{S-B}(11, N = 123) = 4.46$, *ns*. In addition, the path coefficients had very similar values to those shown in Fig. 2 with the exception of the path from Canadian identity to the emotional component of affCRD which was non-significant ($\beta = -.08$). The senior author (Grant) is particularly averse to use any estimation procedure to infer how respondents might have answered a question that they had left missing, especially when the percentage of variance accounted for in the endogenous variables is relatively small as is the case here. Estimating missing values is also questionable because the distribution of some measures, including both the Canadian and the cultural identity measures, were significantly skewed (hence the use of the Satorra–Bentler scaled χ^2_{S-B} and the associated adjustments to the standard errors of the unstandardized path coefficients). Yet the estimation procedure assumes the variables are distributed normally. Finally, it might be argued that estimating missing values is justified because it allows calculation of unbiased estimates of the population parameters from the sample. In the present study, however, the sample is idiosyncratic as the respondents were from cultural organizations known to the research assistants who had the same or similar cultural background. The data are valuable, therefore, because they allow a test of the theoretical model shown in Fig. 1 and not because they are a representative sample of skilled immigrants with credentialing problems.

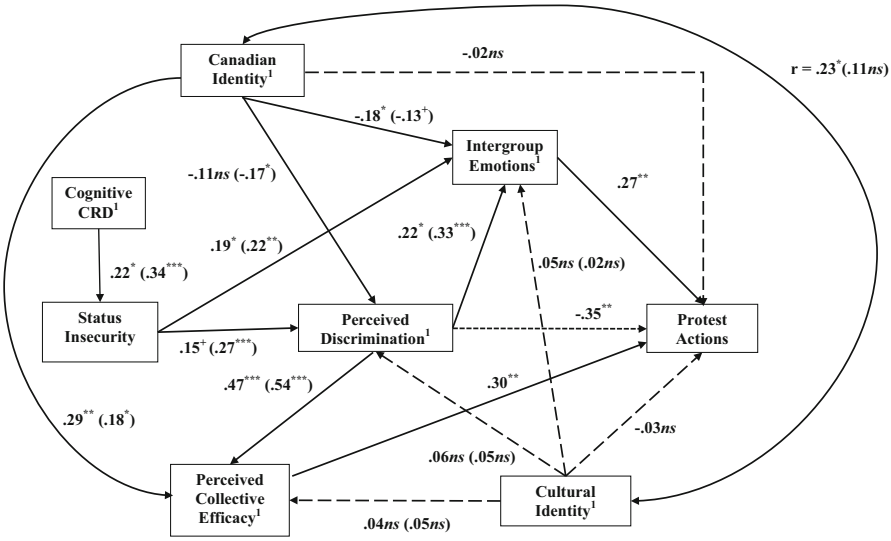

Fig. 2 The theoretical model for SIRDE used to predict participation in protest actions. Standardized path coefficients are shown. Path coefficients in *parentheses* are those based upon an analysis of the data from the first wave using past protest behaviour as a place holder ($N = 168$). The latter were estimated from a model which used three measured variables to index latent predictor variables. *Dashed lines* are used to show non-significant paths that do not support the hypotheses. The *dotted line* indicates that perceived discrimination was a negative predictor of protest actions, a finding that was counter to hypothesis 1a. $^{+}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$. [1]These are latent predictor variables in the analysis of the predictors of past protest behaviours and each is indexed by three measured variables (three parcels of items in the case of Canadian identity, cultural identity and perceived discrimination and three individual items for the others)

paths from cultural identity to protest actions directly, or to the two components of affective CRD, or to collective efficacy were significant. That is, there was no support for hypotheses 2a, 2b or 4b. Further, a comparison of this model with a model in which these paths were set to zero (the model only estimated the correlation between the measures of Canadian identity and cultural identity) did not affect the goodness of fit of the model; $\chi^2_{\text{difference}}$ (4, $N = 106$) = 1.15, *ns*.

In contrast to the results for cultural identity, some of the hypothesized paths from Canadian identity were significant and supported the model. The direct path from Canadian identity to protest intentions is not significant ($\beta = -0.02$), however, which shows that strength of national identity does not reduce involvement in protest actions directly (i.e. hypothesis 2c was not supported). Small negative causal paths from Canadian identity to perceived discrimination ($\beta = -0.11$, *ns*, $\beta = -0.17$, $p < .05$) and to the negative emotions of anger, frustration and resentment ($\beta = -0.18$, $p < .05$, $\beta = -0.13$, $p < .10$), however, lends weak support to hypothesis 2d. That is, the stronger the respondents identified with Canada, the less likely they were to feel that immigrants are discriminated against and to feel angry, frustrated and resentful at their group's inequitable treatment.

The *status insecurity hypothesis* (hypothesis 3) states that the relationship between cognitive CRD and both components of affective CRD is mediated by the belief that the disadvantaged group's status is insecure. As Fig. 1 shows, the analysis strongly supports the viability of this mediated path. Further, the data suggest that the path from cogCRD to affCRD is fully mediated by status insecurity because when direct paths from cogCRD to perceived discrimination and to negative emotions are added into the model they are not significant.[6]

Finally, we examined the *collective efficacy* hypotheses (4a–4d). As Fig. 1 shows there was strong support for three of these hypotheses. Specifically, the path from perceived efficacy to protest actions is strong and significant supporting hypothesis 4a. Further, while the path from cultural identity to collective efficacy is not significant, the path from Canadian identity to perceived collective efficacy is strong and significant. That is the evidence supports hypothesis 4c, but not hypothesis 4b. Finally, the path from perceived discrimination to collective efficacy is also strong and significant supporting hypothesis 4d.[7]

Discussion

The results generally support our SIRDE model in the sense that collective relative deprivation, identity, status insecurity and collective efficacy all contributed to the prediction of protest action and the model was a good fit to the data. The results, however, did not support all of the specific hypotheses derived from the model and, in one instance, were quite unexpected (Fig. 2).

[6] We also tested a model in which cogCRD and status insecurity are correlated exogenous variables that independently influence affCRD. Again the results strongly support our model because the paths from cogCRD to perceived discrimination and to negative emotions are not significant. Then we tested a model in which cogCRD, status instability, and status illegitimacy were correlated exogenous variables. Only instability was related to the two components of affCRD ($\beta = .23$, $p < .05$ with negative emotions; $\beta = .26$, $p < .01$ with perceived discrimination) such that greater status instability was associated with more anger, resentment and frustration and more perceived discrimination. When status instability was introduced into the model as a potential mediator between cogCRD and the two components of affCRD, however, the path from cogCRD to this variable was not significant ($\beta = -.04$). In short, these additional analyses supported hypothesis 3 by showing that only status insecurity acted as mediator between cogCRD and the two components of affCRD.

[7] Branscombe's rejection—identification hypothesis states that minority group members who experience discrimination will identify more strongly with their group as they need to rely more on its resources in order to sustain their sense of well-being in the face of rejection (Branscombe, Schmitt, & Harvey, 1999). This implies that the causal paths from Canadian identity and cultural identity to perceived discrimination are reversed. In order to test this hypothesis, a cross lagged correlational analysis was performed. The results showed that Canadian identity at time 1 correlated with perceived discrimination at time 2 controlling for perceived discrimination at time 1 ($pr = .21$, $p < .05$), but that perceived discrimination at time 1 did not correlate with Canadian identity at time 2 controlling for Canadian identity at time 1 (pr = .00, *ns*). A parallel analysis using cultural identity did not yield any significant effects, however. The analysis, therefore, suggests that the rejection–identification model is not supported, but in an unusual way: the path from a *superordinate national identity* to perceived discrimination does not appear to be reciprocal.

Collective Relative Deprivation

Starting at the heart of relative deprivation theory, the evidence supports the notion first proposed by Grant (2008) that affective CRD has two components: the perceived unfairness or discrimination experienced by disadvantaged group members and their negative emotional reaction of anger, frustration and resentment. In particular, two of the three *deprivation* hypotheses are supported. First, the results show that a strong negative emotional reaction of anger, frustration and resentment leads to engagement in protest actions (hypothesis 1b). This replicates a classic finding in the relative deprivation literature and supports the most important tenet of the theory (Abrams & Grant, 2012; Dube-Simard & Guimond, 1986; Grant & Brown, 1995; Pettigrew, 2002; Runciman, 1966; Smith et al., 2012; Walker & Smith, 2002). Further, hypothesis 1c is also supported as perceived discrimination results in a stronger negative emotional reaction. Together this is consistent with the results of a recent meta-analysis which showed that justice-related affect was most strongly related to engagement in protest behaviours (Smith et al., 2012) while separating out the measure of intergroup emotions from the measure of perceived injustice against the disadvantaged group (perceived discrimination).

To our knowledge, only one other study has measured both components of affective CRD and examines their influence on protest intentions separately (Grant, 2008). Surprisingly, the results of that study showed that perceived discrimination, but not feelings of anger, resentment and frustration predicted stronger protest intentions. The respondents, however, were asked to "describe the emotions that you feel when you have problems gaining recognition from a Canadian employer for your credentials and work experience". That is, they were describing their emotions when they faced personal difficulties rather than their emotions when they learned of the difficulties faced by their group. Although all respondents felt they had employment problems because they were a member of a cultural minority group, it may be that the measure tapped their personal emotions about rejection rather than their emotions about the situation facing the group as a whole. This is important because collective relative deprivation results from an intergroup comparison and relative deprivation theory postulates that intergroup emotions (emotions felt because of the unfair treatment of an ingroup) are most relevant when predicting engagement in protest actions on behalf of a group. Alternatively, it may be that the emotional reaction of anger, resentment and frustration has a weaker impact on a person's protest intentions [as measured in Grant's (2008) study] than on his/her decision to engage in protest actions (as measured in the present study). That is, future protest intentions may be influenced more by abstract and logical cognitive processes than protest actions which may be more affect driven.

Group Identities

The results from the present study are consistent with the results from the influential meta-analysis that led to the development of SIMCA (van Zomeren et al., 2008). Nevertheless, there is a twist: the group identity that was measured in the studies included in this meta-analysis was the participants' disadvantaged group identity. In

the present study, we measured both the respondents' identification with their cultural group (the disadvantaged group) and their new nation, Canada. Surprisingly, the former did not predict involvement in protest actions directly, through the two component of affective CRD, or through perceive collective efficacy. Rather it was identification with the superordinate national group, Canada, that indirectly influenced protest actions. Specifically, the stronger the respondents identified with Canada, the less they felt discriminated against and the less angry, frustrated and resentful they felt at this discrimination (supporting hypothesis 2d) and the more they felt a sense of collective efficacy (supporting hypothesis 4c). Counter to hypothesis 2c, however, identification with Canada did not predict involvement in protest actions directly.

In a previous study, Grant (2008) had hypothesized that cultural identity and national identity would have opposing effects on affective CRD and the results supported this hypothesis although the path from cultural identity to perceived discrimination was only marginally significant. The results from the current study suggest that this marginally significant finding is not reliable because, in the present study, the only identity that the respondents felt was relevant to engagement in protest actions was their superordinate Canadian identity. In hindsight, this makes sense in that skilled immigrants with credentialing problems are engaging in protest action so as to achieve full social inclusion. Therefore, their most salient identity is likely to be their national identity which emphasizes such inclusion. Nevertheless, this finding is unusual in the literature and suggests that majority—minority relationships are not always ingroup—outgroup relationships, but rather can sometimes be conceptualized in terms of members of minority groups identifying with a superordinate national ingroup, particularly when considering the case of recent immigrants seeking to make a permanent home in their new country. It is, however, congruent with Klandermans's (2014) recent research and theorizing regarding groups, such as the skilled immigrants in this study, who have a dual identity in the sense that they have a strong identity with their heritage culture (their culture of origin) and a strong national identity with their new country. Specifically, he suggests that "immigrants with a dual identity are more satisfied with their situation, but if they feel treated unfairly, they are more likely to engage in collective action" (p. 16). The results from the present study support this suggestion and imply that immigrants who strongly identify with their new country feel empowered as Canadians to engage in protest actions that are normative within Canadian society.

Our results are inconsistent, however, with the results of recent research in Germany by Simon and his colleagues (Simon & Grabow, 2010; Simon & Ruhs, 2008) on the effects of a dual identity on politicization. Here a dual identity is conceptualized as a blended or integrated identity rather than as two strong identities in interaction with one another. In support of this conceptualization, these authors showed that a direct measure of the strength of Turkish and Russian immigrants' dual identity predicted normative and peaceful protest action intentions, but that separate measures of their cultural and national (German) identification did not predict protest action intentions either alone or in interaction. In contrast, the results from the present study suggest that immigrants' identification

with their new country does influence their protest actions through affective CRD and collective efficacy. The theoretical perspective and the measures used in the present study are quite different, however, from those used by Simon and his colleagues. And, more specifically, the present study did not include a direct measure of dual identity. Clearly, more theoretical and empirical work is necessary in order to understand how these contrasting lines of research might be integrated.

Perceived Collective Efficacy

The result indicating that perceived discrimination causes significantly *less* rather than more involvement in protest actions was very unexpected and counter to hypothesis 1a. Further this finding is different from the results found by Grant (2008) who showed perceived discrimination against skilled immigrants was positively related to future protest action intentions. Perceived collective efficacy was not included in this earlier study, however. This was a serious omission as the results from the present study strongly support all but one of the *collective efficacy hypotheses*. As Fig. 1 shows, perceived discrimination positively influences perceived collective efficacy (hypothesis 4d) which in turn motivates participation in protest actions directly (hypothesis 4a). Further, as we stated earlier, perceived discrimination exerts a strong, albeit indirect positive influence on participation in protest actions through the emotional reaction of anger, frustration and resentment. It may be, therefore, that perceived discrimination's direct inhibitory effect on participating in protest actions was disguised in Grant's (2008) study by these indirect positive effects. Such inhibition of participation in protest actions needs to be replicated in future studies, however, and the reasons for such inhibition need to be investigated (e.g. perhaps members of disadvantaged groups fear retaliation for protest actions if they believe that their group is discriminated against in society).

Interestingly, a similar phenomenon has recently been noted in the intergroup contact literature. While contact reduces prejudice, some authors argue that it also has the effect of reducing the desire for minority groups to undertake collective protest actions so as to achieve real social change (Reicher, 2007; Wright & Lubensky, 2009). In their recent review, Pettigrew and his colleagues (Pettigrew, Tropp, Wagner, & Christ, 2011) suggest that this is too negative a view because, although contact improves attitudes toward the majority group, it also makes salient existing social inequalities and may, therefore, simultaneously "heighten a minority's sense of *group relative deprivation*" (p. 278), motivating collective action for societal change. These authors argue that intergroup contact can also facilitate social change because contact among cultural minority groups makes it more likely that they will work together for a common cause. Such a cause is exemplified by respondents in the present study who have migrated from many different Asian and Africa countries and who are working together to obtain more recognition from Canadian employers for their foreign credentials and work experience.

The results supporting the *collective efficacy hypotheses* also show that Canadian identity indirectly and positively influences participation in protest actions through perceived collective efficacy (hypothesis 4c). This result supports work by Drury and Reicher (2000, 2009) who argue that a strong group identity can function to

empower disadvantaged group members to actively participate in protest actions; nevertheless, it is unusual because it is identification with the superordinate national group which influences perceived collective efficacy rather than identification with the disadvantaged group. As stated earlier, it is our view that this superordinate identity is particularly important because skilled immigrants are protesting so as to achieve full inclusion into Canada's multicultural society and, in particular, full economic inclusion into the Canadian labour market. That is, this result seems to exemplify one way in which collective action can achieve social change through increasing "the salience of an inclusive superordinate identity, so that advantaged group members perceive disadvantaged group members as part of a larger social identity, or we" (Louis, 2009, p. 730).

Status Insecurity

Apart from considering the role of group identity in predicting protest actions, the present study integrates social identity theory with relative deprivation theory in another way. While the latter suggests that the perception of a disadvantage relative to the majority group (cognitive CRD) is a necessary precondition for affective CRD to be evoked, the former suggests that minority group members will only protest if they perceive that their group's social status is insecure. The specific integration that we suggest and test for the first time in this study is that the perception that the disadvantaged group's status is insecure arises out of the perception of disadvantage (cogCRD) and evokes what Smith et al. 2012 call justice-related affect (affCRD). In other words, the perception of status insecurity mediates the relationship between cognitive and affective CRD (hypothesis 3—the *insecurity hypothesis*). The evidence supports this interesting hypothesis, but given that it has not been tested before, more research is needed in order to examine it further.

Limitations

We would be remiss if we did not discuss an important issue that limits the generalizability of our results. In the present study, we examined predictors of protest actions taken so as to achieve full inclusion into the host (Canadian) society. Of necessity, these political protest actions need to be normative in the host society so as not to antagonize other members of society and to emphasize a shared, superordinate national identity (Klandermans, 2014; Simon & Grabow, 2010). In other circumstances, disadvantaged groups engage in more non-normative protest actions to bring attention to long-standing injustices and the model must be elaborated upon to include this important nuance (Louis, Taylor, & Douglas, 2005; Wright, Taylor, & Moghaddam, 1990; Wright & Tropp, 2002). Indeed, in the extreme, separatist groups take militant social actions which, if successful, will result in complete exclusion from the host society and the formation of a new country. In this instance, protest actions depend upon the development of a radical separatist ideology which mediates the effect of affective collective relative deprivation, disadvantaged group identity and collective efficacy on their protest

actions (Abrams & Grant, 2012). In between are the protest actions of members of different social groups within society who develop politicized identities because they share a set of beliefs that society needs to fundamentally change in some way (Becker, Tausch, Spears, & Christ, 2011; Klandermans, 2014; Simon & Klandermans, 2001; Sturmer & Simon, 2004). The limitation is, therefore, that the role of ideological social change beliefs within SIRDE and the factors that result in disadvantaged group members engaging in non-normative, sometimes illegal militant protest actions need to be explicated further (see Tausch et al., 2011 for a detailed discussion of the latter).

The fact that we were able to collect data at two points in time is a major methodological strength of this study. Longitudinal designs are still correlational designs, however, because they cannot completely rule out the possibility that an unknown third variable could have caused the relationships shown in Table 1. Nevertheless, it does not seem plausible to argue that those who agreed to complete the questionnaire at time 2 had experienced a unique historic event which acted to spuriously cause the relationships found among the predictor variables and subsequent protest actions. After all, the respondents came from a wide variety of cultural and religious community groups and were tested at different times of the year. Further, the relationships found among the variables at time 1 are very similar to the relationships found among the same variables at time 2 for the more select sample that responded to the questionnaire on both occasions. Hence, it is unlikely that the sample's attrition from time 1 to time 2 spuriously caused these relationships. Nevertheless, the data from this study can only provide an initial test of the SIRDE model and the results need to be replicated. As well, the sample size was too small to test the model within any given cultural group or, indeed, any given demographic (e.g. women, older people, etc.).

Conclusion

We believe that the results demonstrate that the SIRDE model shows considerable promise as an integrated theoretical approach which provides a nuanced social psychological explanation for participation in collective protest actions. This is because the model fits the data well, but provides a level of specificity which allows unexpected and interesting findings to emerge. One example is that, for this particular group, national identity, not cultural identity, predicted protest action, albeit indirectly. Had we only measured cultural identity, we might have mistakenly concluded that identity was not a predictor of protest action. Another is the usefulness of separating affective CRD into two components—perceived discrimination and the emotional reaction of anger, frustration and resentment at this discrimination—as the results show that their effects are quite different and, for perceived discrimination, unexpected. We hope, therefore, that other researchers will find our model useful as they explore the social conditions that lead disadvantaged group members to undertake collective protest action.

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Appendix: The Protest Actions Measure

1. I have spent time helping other skilled immigrants from my cultural group find a job.
2. I have participated in peaceful demonstrations to improve the employment situation of skilled immigrants from my cultural group in Canada.
3. I have publicly supported a politician because of his/her commitment to resolving the employment problems faced by immigrants from my cultural group.
4. I have given money to an organization(s) that helps immigrants from my cultural group get established in the Canadian job market.
5. I have worked for a Canadian political party because one of its main objectives is to improve the employment situation of skilled immigrants from my cultural group.
6. I have worked with others from my cultural group to lobby local and/or provincial and/or Federal government(s) to improve the employment situation of skilled immigrants from my cultural group in Canada.
7. I have attended meetings to discuss the employment problems faced by immigrants from my cultural group.
8. I have contacted the media to publicize the employment problems faced by immigrants from my cultural group.
9. I have signed a petition to improve the employment problems faced by immigrants from my cultural group.
10. I have worked with a group of skilled immigrants and Canadians from many different countries in order to try and improve the employment conditions of all skilled immigrants to Canada.

Note Respondents were asked, at time 1, whether they had taken part in each of these protest actions in the past year. Then, at time 2, they were asked if they had taken part in each of these protest actions in the period between time 1 and time 2.

References

Abrams, D., & Grant, P. R. (2012). Testing the social identity – relative deprivation (SIRD) model of social change: The political rise of Scottish nationalism. *British Journal of Social Psychology, 51*, 674–689.

Abrams, D., & Randsley de Moura, G. (2002). The psychology of collective political protest. In V. C. Ottati, R. S. Tindale, J. Edwards, D. O'Connell, E. Posavac, E. Suarez-Balcazar, L. Heath, & F. Bryant (Eds.), *The social psychology of politics: Social psychological application to social issues* (Vol. 5, pp. 193–214). New York: Plenum Press.

Amiot, C. E., & de la Sablonniere, R. (2010). Facilitating the development and integration of multiple social identities: The case of immigrants in Quebec. In R. J. Crisp (Ed.), *The psychology of social and cultural diversity* (pp. 34–61). Chichester: Wiley-Blackwell.

Bauder, H. (2003). "Brain Abuses", or the devaluation of immigrant labour in Canada. *Antipode, 35*, 699–717.

Becker, J. C., Tausch, N., Spears, R., & Christ, O. (2011). Committed dis(s)idents: Participation in radical collective action fosters disidentification with the broader in-group but enhances political identification. *Personality and Social Psychology Bulletin, 37*(8), 1104–1116.

Bentler, P. M., & Wu, E. J. C. (2002). *EQS 6 for windows: User's guide*. Encino, CA: Multivariate Software.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*, 135–149.

Brown, R., Condor, S., Mathews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology, 58*, 273–286.

Brown, R., & Zagefka, H. (2011). The dynamics of acculturation: An intergroup perspective. *Advances in Experimental Social Psychology, 44*, 129–184.

Deaux, K. (2006). *To be an immigrant*. New York: Russell Sage Foundation.

Devos, T., Silver, L. A., Mackie, D. M., & Smith, E. R. (2003). Experiencing intergroup emotions. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 111–134). New York: Psychology Press.

Dion, K. L. (1986). Response to perceived discrimination and relative deprivation. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.), *Relative deprivation and social comparison: The Ontario symposium* (Vol. 4, pp. 159–179). Hillsdale, NJ: Erlbaum.

Drury, J., & Reicher, S. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology, 39*, 579–604.

Drury, J., & Reicher, S. (2009). Collective psychological empowerment as a model of social change: Researching crowds and power. *Journal of Social Issues, 65*, 707–725.

Dube-Simard, L., & Guimond, S. (1986). Relative deprivation and social protest: The personal-group issue. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.), *Relative deprivation and social comparison: The Ontario symposium* (Vol. 4, pp. 201–216). Hillsdale, NJ: Erlbaum.

Grant, P. R. (2007). Sustaining a strong cultural and national identity: The acculturation of immigrants and second generation Canadians of Asian and African descent. *Journal of International Migration and Integration, 8*, 89–116.

Grant, P. R. (2008). The protest intentions of skilled immigrants with credentialing problems: A test of a model integrating relative deprivation theory with social identity theory. *British Journal of Social Psychology, 47*(4), 687–705.

Grant, P. R., & Brown, R. (1995). From ethnocentrism to collective protest: Responses to relative deprivation and threats to social identity. *Social Psychology Quarterly, 58*(3), 195–211.

Grant, P. R., & Nadin, S. (2007). The credentialing problems of foreign trained personnel from Asia and Africa intending to make their home in Canada: A social psychological perspective. *Journal of International Migration and Integration, 8*, 141–162.

Hogg, M. A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London: Routledge.

Hu, L.-T., Bentler, P. M., & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted? *Psychological Bulletin, 112*, 351–362.

Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin, 25*, 120–135.

Kawakami, K., & Dion, K. L. (1995). Social identity and affect as determinants of collective action. *Theory and Psychology, 5*, 551–577.

Kelly, C., & Breinlinger, S. (1996). *The social psychology of collective action*. Basingstoke: Taylor & Francis.

Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review, 49*, 583–600.

Klandermans, B. (1997). *The social psychology of protest*. Oxford: Blackwell.

Klandermans, B. (2004). The demand and supply of participation: Social-psychological correlates of participation in social movements. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.), *The Blackwell companion to social movements* (pp. 360–379). Oxford: Blackwell.

Klandermans, B. (2014). Identity politics and politicized identities: Identity processes and the dynamics of protest. *Political Psychology, 35*(1), 1–22.

Klandermans, B., van der Toorn, J., & van Stekelenburg, J. (2008). Embeddedness and identity: How immigrants turn grievances into action. *American Sociological Review, 73*, 992–1012.

Lalonde, R. N. (2002). Testing the social identity—intergroup differentiation hypothesis: "We're not Americans, Eh!". *British Journal of Social Psychology, 41*, 611–630.

Li, P. S. (2003). *Destination Canada: Immigration debates and issues*. Oxford: Oxford University Press.

Li, P., & Li, E. X. (2013). Decomposing immigrants' economic integration in earnings disparity: racial variations in unexpected returns. *Canadian Ethnic Studies, 45*(3), 81–94.

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*, 151–173.

Louis, W. (2009). Collective action—and then what? *Journal of Social Issues, 65*(4), 727–748.

Louis, W. R., Taylor, D. M., & Douglas, R. L. (2005). Normative influence and rational conflict decisions: Group norms and cost-benefit analyses for intergroup behaviour. *Group Processes and Intergroup Relations, 8*(4), 355–374.

Matthews, K. C. (2006). Perceiving discrimination: Psychological and sociopolitical barriers. *Journal of International Migration and Integration, 7*, 367–387.

Pettigrew, T. F. (2002). Summing up: Relative deprivation as a key social psychological construct. In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 351–373). Cambridge: Cambridge University.

Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations, 35*, 271–280.

Reicher, S. (2007). Rethinking the paradigm of prejudice. *South African Journal of Psychology, 37*, 820–834.

Reitz, J. T. (2001). Immigrant skill utilization in the Canadian labour market: Implications of human capital research. *Journal of International Migration and Integration, 2*, 347–378.

Runciman, W. G. (1966). *Relative deprivation and social justice*. London: Routledge and Kegan Paul.

Simmons, A. B. (2010). *Immigration and Canada: Global and transnational perspectives*. Toronto: Canadian Scholars' Press Inc.

Simon, B., & Grabow, O. (2010). The politicization of migrants: Further evidence that politicized collective identity is a dual identity. *Political Psychology, 31*(5), 717–738.

Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social-psychological analysis. *American Psychologist, 56*, 319–331.

Simon, B., & Ruhs, D. (2008). Identity and politicization among Turkish immigrants in Germany: The role of dual identification. *Journal of Personality and Social Psychology, 95*, 1354–1366.

Smith, H. J., Pettigrew, T. F., Pippin, G. M., & Bialosiewicz, S. (2012). Relative deprivation: A theoretical and meta-analytic review. *Personality and Social Psychology Review, 16*, 203–232.

Statistics Canada. (2012). *Low Income Lines, 2010 to 2011*. Ottawa: Government of Canada. (Catalogue No. 75F0002M, no. 002).

Sturmer, S., & Simon, B. (2004). Collective action: Towards a dual-pathway model. *European Review of Social Psychology, 15*, 59–99.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Allyn & Bacon.

Tajfel, H. (1978). *Differentiation between social groups*. London: Academic Press.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.

Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011). Explaining radical group behaviour: Developing emotion and efficacy routes to normative and non-normative collective action. *Journal of Personality and Social Psychology, 101*(1), 129–148.

Taylor, D. M., & McKirnan, D. J. (1984). A five stage model of intergroup relations. *British Journal of Social Psychology, 23*, 291–300.

Taylor, D. M., & Moghaddam, F. M. (1994). *Theories of intergroup relations: International social psychological perspectives* (2nd ed.). Westport, CT: Greenwood Publishing Group.

Van Zomeren, M., Postmes, T., & Spears, R. (2008). Towards an integrative social identity model of collective action. A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134*, 504–535.

Verkuyten, M., & Martinovic, B. (2012). Immigrants' National identification: Meanings, determinants, and consequences. *Social Issues and Policy Review, 6*, 82–112.

Walker, I., & Pettigrew, T. F. (1984). Relative deprivation theory: An overview and conceptual critique. *British Journal of Social Psychology, 23*, 301–310.

Walker, I., & Smith, H. J. (2002). *Relative deprivation: Specification, development, and integration*. Cambridge: Cambridge University Press.

Wiley, S., Figueroa, J., & Lauricella, T. (2014). When does dual identity predict protest? The moderating roles of anti-immigrant policies and opinion-based group identity. *European Journal of Social Psychology, 44*, 209–215.

Wright, S. C., & Lubensky, M. (2009). The struggle for social equality: Collective action vs. prejudice reduction. In S. Demoulin, J. P. Leyens, & J. F. Dovidio (Eds.), *Intergroup misunderstandings: Impact of divergent social realities*. New York: Psychology Press.

Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology, 58*(6), 994–1003.

Wright, S. C., & Tropp, L. R. (2002). Collective action in response to disadvantage: Intergroup perceptions, social identification, and social change. In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 200–236). Cambridge: Cambridge University Press.