COPING WITH THREATS TO RELIGIOUS IDENTITY:
IMPLICATIONS FOR PSYCHOLOGICAL OUTCOMES, SOCIAL ACTION, AND
POLITICAL CONSCIOUSNESS

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by
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Abstract

A strong sense of membership in a valued social group, termed *social identity*, has been associated with positive psychological outcomes. Benefits appear to extend even to situations wherein the stressor involves discrimination on the basis of that group membership. However, the role of religion as both an identity and a system of beliefs for coping with stressful experiences might lend this particular social identity a protective effect exceeding that of membership in other groups, yet may also elicit stronger responses when it is challenged directly. The present investigation examined the role of religious identification in guiding appraisals of threatening events, coping responses, and subsequent psychosocial outcomes. Study 1 ($N = 142$) revealed that highly-identified individuals reported reduced maladaptive appraisal-coping processes in an effort to deal with previous trauma and, in turn, more positive psychological outcomes. Yet, in response to a laboratory stressor designed to simulate religious discrimination (Study 2; $N = 143$), high-identifiers reported counter-productive coping strategies, poorer psychological outcomes, and were more likely to take action. Moreover, such responses exceeded those elicited by a non-religious identity threat. Study 3 ($N = 420$) involved the manipulation of religious versus ethnic identity salience and indicated stronger appraisal-coping, psychosocial, and political responses following recollection of a previous experience of religious compared with ethnic discrimination. Appraisal-coping processes mediated relations in all studies, but were most evident following religious threat. It is suggested that although religious identification generally facilitates adaptive responses to stressors, its protective effects appear to be undermined when religious identity is targeted, likely reflecting the threat as an assault on the belief system itself.

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COPING WITH THREATS TO RELIGIOUS IDENTITY:
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“God is on leave” (Wiesenthal, 1998).

Although this sentiment of discouragement and despair is all too common during times of conflict or trauma, in such circumstances individuals often rely on their systems of beliefs, including religious beliefs, to help them understand or cope with stressful situations (Macavei & Miclea, 2008; Pargament, 1997; Park, 2006). However, religion may not only facilitate coping with stressful experiences, but also appears to serve as a social identity in itself (Dollinger, 2001; Freeman, 2003; Mishra, 2005; Muldoon, Trew, Todd, Rougier, & McLaughlin, 2007; Wellman & Tokuno, 2004). Indeed, from race to religion, we all belong to particular social groups that inevitably shape our responses to a range of circumstances (Tajfel, 1978, 1982; Tajfel & Turner, 1979; Turner, 1981, 1982). In this regard, an individual’s sense of religious identity should guide both religious and non-religious understandings of a threatening situation and the subsequent coping responses endorsed.

A strong sense of social identity, stemming from any number of group memberships, has been associated with positive psychological outcomes (Branscombe, Schmitt, & Harvey, 1999; Cameron, 1999; Mossakowski, 2003; Phinney, Cantu, & Kurtz, 1997; Tajfel & Turner, 1979). However, in times of crises or insecurity, some group memberships might become especially salient within one’s self-concept. It has been argued that in situations that undermine an individual’s sense of safety and security, such as violent conflict or traumatic experiences, religious identity may become particularly

important (Freeman, 2003; Kinnvall, 2004; Muldoon et al., 2007). This perhaps occurs because identification with one's religious group provides a sense of unwavering stability and "solid ground", more so than might be gained from other social identities, as religion itself offers answers in times of uncertainty and provides order in the midst of chaos (Kinnvall, 2004; Verkuyten & Yildiz, 2007). However, stressful circumstances also arise due to intolerance against one's religious group. Clearly, as demonstrated throughout history and by our current socio-political climate, threats to religious identity are common (Wellman & Tokuno, 2004). Yet, it remains uncertain how religious identity (and the beliefs therein) might alter responses to an event when it is the identity itself that is being challenged.

Although it has been suggested that an examination of how individuals respond to an identity threat within a stress and coping framework may be useful (Ashmore, Jussim, Wilder, Heppen, 2001; Haslam, 2004; Major & O'Brien, 2005), few researchers have incorporated such a model empirically (cf. Haslam, Jetten, O'Brien, & Jacobs, 2004; Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005; Haslam & Reicher, 2006; Matheson & Cole, 2004). Moreover, among studies that have integrated this framework, the analysis of coping mechanisms has primarily been restricted to social support, thus neglecting the broader array of coping responses that might be elicited by social identification and identity threat (cf. Matheson & Cole, 2004). Thus the present research, comprising three studies, investigates the role of stressor appraisals and coping responses in relation to identity strength following various threatening situations, including stressful experiences unrelated to religious identification. Moreover, given the potential benefits of group membership, the associations between religious identity strength and various well-

being outcomes are examined, as are attitudes toward action-taking following an identity threat (i.e., actions that might diminish or fuel conflict thereafter), and religiously-based political consciousness. Finally, in light of the stressful nature of the events in question, the potential roles of appraisals and coping in accounting for the relations between identity strength and those psychosocial outcomes are examined. Given the salience of religious identity in many individuals' self-conceptions (Freeman, 2003; Kinnvall, 2004; Verkuyten & Yildiz, 2007; Wimberley, 1989), coupled with a culture wherein individuals and groups are regularly targeted by others on the basis of religious beliefs and affiliation (Wellman & Tokuno, 2004), an investigation of the ways in which people attempt to manage such threats seems timely.

The Social Identity of Religion

The concept of identity in the relation between the self and society has been the subject of much theorizing and research. Social identity theory (Tajfel & Turner, 1979) has been particularly influential in providing a basic understanding of the relation between the self-concept and the social groups to which one belongs. According to this perspective, threats to one's self-esteem or well-being might be alleviated by increasing identification with a group that offers high levels of status and/or support. Turner (1982) defined a social group as a collection of individuals who perceive themselves to be members of the same social category. This *self-categorization* (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) subsequently promotes perceptions of one's social environment as consisting of an *ingroup* (in which the individual holds membership) and various *outgroup(s)* (of which the individual is not a member) (Hogg & Abrams, 1988). Social identity theory, originally developed by Tajfel (1978, 1982) and Turner (1981;

1982; Tajfel & Turner, 1979), facilitates our understanding of individuals in the context of those group memberships (Abrams & Hogg, 1990). *Social identity* is defined as “that part of the individuals’ self-concept, which derives from their knowledge of their membership in a social group (or groups) together with the value or emotional significance of that membership” (Tajfel, 1981, p.255). Social identity differs from *personal identity*, which represents distinct characteristics that are unique to the individual (e.g., competence, talent, and sociability; Deschamps & Devos, 1998; Luhtanen & Crocker, 1992). Whereas personal identity refers to self-perceptions as an individual, social identity refers to self-perceptions in terms of the social groups to which one belongs (Deschamps & Devos, 1998; Luhtanen & Crocker, 1992).

Social identity and self-categorization theories posit that identification with one’s group membership is motivated, in that “individuals seek to differentiate their own groups positively from others to achieve a positive social identity” (Turner et al., 1987, p.42). When that identity is threatened, however, individuals might engage in self-protective behaviours in order to preserve personal and collective self-esteem and well-being (Crocker & Major, 1989). Such responses could be either involuntary (e.g., anxiety; affective responses) or voluntary (e.g. coping strategies; attributing the event to prejudice rather than the self) (Major & O’Brien, 2005). Crocker and Major (1989) have argued that when such voluntary self-protective responses are successful, individual well-being will be safeguarded, but when unsuccessful, the individual will “dis-identify” with the devalued group in order to preserve self-esteem. In contrast, Branscombe and colleagues (1999) have suggested with their *rejection-identification model* that attributing negative events to prejudice is related to *reduced* well-being, especially when such events are

perceived as stable (i.e., pervasive rejection from the outgroup). In such circumstances, increased identification with the devalued group itself should serve to diminish perceptions of threat, thus protecting well-being. Clearly, the extent to which an individual strongly identifies with a group in which one holds membership may have implications for coping with a range of stressful circumstances, and hence may have implications for subsequent attitudes and well-being.

Religious identity. Although much research concerning social identity has focused on race (e.g., Branscombe et al., 1999), gender (e.g., Schmitt, Branscombe, & Postmes, 2003), and nationality (e.g., Bond, 2006), fewer studies have empirically evaluated the psychosocial or political implications of a social identity stemming from religion. It has been suggested that “the symbolic boundaries of religion provide a powerful engine for individual and group identity formation” (Wellman & Tokuno, 2004, p. 292). Indeed, although religion exists as a series of diverse yet commonly held belief systems from which individuals often gain benefits, those who are *highly-identified* with their religious group not only share a common set of beliefs but, by definition, also perceive their religious group membership as central to their self-concept, gain a sense of personal- or collective self-esteem from the group membership, and identify themselves as having a strong bond with other members of the group (Cameron, 2004). Moreover, the unique characteristics of religion that cannot be empirically disputed, including compelling affective experiences and a sense of moral authority (Wellman & Tokuno, 2004), may lend this particular social identity a personal significance exceeding that of membership in other groups (Kinnvall, 2004; Verkuyten & Yildiz, 2007; Wimberley, 1989). Although an analysis of *multiple* identities that includes religion is rare, one such study focusing on

the Sinhala Buddhist population in Sri Lanka found that religious identity was rated as more salient to individuals' self-concept than any of ten other identities (including race, nation, caste, political affiliation, town, age, gender, occupation, education, and class; Freeman, 2003). However, given that this finding occurred in the midst of Sri Lanka's ongoing civil war, religious identity salience might have been influenced by the conflict conditions that surrounded participants. Certainly, an identity is more likely to come to the forefront of an individual's self-concept when it is under threat (Jetten, Schmitt, Branscombe, & McKimmie, 2005).

Religious identity has been examined in several different contexts, such as the Protestant-Catholic divide in Northern Ireland (Cairns, Kenworthy, Campbell, & Hewstone, 2006; Leach & Williams, 1999; Muldoon et al., 2007), the array of conflicts in the Middle East (Bekerman & Horenczyk, 2004; Lybarger, 2007; Shechtman & Tanus, 2006), and the 9/11 terrorist attacks in the United States (Kruglanski, Chen, Dechesne, Fishman, & Orehek, 2007; Moskaleiko, McCauley, & Rozin, 2006). Although these conflicts may be attributed, in part, to divergent religious belief systems, there is also reason to believe that they are related to group identity (González & Brown, 2006). For example, although the conflict in Northern Ireland has always been highly political in nature (i.e., disagreements between Unionists and Nationalists regarding the most appropriate constitutional status for the region), there is considerable evidence that the intergroup tensions are largely based on religious group membership. Indeed, self-identification as a Protestant or Catholic often tends to be the most general and salient form of identity for inhabitants of that area (Muldoon et al., 2007; Stringer & Cairns, 1983), promoting ingroup favouritism and outgroup bias (Kremner, Barry, & McNally,

1986). Likewise, in Israel, efforts have been made to integrate Arab (predominantly Muslim) and Jewish citizens into peaceful social co-existence while averting the threat of religious identity erosion, which serves as a powerful group partition (Bekerman & Horenczyk, 2004). Finally, although some have contested the religious underpinnings of the 2001 terrorist attacks in the United States, there is overwhelming evidence of the *fundamentalist* religious ideology held by the attackers, which was inextricably linked to their personal and collective identity (Kruglanski et al., 2007; Post, 2005). Interestingly, levels of (primarily Catholic, Protestant, and Jewish) religious identity salience were significantly higher among American university students four days following those attacks than they were six months afterward (Moskalenko et al., 2006), suggesting that the relation between identity strength and socio-political events might also be reciprocal in nature. Moreover, this finding coincides with previous research stemming from social identity theory (e.g., Jetten et al., 2005), including Branscombe et al.'s (1999) rejection-identification model wherein perceptions of outgroup intolerance result in increased identification with the devalued ingroup.

One of the tenets that may empower religious identity is simply the belief that one's own religion is the truth (Kinnvall, 2004; Wellman & Tokuno, 2004). To be sure, people will behave in an extraordinary manner, even giving up their life, in order to protect religious truths (Kruglanski et al., 2007; Stark, 2001; Wellman & Tokuno, 2004). However, whereas advocates of some religious ideologies might perceive acts of suicide or martyrdom to inherently bestow eternal spiritual benefits (which, of course, cannot be empirically assessed), the termination of one's life obviously conflicts with more immediate (earthly) outcomes for psychological or physical health. Paradoxically,

however, psychological benefits preceding such an act may be great in highly-identified individuals (e.g., life purpose; Mahoney et al., 2005; Park, 2007). Thus, a social identity empowered by a community of members holding such strong convictions will most likely bring about benefits to personal well-being, equalling or exceeding those associated with other group memberships. Moreover, such benefits need not be restricted to social identities of fundamentalist proportion, but should also be evident as a consequence of the daily attitudes and actions of religious individuals who are guided by their system of beliefs.

Links to well-being. According to social identity theory, individuals are motivated to differentiate the ingroup (which includes the self) from the outgroup using dimensions with which the ingroup acquires a positive distinctiveness (Hogg & Abrams, 1988). This positive distinctiveness, in turn, promotes a positive social identity that subsequently encourages a sense of individual well-being (Haslam, Jetten, Postmes, & Haslam, 2009), including reduced symptoms of depression (Mossakowski, 2003), enhanced personal self-esteem (i.e., self-worth, Hogg & Abrams, 1988; Tajfel & Turner, 1979) and collective self-esteem (i.e., the value placed on one's membership in a social group; Luhtanen & Crocker, 1992). However, when an individual's identity is threatened (e.g., through stigma or discrimination), a host of negative affective and physiological stress responses may result (Dickerson & Kemeny, 2004; Major & O'Brien, 2005; Matheson & Cole, 2004). Paradoxically, although discrimination ought to be most threatening to those who identify strongly with their group, these individuals often experience the least distress when their group is threatened (Branscombe et al., 1999; Fable, Platt, & Hoey, 1998; Jetten, Branscombe, Schmitt, & Spears, 2001; Mossakowski, 2003). Consequently, as in

the case of other social identities, religious identity should be strongly linked to psychological and even physical health outcomes.

Several studies have examined the relation between religious identity and health *behaviours*, finding associations with reduced smoking (Soweid, Khawaja, & Salem, 2004) and increased intentions to follow mammography recommendations (Bowen, Singal, Eng, Crystal, & Burke, 2003) among highly-identified religious individuals. Such findings are consistent with previous research regarding the religion-health link in general (see Koenig, 1999 and Koenig & Cohen, 2002 for overviews), and might be indicative of religious individuals' reduced tendency to engage in risk behaviours (e.g., Amey, Albrecht, & Miller, 1996; Sinha, Cnaan, & Gilles, 2007). Fewer studies have examined the relations between religious identity and psychological health. Findings from the small number of studies that have, however, suggested that higher levels of religious identification were indeed related to lower levels of psychological distress in both Christian (specifically, depression; Koteskey, Little, & Matthews, 1991) and Jewish individuals (Vilchinsky & Kravetz, 2005). In addition, higher levels of subjective well-being (i.e., lower negative affect, higher positive affect and life satisfaction) were reported among highly-identified religious individuals in a representative national sample in the United States (Greenfield & Marks, 2007).

Given the role of appraisals and coping in buffering against symptoms of distress (Lazarus & Folkman, 1984), religious identity may also be related to the appraisal-coping responses that are employed to deal with stressful experiences including, but not limited to, intolerance on the basis of religious group membership. Indeed, although such religion-based threats are common, history is replete with examples wherein highly-

identified religious individuals relied on their beliefs in order to deal with a variety of group-based challenges. For example, Martin Luther King Jr.'s involvement with the black civil rights movement was closely tied to his Protestant faith (King, 1968).

Likewise, Mahatma Ghandi relied on Hindu doctrine in his efforts to bring about social and political change in both India and South Africa (Ghandi, 1962). Viktor Frankl, although victimized on the basis of his Jewish ethnicity in Nazi Germany, endured horrific events over and above religious and ethnic prejudice itself, and took solace in his religious belief system in order to find meaning (Frankl, 1985). Thus, religious identification might influence both religious and non-religious interpretations of an array of threatening circumstances, while at the same time enhance the coping resources available to the individual. In this way, the relations between religious identity and various psychosocial outcomes might be accounted for, at least in part, by the appraisal-coping processes used to deal with stressful events.

Coping: An Overview

As previously indicated, it has been suggested that an examination of responses to an identity threat within a stress and coping framework may be especially fruitful (Ashmore et al., 2001; Haslam, 2004). Specifically, the distress associated with unpredictable and uncontrollable events often leads individuals to seek support and security from other ingroup members. In a world where rapid globalization and social change are a constant, such threats are likely to become more rather than less likely, and the stability of identification (and notably religious identification, given the stability of religion itself across history and culture; Kinnvall, 2004; Verkuyten & Yildiz, 2007) with one's group particularly important. In this regard, however, just as coping responses to stressful

situations vary across individuals, such reactions might differ across groups. For instance, whereas some societies (or subgroups within a society) adhere closely to peaceful ideals in the midst of threat, others might be more likely to embrace violence as a means of dealing with the stressor, even if those actions challenge societal norms (Ashmore et al., 2001).

A stress and coping framework would further lead to the consideration of different styles of coping with stressful experiences, possibly leading to differential outcomes in terms of both individual and intergroup strife (Ashmore et al., 2001). For example, focusing on the emotional aspects of a situation versus cognitively reframing the stressor will undoubtedly lead to contrasting attitudes and behaviours at both the personal and group levels. Interestingly, there is evidence that an individual's self-definition may be reciprocally linked to the coping strategies that the individual employs (or rejects). For example, coping through emotional expression following a traumatic experience should help to incorporate experiences into one's self-concept (Pennebaker & Keough, 1999). Alternatively, the degree to which an individual identifies with one's social group might influence perceptions of the centrality of a given threat, or the resources available to deal with the stressor. Likewise, turning to one's group for support could enhance identification (Branscombe et al., 1999), whereas rejecting one's group in an attempt to cope results in dis-identification (Crocker & Major, 1989).

The stress response: Appraisals and coping. Ordinarily, when individuals encounter a stressor, they engage in cognitive appraisals regarding the significance or meaning of the event (Lazarus & Folkman, 1984). These appraisals involve an evaluation of whether the event represents a self-relevant threat (primary appraisal), and if so, they are followed by

secondary appraisals concerning whether the individual is equipped to cope with the event (Carver & Scheier, 1994; Chang, 1998; Lazarus & Folkman, 1984; Peacock & Wong, 1996). Negative appraisals reflecting greater potential threat or harm and a perceived inability to contend effectively with a stressor are associated with greater distress, as well as symptoms of depression (Alloy & Clements, 1998; Lawson, MacLeod, & Hammond, 2002). Conversely, appraisals of the stressor as a challenge from which individuals might learn or grow have been associated with improved psychological outcomes (Ferguson, Matthews, & Cox, 1999).

Appraisals may subsequently influence the coping strategies individuals adopt in response to an event, and these coping strategies can serve to buffer against negative psychological and physical outcomes (Lazarus & Folkman, 1984). Generally, coping strategies have been defined as falling into two superordinate categories, namely problem-focused and emotion-focused coping (Folkman & Lazarus, 1980). Problem-focused coping strategies typically entail cognitive or behavioural efforts, such as cognitive restructuring or problem-solving techniques, to alter the situation or one's relationship to the situation (Carver, Scheier, & Weintraub, 1989; Endler & Parker, 1994; Matheson & Anisman, 2003). Emotion-focused efforts tend to involve strategies that manage emotional aspects of the stressor, and are often divided into those strategies that entail emotional approach (managing or engaging with the emotions evoked through rumination, expression, or seeking support) versus avoidance (disengaging or denying the relevance of the event to the self) (Endler & Parker, 1994; Snyder & Pulvers, 2001).

Typically, it is thought that problem-focused coping strategies are more likely to be adopted when the individual appraises the situation as controllable, and these have been

associated with positive indices of well-being (Hynes, Callan, Terry, & Gallois, 1992; Lazarus, 1999). When the situation is appraised as uncontrollable or threatening, then emotion-focused coping strategies, especially rumination (Nolen-Hoeksema, Parker, & Larson, 1994) and emotional containment (Matheson & Anisman, 2003; Ravindran, Matheson, Griffiths, Merali, & Anisman, 2002), might predominate and these tend to be related to poorer well-being (Carver et al., 1989; Lazarus, 1999). Although emotion-focused coping is often regarded as counter-productive, there has been increasing recognition that emotional approach or engagement strategies can facilitate the ability to come to terms with feelings in emotionally charged situations and, in doing so, may reduce distress (Austenfeld & Stanton, 2004; Stanton et al., 2000; Stanton & Franz, 1999). Conversely, emotional avoidant strategies are consistently related to poorer well-being outcomes (Lodge & Feldman, 2007). Of course, the effectiveness of particular coping strategies may be situation-specific (Carver & Scheier, 1994; Folkman & Lazarus, 1980), may vary over time (DeLongis & Holtzman, 2005; Tennen, Affleck, Armeli, & Carney, 2000), and may serve different functions or goals (Mattlin, Wethington, & Kessler, 1990). For example, social support seeking might serve to promote emotional expression (e.g., venting or having a shoulder to cry on) or may be used to facilitate problem-solving (a source of information or a method of planning ways to deal with the challenge). Moreover, the relation between appraisal and coping processes is often reciprocal and dynamic (Carver et al., 1989; Folkman & Lazarus, 1980).

Religious appraisals and coping. The notion of religion within a stress and coping framework has also been considered (see Pargament, 1997, for an overview). Certainly, religious coping is commonly assessed and has frequently been found to be an effective

strategy for diminishing distress, as has a reliance on other belief systems (e.g., political beliefs; Brune et al., 2002). However, individuals may further benefit by adding the unique characteristics of religious coping (e.g., faith in a higher power to help resolve problems) to their coping battery—characteristics which seem to have independent predictive power for health and well-being beyond the effects of other explanatory variables (Pargament, 2002; Snyder, 2001). Pargament (1997) has asserted that religious coping methods are used when people face the limits of personal control. Indeed, at such a juncture, individuals might also be more likely to appraise distressing situations in religious terms (i.e., as God's will; under God's control), and such interpretations generally precede religious coping, although (as with non-religious coping) this relation is likely to be reciprocal in nature (Pargament, 1990).

Nonetheless, whereas some individuals use religion as a source of strength and as a positive coping resource (e.g., seeking spiritual support, prayer, or forgiveness), others turn away from their religious ideals (Falsetti, Resick, & Davis, 2003) or engage in forms of negative religious coping (e.g., religious denial, religious passivity, or anger toward God; Exline, 2002; Pargament et al., 2003). Positive religious coping is typically associated with benefits to health and well-being (Ano & Vasconcelles, 2005; Pargament, 1997; Pargament, Koenig, & Perez, 2000). In contrast, although negative religious coping is, not surprisingly, generally related to poorer well-being outcomes, these negative strategies may be a sign of a deeper crisis—a disruption of the belief system entirely. Consequently, negative religious coping strategies might actually undermine an individual's battery of coping resources, perhaps reflecting a threat to one's religious identity itself.

Thus, the question remains as to whether religious coping is helpful, harmful, or irrelevant? Unfortunately, the answer is yes to all three possibilities (Pargament, 1997). Although considerable research has supported the notion that religious coping is associated with positive outcomes for mental and physical health, it has also been shown that some forms of religious coping have either a deleterious relation or no relation at all to health outcomes (Ano & Vasconcelles, 2005; Pargament, 1997; Pargament et al., 2003). Given the available research, it is difficult to conclude whether religious coping, as a whole, is either an adaptive or a maladaptive coping strategy. It seems that the relations between religious coping and mental or physical health outcomes are complex and depend on many factors, which could include characteristics of the stressor (e.g., severity; Koenig, Weiner, Peterson, Meador, & Keefe, 1997; Smith, McCullough, & Poll, 2003), individual differences (e.g., religious affiliation, ethnicity; Cohen, 2002; Culver, Arena, Antoni, & Carver, 2002) and the use of positive versus negative types of religious coping methods (Pargament et al., 2000).

Links to identity strength. Given the positive associations between having a strong sense of group membership and psychological health outcomes (e.g., reduced depression, increased self-esteem), it should not be surprising that identity strength is also associated with those appraisal-coping processes that are generally considered to be of more adaptive value. For example, links have been demonstrated between a strong ethnic identity and increased use of coping strategies such as social support-seeking and problem-solving in dealing with racial discrimination among Asian Americans (Yoo & Lee, 2005). Similarly, highly-identified African Americans reported increased regulation of negative emotions and reduced social withdrawal following a medical stressor, as well

as increased cognitive restructuring following both medical and test-taking stressors. Highly-identified Caucasian Americans, however, were *less* likely to engage in self- or other-blame in response to the same test-taking stressor (Zaff, Blount, Phillips, & Cohen, 2002). Likewise, identity importance in relation to university affiliation was associated with both diminished perceptions of threat and a reduced reliance on emotion-focused coping when that group membership was threatened (Matheson & Cole, 2004).

Thus, it appears that a strong social identity plays a role in predicting which appraisal-coping processes are adopted in response to a variety of stressful life events. Overall, highly-identified individuals tend to use coping strategies that are typically considered to be effective (e.g., problem-solving, cognitive restructuring), and less likely to endorse those that are considered to be relatively ineffective (e.g., emotional coping, blame). This pattern might be indicative of greater social-support networks from which highly-identified individuals benefit (Haslam et al., 2005; Haslam & Reicher, 2006, 2007) or, alternatively, a more positive cognitive bias derived from increased strength of group membership. However, it has been argued that the *content* of social identity is important, in that “social identities are meaningful self-definitions *precisely because* of their content” (Livingstone & Haslam, 2008, p. 18). Assumptions derived from the study of one identity should therefore not be blindly applied to another. The role of *religious* identity in altering coping responses remains to be elucidated. Certainly, the previously described findings (i.e., highly-identified individuals’ tendencies to use effective coping, but to reject ineffective coping strategies), coupled with the powerful social motivations inherent to religious group membership (Wellman & Tokuno, 2004), suggest that this identity may serve an especially potent function in promoting adaptive (and discouraging

maladaptive) coping efforts in the midst of distress. Such coping responses, in turn, should help to diminish the negative outcomes associated with stressful experiences, while at the same time motivating individuals to advance social change (e.g., Ghandi, 1962; King, 1968).

Overview of the Present Research

The goal of the present research was to assess the relations between religious identity strength and various psychosocial responses, as well as the potential mediating roles of appraisal-coping processes therein. Study 1 examined the role of religious identification in predicting appraisals and coping responses to individuals' most distressing life event, including the implications for depressive affect and self-esteem derived from engaging in (or rejecting) various religious and non-religious appraisal-coping responses. Study 2 investigated these relations using a laboratory stressor to simulate a threat to individuals' religious group identity (compared to another identity under threat). Several state indices of psychological well-being, including affective responses and collective self-esteem following the threats were of particular interest. Moreover, Study 2 also assessed the role of identification and appraisal-coping responses in determining the actions that individuals were willing to endorse following an identity threat. Finally, Study 3 investigated religious identity threat (again, compared to another identity threat) in a community sample of participants. Specifically, the extent to which religious identification was related to appraisal-coping responses to a freely-recalled, real-world experience of identity threat was assessed. In addition to examining affective responses, collective self-esteem, and retrospective reports of action-taking upon recalling the threat, political consciousness was assessed. Thus, across the three studies, levels of religious

group identification were examined in relation to various psychological responses, social actions, and political attitudes, with a particular focus on the potential mediating role of appraisal-coping processes in dealing with distress, including (but not limited to) threats to individuals' religious identity itself.

STUDY 1

Distressing life events have been linked to a variety of stress-related psychological disturbances, including an increased prevalence of posttraumatic stress disorder (PTSD), depression (e.g., Rayburn et al., 2005; Witvliet, Phipps, Feldman, & Beckham., 2004), and reduced self-esteem (Bradley, Schwartz, & Kaslow, 2005). Whereas certain coping strategies might limit the negative psychological and physical consequences that are associated with stressful events, other coping strategies may be less effective or even exacerbate negative outcomes. For example, greater use of emotion-focused coping and lower levels of problem-focused coping strategies have been shown to predict greater depressive symptoms following assault (Matheson, Skomorovsky, Fiocco, & Anisman, 2007). The use of avoidant coping mediated the relation between experiences of sexual abuse and a host of subsequent stress-related symptoms (Bal, van Oost, de Bourdeaudhuij, & Crombez, 2003). Similarly, in a sample of individuals who had endured a variety of traumatic experiences (e.g., death of a loved one, serious injury, family violence), PTSD symptoms and the endorsement of passive coping strategies (i.e., self-blame, avoidance, and wishful thinking) were strongly related (Goldenberg & Matheson, 2005).

Religious coping strategies typically follow a similar pattern in that, not surprisingly, negative religious coping (e.g., blaming God) has been associated with higher levels of depression (Smith et al., 2003) and reduced self-esteem following stressful life events (Bradley et al., 2005); conversely, the opposite relations were found with regard to positive religious coping (e.g., prayer). However, distressing events in themselves might also influence the extent to which individuals identify themselves in terms of their

religious group membership and rely on their religious beliefs to cope with the experience. For example, in some cases, stressful life experiences strengthen previously held religious beliefs (Park, 2006; Shaw, Joseph, & Linley, 2005), as has been observed among some who have endured war-related trauma, including Holocaust survivors (Carmil & Breznitz, 1991; Frankl, 1985). In other cases, however, trauma or extreme distress might actually diminish the extent to which one holds the ideals associated with religious beliefs (Falsetti et al., 2003). These shifting beliefs, in turn, could manifest themselves in the level at which individuals identify with their religious group following stressful life events (i.e., decreased identification). However, given that religiosity serves a function over and above that of group identity, the effects of stressful experiences may be especially profound, threatening the very beliefs on which the identity is based and subsequently altering the ways in which individuals tend to cope with distress thereafter.

Given the role of religion as both an identity and a system of beliefs for coping with stressful experiences, the present study examined how strength of identification with a religious group influenced religious and non-religious appraisal-coping processes, and the implications for psychological outcomes (i.e., depressive affect and self-esteem). To assess these relations, participants described a previous traumatic or highly-distressing experience, and their appraisal and coping responses to that event were considered.

The processes that were expected to link religious identification and psychological outcomes are depicted in Figure 1.1. Stemming from this model, in the present study, it was hypothesized that:

- 1) Religious identity would be related to more positive psychological outcomes (i.e., lower levels of depressive affect and higher levels of self-esteem).

2) Religious identity would be related to stress appraisals; specifically, a stronger identity would be positively related to religious appraisals, as well as appraisals of the situation as controllable and as a positive challenge, while negatively related to appraisals of the conflict as threatening and central to well-being.

3) Religious identity would be related to coping strategies; specifically, a stronger identity would be positively related to religious (i.e., positive and to a lesser extent negative religious coping) and problem-focused coping, while negatively related to emotion-focused and avoidant coping strategies.

4) Both stress appraisals and coping would mediate the relations between religious identity and psychological outcomes.

Figure 1.1

Conceptual Multiple Mediator Model of Relations among Religious Identity Strength (Predictor), Appraisals and Coping Strategies (Mediators), and Psychological Outcomes

Method

Participants and Procedures

University students (103 women; 39 men) ranging in age from 17 to 62 years ($M = 21.17$; $SD = 5.93$) participated in a study described as assessing the impact of stressful life events on psychological health. Based on responses to a pre-measure administered to introductory psychology students, participants were contacted if they were currently

affiliated with any religion; however, students with no such affiliations also signed-up via the introductory psychology online system and were welcomed to participate. In addition, on-campus religious centres were contacted and their members invited to participate. A variety of religious affiliations was represented; although 26.6% ($n = 38$) of participants indicated that they were atheist or agnostic, the remaining self-identified as Catholic (25.9%; $n = 37$), Protestant (18.2%; $n = 26$), Muslim (15.5%; $n = 22$), Hindu (3.5%; $n = 5$), Buddhist (2.8%; $n = 4$), or Jewish (1.4%; $n = 2$), whereas 5.6% ($n = 8$) indicated they were affiliated with other religions (e.g., Sikh, Bahá'í). Approximately half of participants who reported their ethnic status indicated that they were Euro-Caucasian ($n = 72$, 50.4%), whereas the remainder self-identified as Asian ($n = 24$, 16.9%), Middle Eastern ($n = 23$, 16.1%), Black ($n = 10$, 7.0%), or as being of mixed ethnic status (e.g., African/Caucasian) ($n = 4$, 2.8%).

As incentive, participants received either experimental credit or \$10. After providing written informed consent, participants described their most distressing life event (in writing or by selecting from a series of event descriptions via the Traumatic Life Events Questionnaire, Kubany et al., 2000; see Appendix A). Experiences included shock (e.g., natural disaster; $n = 14$), assault ($n = 25$), death of a loved one ($n = 26$), discrimination ($n = 11$), some other type of traumatic event (e.g., witnessed serious accident; a serious animal bite; $n = 35$), and events that might be categorized as somewhat less severe yet were still highly distressing to the individual (e.g., infidelity, bankruptcy, $n = 31$).¹ Participants subsequently completed measures in which they responded to their most distressing life event in terms of both religious and non-religious appraisals of the event

and the coping strategies endorsed. In addition, participants completed measures of religious identification, depressive symptoms, and personal self-esteem. All participants were debriefed and provided with a list of contacts that included counselling services should they experience any distress following the study.

Measures

Religious identity. Cameron's (2004) Identity Scale was modified in order to assess the extent to which participants identified with their religious group. Religious identification was measured along three dimensions, including centrality (e.g., "In general, being a member of my religious group is an important part of my self-image"), esteem (e.g., "In general, I'm glad to be a member of my religious group"), and common bond (e.g., "I feel strong ties to other members of my religious group"). Participants rated each item along 6-point scales ranging from 0 (strongly disagree) to 5 (strongly agree). However, the correlations among the identity subscales were sufficiently high (r s ranged from .60 to .65) to merit creating a single index of religious identity (Cronbach's $\alpha = .86$). Given that this variable was treated as continuous in our analyses (across all religious affiliations) and atheists or agnostics do not typically form a collective in the same way as organized religious groups, as in previous research (e.g., Moskaleiko et al., 2006), atheists and agnostics were given a score of 0 on this measure².

Appraisals. Appraisals of the stressful event were assessed using the Stress Appraisal Measure (SAM; Peacock & Wong, 1990), a 28-item multidimensional scale that assesses cognitive appraisals of a given stressor situation. Respondents rated each item along 5-

¹ Although some participants reported more than one incident of a traumatic or highly distressing experience, these numbers reflect those that individuals identified as being their *most* distressing life event.

point scales ranging from 1 (not at all) to 5 (extremely). The SAM taps into several primary appraisal dimensions including perceived threat (e.g., 'How threatening is this situation?'), challenge (e.g., 'To what extent can I become a stronger person because of this problem?'), and centrality (e.g., 'Does this situation have long-term consequences for me?') (see Table 1.1 for Cronbach's α s). Although the inter-item reliability for the challenge subscale was low, in our previous research we found this subscale to yield lower reliability values than the other appraisal subscales (Ysseldyk, Matheson, & Anisman, 2009), as have the authors of the SAM (Peacock & Wong, 1990). Appraisals of control were assessed along three subscales reflecting the extent to which the event was perceived as controllable by oneself (e.g., 'Do I have the ability to do well in this situation?'), by others (e.g., 'Is there anyone who can help me manage the problem?'), or as uncontrollable by anyone (e.g., 'Is it beyond anyone's power to do anything about this situation?'). Correlations among the appraisal dimensions were moderate (see Table 1.1).

² When atheists and agnostics were excluded from analyses entirely, the pattern of findings between religious identification and the remaining variables of interest remained the same, with the exception that identification and challenge appraisals were positively related, $r = .27, p < .05$.

Table 1.1

*Correlations among Stress Appraisal Dimensions in Study 1**(Cronbach's α s on the diagonal)*

Stressor appraisals	1	2	3	4	5	6
1. Threat	.87					
2. Challenge	-.02	.56				
3. Centrality	.71***	.20*	.86			
4. Controllable by oneself	-.24**	.47***	-.05	.80		
5. Controllable by others	.09	.18*	.18*	.32***	.85	
6. Uncontrollable by anyone	.45***	-.05	.33***	-.11	.15	.73

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

Religious appraisals. As there did not exist a measure of religious *appraisals* that differentiates this process from religious *coping*, five items were designed for the purpose of this study (referred to henceforth as the Religious Appraisal Measure; RAM). Specifically, participants were asked the extent to which they felt 1) that their religion influenced how they *interpreted* the event, 2) that God was in control of the event *occurring*, 3) that God was in control of the *outcome* of the event, 4) that the event was a *positive challenge* from God, and 5) that the event was God's *will* in their life. Responses were rated along 5-point scales ranging from 1 (not at all) to 5 (extremely) and summed such that greater scores represented higher levels of religious appraisal in response to participants' most distressing life event ($\alpha = .93$).

Coping. In order to assess the multidimensional nature of coping, we employed a scale (SCOPE: Survey of Coping Profile Endorsement; Matheson & Anisman, 2003) comprising 50 items that reliably assess 14 strategies that differentiate between various stress-related responses (Mantler, Matejcek, Matheson, & Anisman, 2005; Matheson & Anisman, 2003; Matheson et al., 2005; Matheson & Anisman, 2009). The strategies assessed include a range of cognitive/behavioural (e.g., problem-solving, cognitive restructuring, active and cognitive distraction, and rumination) and socio-emotional methods (e.g., humour, social-support seeking, emotional expression, other- and self-blame, emotional containment, wishful thinking, and passive resignation), as well as religious faith. Respondents rated each item using a 5-point scale ranging from 0 (never) to 4 (almost always) in terms of whether they used each strategy to deal with their most distressing life event.

In order to reduce the number of coping variables and facilitate more parsimonious analyses, a principal components analysis with varimax rotation was conducted on the 14 coping endorsement subscales. Based on a scree test (Stevens, 2002), three components were identified, explaining 60.5% of the variance. Based on factor loadings of .45 or higher, the first factor reflected *emotion-focused* coping strategies, including rumination, emotional expression and containment, self- and other-blame, and wishful thinking ($\alpha = .88$). The second factor represented *problem-focused* coping, including problem-solving, cognitive restructuring, social support seeking, and religious faith; however, given the more detailed measures of religious coping included in the present investigation, coupled with reduced scale reliability when the religious faith subscale was included, the decision was made to exclude this subscale from the problem-focused coping component ($\alpha =$

.73). The third factor comprised *avoidant* strategies, namely active and cognitive distraction, humour, and passive resignation. Although cognitive distraction loaded onto both emotion-focused and avoidant coping, due to the increased scale reliability when it was included as an avoidant strategy and in keeping with theoretical considerations, it was included as part of the latter component ($\alpha = .65$). It should be noted that although the item-total reliability for the avoidant coping component was somewhat low, these values were based on the subscale scores (rather than the individual items contributing to them, wherein $\alpha = .82$). The coping dimensions were moderately correlated with one another (r s ranged from .34 to .52), with the strongest relation being between the emotion-focused and avoidant coping dimensions.

Religious coping. The Brief RCOPE (Pargament, Smith, Koenig, & Perez, 1998) was used to assess the extent to which participants used both positive (e.g., “Sought God’s love and care”; $\alpha = .96$) and negative (e.g., “Wondered whether God had abandoned me”; $\alpha = .87$) religious coping methods to deal with their most distressing life event. Respondents rated each item using 5-point scales ranging from 0 (not at all) to 4 (a great deal) in terms of how much or how frequently they engaged in each behaviour when dealing with their most stressful situation. The two indices of religious coping were only moderately positively correlated, $r = .39$, $p < .001$.

Depressive symptoms. The 21-item Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was used to assess depressive symptoms. Respondents selected from sets of response choices that reflected increasing degrees of problem severity (e.g., from 0 ‘I do not feel sad’ to 3 ‘I am so sad or unhappy that I can’t stand it’). Responses were summed to provide a single index of depressive

symptomatology, such that higher scores reflected greater depressive affect ($\alpha = .92$).

Self-esteem. Fourteen items were used to assess self-esteem (Ryff, 1989).

Participants rated each item using 6-point scales ranging from 1 (strongly disagree) to 6 (strongly agree) in terms of the degree to which they held positive attitudes toward themselves (e.g., “In general, I feel confident and positive about myself”). Responses were reverse-scored as needed to create a single index of self-esteem, such that higher scores reflected more positive attitudes toward the self ($\alpha = .90$).

Results

Preliminary analyses were conducted to assess outliers (i.e., greater or less than 3 z-scores) and missing data, as were a series of diagnostic measures (e.g., normal probability plots, skewness < 3) to ensure that the assumptions of our planned analyses were met. No assumptions were violated; thus, the analyses reported in the present study are those using raw participant responses.

Religious Group Differences

Given the focus of the present study on *religious* identification, it was of interest to assess whether any religious group differences existed even before identity strength was considered. One-way analyses of variance (ANOVAs) revealed several variations among those groups.³ Differences existed in levels of religious identity strength, $F(3, 97) = 4.68$, $p < .01$, religious appraisals, $F(4, 136) = 15.17$, $p < .001$, and positive religious coping, $F(4, 137) = 11.99$, $p < .001$. Follow-up multiple comparisons using Bonferroni

³ These ANOVAs included those who self-identified as atheists and agnostics, with the exception of the ANOVA conducted to assess differences in religious identity given that atheists/agnostics all received a score of 0. The “Other” religious group was comprised of individuals whose religious affiliation was represented by $n < 10$ in the present study (e.g., Buddhists, Hindus, Bahá’ís).

corrections for maintaining family-wise error rate at $p < .05$ were conducted. As seen in Table 1.2, Muslims reported significantly higher levels of religious identification than did Catholics. Not surprisingly, atheists and agnostics reported significantly lower levels of both religious appraisals and positive religious coping than did Protestants, Muslims, or those affiliated with “other” religions. Moreover, levels of religious appraisals differed among the religious groups, in that Muslims were significantly more likely to appraise their situation in religious terms and to use positive religious coping strategies than were Protestants or Catholics. Although no differences were evident between the religious groups on non-religious stressor appraisals, endorsements of avoidant coping differed, $F(4, 137) = 3.15, p < .05$; however, follow-up multiple comparisons did not yield significant differences. No differences existed between the religious groups in levels of depressive symptoms or self-esteem.⁴

⁴Although the moderating role of religious affiliation was assessed in all subsequent analyses, the effect was non-significant with the exception of the relations between religious identity and religious appraisal-coping processes. However, subsequent simple effects analyses did not yield differential patterns across religious groups among these variables. Thus, all analyses are reported collapsed across religious affiliation.

Table 1.2

Descriptive Statistics (Means, SDs) as a Function of Religious Affiliation

	Atheist/ agnostic (<i>n</i> = 38)	Catholic (<i>n</i> = 37)	Protestant (<i>n</i> = 26)	Muslim (<i>n</i> = 22)	Other (<i>n</i> = 19)
Religious identity	0.00 (0.00)	2.46 (0.91) _a	2.83(1.17) _{ab}	3.40 (1.08) _b	3.25(0.96) _{a,b}
Stressor appraisals					
Threat	3.35 (0.94)	3.28 (0.94)	2.94 (1.06)	2.73 (0.98)	3.27 (0.95)
Challenge	2.42 (0.60)	2.25 (0.79)	2.34 (0.83)	2.69 (0.77)	2.43 (1.11)
Centrality	3.43 (1.16)	3.31 (1.04)	3.55 (1.23)	3.02 (1.14)	3.49 (1.09)
Controllable by oneself	2.91 (0.79)	2.87 (0.92)	2.88 (1.03)	3.06 (0.82)	2.86 (1.09)
Controllable by others	3.00 (0.91)	2.97 (1.07)	2.99 (1.28)	2.81 (1.06)	3.42 (1.21)
Uncontrollable by anyone	2.68 (0.92)	2.65 (1.05)	2.72 (1.24)	2.39 (1.14)	3.13 (1.00)
Religious	1.26 (0.51) _a	1.96(0.98) _{a,b}	2.45 (1.42) _b	3.44 (1.45) _c	2.53(1.14) _{b,c}
Coping strategies					
Problem-focused	2.10 (0.53)	2.08 (0.96)	2.02 (0.75)	2.09 (0.75)	2.44 (0.97)
Emotion-focused	1.93 (0.69)	1.85 (0.90)	1.61 (0.88)	1.52 (0.70)	2.18 (0.93)
Avoidant	1.99 (0.40)	1.64 (0.70)	1.59 (0.70)	1.64 (0.54)	1.99 (0.64)
Positive religious	0.36 (0.59) _a	1.03(1.01) _{a,b}	1.32 (1.24) _b	2.34 (1.51) _c	1.45(1.28) _{b,c}
Negative religious	0.36 (0.57)	0.49 (0.75)	0.60 (0.91)	0.66 (0.75)	0.70 (0.81)
Depressive affect	10.75(10.25)	8.57 (7.18)	5.50 (7.17)	7.58 (10.14)	9.07(5.98)
Self-esteem	4.17 (0.75)	4.41 (0.88)	4.56 (0.75)	4.18 (0.78)	4.33 (0.70)

Note. Means in the same row that do not share sub-scripts differ at $p < .05$ using Bonferroni comparisons.

The Role of Religious Identity Strength

Psychological outcomes. A multiple regression analysis revealed that religious identity strength was associated with psychological outcomes, $R^2 = .079$, $F(2, 135) = 5.76$, $p < .01$, such that higher levels of identity strength were related to lower levels of depressive affect ($r = -.22$, $p < .01$; $\beta = -.10$, *ns*), and higher levels of self-esteem ($r = .27$, $p < .001$; $\beta = .21$, $p < .05$). Thus, as expected (Hypothesis 1), stronger religious identification was related to greater psychological health.

Appraisals. A multiple regression analysis revealed that stressor appraisals were significantly related to religious identity, $R^2 = .098$, $F(6, 130) = 2.37$, $p < .05$. In particular, stronger identification was associated with diminished appraisals of the situation as threatening ($r = -.21$, $\beta = -.41$, $ps < .01$). The remaining stressor appraisals were unrelated to religious identity. As expected, religious appraisals were also associated with identity strength, in that those who reported higher levels of religious identification appraised their distressing situation in more religious terms ($r = .65$, $p < .001$).

Coping. A multiple regression analysis conducted to assess the relation between religious identification and the three dimensions of non-religious coping indicated that religious identity was significantly related to coping endorsements in response to individuals' most distressing life event, $R^2 = .155$, $F(3, 133) = 8.17$, $p < .001$. Specifically, stronger identification was related to a reduced inclination to endorse avoidant coping strategies ($r = -.31$, $\beta = -.43$, $ps < .001$), but was not related to emotion-focused coping ($r = -.13$, $\beta = -.01$, *ns*). Problem-focused coping, in contrast, appeared to have a suppression effect, ($r = .08$, *ns*; $\beta = .28$, $p < .01$).

Finally, the relations between religious identity and religious coping were assessed. A regression analysis indicated that these variables were indeed related, $R^2 = .380$, $F(2,135) = 41.38$, $p < .001$. Examination of the zero-order correlations and regression coefficients revealed that stronger identification was associated with an increased propensity to endorse positive religious coping ($r = .60$, $\beta = .66$, $ps < .001$), whereas identification and negative religious coping were not related ($r = .12$, $\beta = -.14$, ns).

In summary, in partial support of Hypothesis 2, individuals who identified highly with their religious group appeared to have a *reduced* inclination to interpret their most distressing life event as threatening and had a *greater* propensity to interpret this event within a religious framework (e.g., under God's control). This pattern of appraisals was somewhat mirrored in the coping strategies that highly-identified individuals endorsed, in that they were less likely to rely on (non-religious) avoidant coping strategies and more likely to employ positive religious coping to deal with the event (Hypothesis 3).

Relations between Appraisal-Coping Processes and Psychological Outcomes

It was argued that appraisal-coping processes would mediate the relations between religious identity strength and the psychological outcomes. For this to be true, these mediating variables must also predict depressive symptomatology and self-esteem. Zero-order correlations were therefore assessed between the outcomes (depressive affect, self-esteem) and appraisal-coping variables (threat, religious appraisals; avoidant, positive religious coping) that were significantly related to religious identification and thus could serve as mediators. As seen in Table 1.3, threat appraisals were associated with higher levels of depressive symptomatology and lower levels of self-esteem. Conversely, religious appraisals were unrelated to both indices of psychological health, and therefore

could not mediate their relations with religious identification. Coping strategies followed a similar pattern, in that avoidant coping efforts were associated with more depressive affect and less self-esteem, whereas positive religious coping was unrelated to the psychological outcomes.

Table 1.3

Zero-order Correlations among Psychological Outcomes and Appraisal-Coping Processes related to Religious Identity Strength

	Psychological outcomes	
	Depressive affect	Self-esteem
Stressor appraisals		
Threat	.21**	-.18*
Religious	-.01	.00
Coping strategies		
Avoidant	.28***	-.28***
Positive religious	.03	.00

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

The Mediating Roles of Appraisal-Coping Processes in the Relations between Religious Identity Strength and Psychological Outcomes

Given the lower inclination of individuals with a stronger religious identity to report depressive symptoms, along with their increased levels of self-esteem, it was of interest to assess whether these relations were accounted for by appraisal-coping processes that were related to both religious identification and psychological outcomes in the present study (i.e., threat appraisals and avoidant coping). To examine these mediated models,

Preacher and Hayes' (2008) procedures for assessing multiple mediation were followed. This approach consists of using a bootstrap sampling distribution and the construction of confidence intervals in order to assess the *direct*, *indirect* (i.e., through the mediator(s)), and *total* effects of the predictor variable (i.e., identity strength) on the outcome variables (i.e., depressive affect and self-esteem, in separate analyses). The bootstrap method is considered to be superior to the Sobel test (as delineated by Baron & Kenny, 1986), in that it has greater statistical power (Mallinckrodt, Abraham, Wei, & Russell, 2006), does not assume a normal sample distribution, and is especially useful with smaller samples (i.e., more conservative) (Preacher & Hayes, 2004). Preacher and Hayes' (2008) SPSS macro for multiple mediation was used for the analyses, with 1000 bootstrap samples in each analysis and 95% bias corrected and accelerated confidence intervals.

As seen in Figure 1.2, when the potential mediating roles of the relevant appraisal-coping processes were assessed in the relation between identity strength and depressive symptomatology, this relation was reduced to non-significance. Indeed, the 95% confidence intervals for both threat appraisals and avoidant coping did not overlap zero, indicating that highly-identified religious individuals' reduced tendencies to appraise their most distressing life event as threatening and to use avoidant coping to deal with the event significantly accounted for their lower levels of depressive affect (Hypothesis 4).

Figure 1.2

Path Diagram depicting the Indirect Effects of Appraisal-Coping Processes in the Relation between Religious Identity Strength and Depressive Affect

Note. The unstandardized coefficient for the total effect of identity strength on depressive affect is presented above the horizontal arrow-line; the unstandardized coefficient for the direct effect of identity strength on depressive affect (controlling for appraisals and coping) is presented below the horizontal arrow-line. The unstandardized coefficients for the indirect effects of appraisals and coping and the bootstrapped 95% bias-corrected and accelerated confidence interval are presented inside the boxes. * $p < .05$; ** $p < .01$

When the potential mediating roles of threat appraisals and avoidant coping were assessed in the relation between identity strength and self-esteem, as seen in Figure 1.3, this relation remained significant. Nonetheless, the 95% confidence interval for avoidant coping did not overlap zero, indicating that highly-identified religious individuals' reduced tendencies to endorse avoidant coping to deal with their most distressing life event partially accounted for their increased self-esteem (Hypothesis 4).⁵

⁵ Given the potential for appraisals to influence coping, the mediating roles of appraisals in the relations between religious identity strength and coping in Study 1 are presented in Appendix B.

Figure 1.3

Path Diagram depicting the Indirect Effects of Appraisal-Coping Processes in the Relation between Religious Identity Strength and Self-Esteem

Note. The unstandardized coefficient for the total effect of identity strength on self-esteem is presented above the horizontal arrow-line; the unstandardized coefficient for the direct effect of identity strength on self-esteem (controlling for appraisals and coping) is presented below the horizontal arrow-line. The unstandardized coefficients for the indirect effects of appraisals and coping and the bootstrapped 95% bias-corrected and accelerated confidence interval are presented inside the boxes.

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

Discussion

Consistent with past research linking strength of social identification with positive psychological outcomes (Branscombe et al., 1999; Cameron, 1999; Mossakowski, 2003; Phinney et al., 1997; Tajfel & Turner, 1979), religious identity strength was associated with lower levels of depressive symptoms and higher self-esteem. Also consistent with prior research (Carver et al., 1989; Lazarus & Folkman, 1984; Matheson & Anisman, 2003), both appraisals and coping strategies were predictive of psychological health. Indeed, a subset of these factors partially mediated the relations between religious

identity strength and both depressive symptoms and self-esteem, suggesting that the appraisal-coping processes evoked in response to a stressor act as mechanisms linking religious identification and positive well-being.

Highly-identified individuals were less inclined to appraise their most distressing life experience as particularly threatening or to endorse avoidant coping (e.g., active and cognitive distraction, passive resignation) following the stressful event. In so doing, religious identity strength was related to lower vulnerability to depressive symptoms and greater levels of self-esteem (albeit only diminished avoidant coping was implicated in the latter instance). Thus, the link between religious identification and psychological health may be indicative of highly-identified individuals' ability to diminish distress by interpreting stressful life events as more benign and to resist passive tactics in an effort to resolve such experiences. These findings also suggest that highly-identified religious individuals might not only turn to religion when faced with intolerance or prejudice in an effort to diminish distress, but would also be more likely to turn coping into action more generally (as with King, Ghandi, or Frankl).

The notion has been offered that an individual's identification with a social group influences understandings of intergroup stressors (e.g., discrimination) and facilitates the ability to cope with such events (Ashmore et al., 2001; Haslam, 2004; Major & O'Brien, 2005; Matheson & Cole, 2004). However, although a small number of participants ($n = 11$) in the present study did, in fact, consider an experience of discrimination as their most distressing life event (although the specific group context of the experience is unknown), the majority of individuals reported appraisals and coping responses in relation to numerous distressing events that were unrelated to group identity (e.g., death

of a loved one, natural disaster, assault). Thus, not surprisingly, religious identity strength may be linked to understandings of events beyond the group context, as well as the coping strategies employed to deal with a variety of distressing life events. Moreover, the appraisal-coping resources used by highly-identified religious individuals went beyond religion to include non-religious appraisals and coping strategies. Hence, these findings suggest that religious identity strength (among those who view themselves as having a religious affiliation) may be fundamentally associated with individuals' tendencies to generally interpret and cope with stressful life events in an adaptive manner.

When faced with a direct threat to one's identity, however, differences across religious groups or affiliations remain unclear. Nevertheless, Muslim individuals reported higher levels of religious identification than did Catholic participants. This finding corroborates the notion that the significance of religious identity might not be equal across religious groups (Fischer, Greitemeyer, & Kastenmüller, 2007; Wellman & Tokuno, 2004). Moreover, Muslim individuals were more likely to interpret a stressor in religious terms and to rely on positive religious coping strategies following the event than were members of the other religious groups. It could be that, whereas the experience of a particularly stressful event undermined the strength of religious identity among Protestants and Catholics, such an event simply reinforced this identity among Muslim individuals. Alternatively, the difference observed with regard to levels of identity strength also coincides with evidence that group membership may be stronger in marginalized groups (Branscombe et al., 1999), and certainly within the current socio-political context wherein the data for the present study were collected, Muslims represent a minority religion. Feelings of threat associated with relatively persistent insinuations

that even “mainstream” Muslims may be connected to Islamic terrorism (Byng, 2008) might also result in increased religious identification as a protective mechanism. This said, the relations between religious identity strength and the other variables of interest in the present study were not moderated by religious affiliation. Thus, it seems that despite their diversity, individuals of different religious faiths may cope with stressors in a similar manner, deriving comparable benefits to psychological health when they strongly identify with their religious group.

It should be noted that the data were retrospective and correlational and so causal conclusions must be considered cautiously (e.g., appraisals of threat might lead to reduced social identification). Indeed, when mediated models considering alternative pathways were tested (e.g., appraisal-coping processes preceding identity strength), religious identity strength significantly mediated the relations of both threat appraisals and avoidant coping in predicting self-esteem. Thus, although it is certainly plausible that highly-identified individuals endorsed particular coping strategies that in turn enhanced well-being, it is equally likely that individuals who adopted particular appraisals or strategies for coping were more or less likely to embrace their religious identity.

Given the results of the present study, wherein the patterns of appraisals and coping in response to distressing life events differed as a function of the strength of individuals’ religious identification, the question arises as to whether similar appraisal-coping patterns might be evident when one’s religious identity itself is directly under threat. Moreover, the role of such processes in linking levels of identity strength, not only with psychological responses, but also with individual or collective social efforts to manage the threat, remains to be determined.

STUDY 2

Religious identity strength appears to be related to diminished negative psychological outcomes associated with traumatic or distressing experiences, and these relations are at least partially accounted for by the appraisals and coping responses used (or rejected) by highly-identified individuals. However, the role of appraisal-coping processes might differ when the stressor involves discrimination in the form of a direct threat to one's religious identity itself. Indeed, religion is a variable that has received increasing attention in studies of socio-political based conflict (e.g., Kruglanski et al., 2007; Marsella, 2005; Wellman & Tokuno, 2004). Although the problem of religion-fuelled conflict is not a new one, the role of religious identity in motivating individuals' responses to such threats remains unclear. Identity threats are often targeted at the group as a whole; however, individual differences in perceptions of the situation, along with the strategies used to deal with such threats, may not only influence individuals' psychological well-being following discriminatory experiences but might also serve to promote individual and collective actions that could alleviate or exacerbate conflicts rooted in religious differences.

It has been suggested that an individual's perception in a given situation that their group is being devalued or marginalized culminates in a social identity threat (Branscombe, Ellemers, Spears, & Doosje, 1999; Major & O'Brien, 2005). From this perspective, identity threat is in many ways similar to other psychosocial stressors. Indeed, like the appraisal-coping framework advanced by Folkman and Lazarus (1980) to explain the stress process, Major and O'Brien (2005) suggested that identity threat occurs under conditions where an individual appraises or identifies a stigma-relevant stressor as

one that might be harmful to their social identity, but means of coping effectively with this challenge are not available. Yet, high levels of positive identification with one's group may guard against such threats by encouraging optimism about the potential outcomes (Carver, Reynolds, & Scheier, 1994), or facilitating adaptive coping responses (e.g., Matheson & Cole, 2004; Yoo & Lee, 2005; Zaff et al., 2002). Although identity threats are common across a range of group memberships (e.g., gender, ethnicity, nationality), what may distinguish a threatened *religious* identity from other types of identity threat are the broader implications associated with the identity. Threats to one's religious identity, as well as responses to such threats, potentially surpass the individual and even group level as they might be considered to have "eternal" consequences by the threatened party (Wellman & Tokuno, 2004). Moreover, unlike other group identities, threats to religious identity not only target the individual or group, but also attack the system of beliefs on which the identity is founded. As a result, the coping resources available to deal with the threat might be undermined and the array of psychological or social responses magnified.

Threats to one's social identity often result in a variety of psychological (e.g., affective) and social (e.g., behavioural) responses (Major & O'Brien, 2005), while at the same time making salient (even as it challenges) group identity (Branscombe et al., 1999; Jetten et al., 2005). Indeed, as noted by Major and O'Brien (2005), it is important to examine multiple outcomes resulting from stigma or identity threat within one research investigation, in that efforts to attain some goals (e.g., protecting self-esteem) might inhibit efforts to realize others (e.g., social or political change). Several emotions are often elicited when identity threats occur, which may be linked to construals of the

situation or the coping strategies relied on to deal with the event (Mackie, Devos, & Smith, 2000; Yzerbyt, Dumont, Wigboldus, & Gordijn, 2003). Whereas positive feelings of strength and determination might predominate when the individual perceives they have control and possess the resources to cope effectively, more negative emotions, such as anger or fear, may prevail when the threat to the group is perceived as imminent or individuals feel the outgroup is to blame for hardships faced by one's own group members. In the same way, sadness might be the dominant emotion when individuals ruminate over perceived losses associated with the situation (Dumont, Yzerbyt, Wigboldus & Gordijn, 2003). Indeed, one needn't look further than our own proverbial backyard to find such emotions still resonating in the aftermath of the 9/11 attacks in the United States, especially given the ongoing threat of further violence (Marshall et al., 2007; Skitka, Bauman, Aramovich, & Morgan, 2006).

Similarly, appraisal-coping processes may influence the extent to which personal or collective self-esteem is preserved in discriminatory circumstances. Given that appraisals of control are typically higher among individuals who adopt a problem-focused coping orientation (Folkman & Lazarus, 1980), such group members may possess a sense of empowerment whereby high levels of collective self-esteem are maintained even in the midst of threat (Matheson & Cole, 2004; Doosje, Ellemers, & Spears, 1995; Ellemers, Spears, & Doosje, 1997). Conversely, other individuals tend to rely on emotion-focused coping strategies, such as denial, and so this orientation is likely to result in dis-identification, in that the extent to which individuals' esteem is dependent on group membership is diminished (Matheson & Cole, 2004; Major & Schmader, 1998). It should be noted, however, that collective self-esteem appears to have multiple dimensions

(Luhtanen & Crocker, 1992) that might present differently under conditions of threat. On the one hand, collective self-esteem may comprise the individual's *own* evaluations of their group membership, including how good or worthy they are as a group member, how proud they are to be a member of the group, or how important their group membership is to their self-concept (Luhtanen & Crocker, 1992). As is often the case when a group is devalued by others, paradoxically, individuals may respond with more positive evaluations on these dimensions of collective self-esteem as a self-protective strategy, especially when they were highly-identified with the group prior to the threat (Branscombe et al., 1999). On the other hand, collective self-esteem also appears to include a component that is determined by the individual's perceptions of how *others* view the group (i.e., public collective self-esteem; Luhtanen & Crocker, 1992). It has been suggested that public collective self-esteem actually serves as an autonomous dimension and might be most likely to reflect perceived hostility, thereby fostering the potential for increased ingroup favouritism and conflict insurgence between religious groups (Leach & Williams, 1999).

Finally, much in the same way that appraisals or coping strategies might be associated with affective responses or collective self-esteem, those processes are apt to be related to individuals' behavioural intentions following an identity threat (Dumont et al., 2003; Frijda, Kuipers, & ter Schure, 1989; Mackie et al., 2000; Yzerbyt et al., 2003). For instance, whereas a problem-solving approach might prompt the individual to seek advice or make plans to overcome adversity, some emotion-focused strategies (e.g., rumination, blame) could fuel responses analogous to what Ashmore et al. (2001) call *destructive coping*, in that members of the threatened group might seek to confront or harm members

of an opposing group in order to preserve group identity. Alternatively, a refusal to respond actively in any manner following an identity threat could simply reflect an avoidant coping style (LeDoux & Gorman, 2001).

The Present Study

The present study examined the associations among identity strength, appraisal-coping processes, and various psychological and social responses to an identity threat. In particular, it was of interest whether identification would be associated with several state indices of psychological well-being (i.e., affective responses and collective self-esteem) and social responses in terms of action-taking, as well as the extent to which these relations might differ as a function of whether or not identification was based on *religious* group membership (vs. another social group membership). Moreover, the extent to which individuals' responses to a religious versus non-religious identity threat were accounted for by appraisals and coping propensities was assessed (see Figure 2.1).

Self-report measures are frequently confounded with a number of dispositional or situational factors. Thus, participants in the present study were exposed to a laboratory manipulation that was intended to make salient a threat to their religious identity, compared with a control group wherein individuals' identity stemming from their university affiliation was threatened (given a sample of university students). Previous research has found that threats to university identification resulted in responses similar to those seen across other group threats, in that students responded with significantly more anger when their university was devalued (Matheson & Cole, 2004; Yzerbyt et al., 2003). Moreover, those individuals tended to deny the importance of their identity when emotion-focused coping strategies were employed and even demonstrated increased

physiological reactivity (Matheson & Cole, 2004), suggesting that the stress associated with such an identity threat was both collectively threatening and personally relevant.

It was expected that responses to an identity threat might be stronger when *religious* identity was threatened (compared with another social identity). Those responses may also vary as a function of religious affiliation (including Catholic, Protestant, Muslim and atheist/agnostic, in the present study), given variations in the perceived status of denominations. Thus, the following hypotheses were made.

Responses as a function of identity threat type and religious affiliation:

1) Appraisals, coping, affective responses, collective self-esteem, and action endorsements would be more apparent (e.g., more negative affect, higher collective self-esteem) when religious identity was threatened compared to when a university-related identity was threatened.

2) Responses would vary as a function of religious affiliation, in that the responses of Muslim individuals would be magnified, given this group's current minority status in the socio-political context examined.

3) Religious affiliation and the type of threat would interact to influence responses to the identity threat; specifically, given Hypotheses 1 and 2, it was expected that Muslim individuals responding to the religious identity threat would demonstrate the most distinct outcomes (e.g., highest negative affect).

Relations with identity strength (see Figure 2.1):

4) Identity strength (i.e., related to one's religious *or* university affiliation) would be related to more negative affective responses, higher levels of collective self-esteem, and

increased intentions for action following the relevant identity threat; however, the magnitude of those responses was expected to be greatest following religious threat.

5) Identity strength would be related to stressor appraisals. However, in contrast to Study 1, stronger identification was expected to be *positively* related to appraisals of the situation as threatening and central (given that identity itself was targeted). In line with Study 1, however, identity strength would also be positively related to appraisals of the situation as controllable and as a positive challenge.

6) Identity strength would be related to coping strategies. Specifically, given the posited protective effects of group membership, stronger identification would be positively related to problem-focused coping, and negatively related to emotion-focused and avoidant coping. In addition, religious identity strength would be positively related to religious coping (i.e., positive and to a lesser extent negative religious coping).

7) Both stressor appraisals and coping would mediate the relations between identity strength and the various psychological and social outcomes; however, those processes were expected to play a stronger role when religious identity had been threatened.

Figure 2.1

Conceptual Multiple Mediator Model of Relations among Identity Strength (Predictor), Appraisals and Coping Strategies (Mediators), and Affective Responses, Collective Self-Esteem, and Action Intentions (Outcomes)

Participants and Procedures

University students (101 women; 42 men) ranging in age from 16 to 48 years ($M = 21.04$; $SD = 5.18$) participated in a study described as assessing ways of coping with stressful life events. Based on responses to a pre-measure administered to introductory psychology students, participants were contacted if they self-identified their religious

affiliation as Catholic, Protestant, Muslim, or atheist/agnostic (the latter representing a non-religious control group). Thus, 35.0 % of participants in the present study identified themselves as Catholic ($n = 50$), 32.2% as Protestant ($n = 46$), 18.2% as Muslim ($n = 26$), whereas the remaining 14.7% self-identified as atheist/agnostic ($n = 21$). The majority of participants who reported their ethnic status indicated that they were Euro-Caucasian ($n = 94$, 65.7 %), whereas the remainder self-identified as Asian ($n = 10$, 7.0%), Black ($n = 10$, 7.0%), Middle Eastern ($n = 12$, 8.4%), East Indian ($n = 7$, 4.9%), Hispanic ($n = 3$, 2.1%), or as being of mixed ethnic status (e.g., Aboriginal/Caucasian) ($n = 7$, 4.9%).

Participants completed the study in small group sessions in the lab. After being provided with a verbal overview of the study, participants completed an informed consent form and a series of background information questions (e.g., gender, ethnicity). Participants then proceeded to complete a measure assessing strength of identity (Cameron, 2004); however, in Study 2, 44.1% ($n = 63$) of participants completed a measure of *religious* identity as in Study 1 ($\alpha = .85$; see Appendix A) whereas the remaining 55.9% completed the same measure modified to assess the strength of their *university*-related identity ($n = 80$; $\alpha = .72$) (see Appendix C).

Next, participants were exposed to a manipulation that was intended to threaten their identity (religious vs. university). Specifically, participants in the religious identity threat condition read a fictitious summary of survey results stating that the majority of non-[Catholic/ Protestant/ Muslim] Canadians do not like people of the [Catholic/ Protestant/ Muslim] faith, along with several insulting “quotes” (see Appendix C). After reading these fabricated survey results, participants were told that, in light of these findings, Carleton University was considering reducing the amount of financial support and

campus resources available for students of that particular religious group. Participants in the university threat condition read a comparable article of fictitious survey results stating that the majority of potential employers reported that they generally would not hire students from Carleton University, and were then told that the Ontario Provincial Government was considering including this kind of information in its funding formula. If that went forward, it would reduce the amount of financial support and resources provided by the province to Carleton students (see Appendix C).

Following the threat scenario, participants completed several questionnaires (see Appendix C). These included a threat manipulation check measure, presented as a “questionnaire requested by the Carleton University Psychology Department to assess what participants think when we provide them with published articles that may be relevant to them”. In addition, as in Study 1, participants completed questionnaires assessing both religious (RAM; $\alpha = .90$) and non-religious appraisals (SAM; Peacock & Wong, 1990; see Table 2.1 for r s and Cronbach’s α s), as well as religious (Brief RCOPE; Pargament et al., 1998; positive $\alpha = .96$, negative $\alpha = .84$; $r = .50$, $p < .001$), and non-religious coping (SCOPE; Matheson & Anisman, 2003). The non-religious coping dimensions replicated those used in Study 1 (i.e., problem-focused, emotion-focused, and avoidant; see Appendix A; α s $> .75$; r s ranged from .12 to .36). However, in Study 2, appraisal-coping responses were assessed in relation to the identity threat, rather than in response to a distressing life event. Finally, measures of affect, collective self-esteem, and behavioural intentions were assessed (see Appendix C). Following this final questionnaire, participants were asked to complete a short suspicion measure to determine whether they had suspected the true nature of the study.

Participants received compensation in the form of 1.5% toward their Introductory Psychology grade or \$10 for participation in the study. Full debriefing was given along with a list of contact numbers should they experience any distress. As this study involved some deception in the form of the threat scenario, all participants were asked to sign another form giving permission to use their data once debriefing had occurred, thereby providing true informed consent. Finally, in an effort to alleviate any potentially adverse consequences of our identity threat manipulation, participants were also given a “fact sheet” outlining the psychological and physical health benefits of being associated with any religion, or the advantages of being a Carleton University student.

Table 2.1

*Correlations among Stress Appraisal Dimensions in Study 2**(Cronbach's as on the diagonal)*

Stressor appraisals	1	2	3	4	5	6
1. Threat	.88					
2. Challenge	.29**	.60				
3. Centrality	.80***	.28**	.93			
4. Controllable by oneself	-.21*	.29**	-.19*	.84		
5. Controllable by others	-.15	.16	-.15	.44***	.83	
6. Uncontrollable by anyone	.25**	-.08	.09	-.24**	-.16	.68

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

Measures

Threat manipulation check. Participants rated the effectiveness of the identity-threat manipulation along ten bipolar scales ranging from 1 to 7 (modified Matheson & Cole, 2004). The first five items assessed the extent to which the article had succeeded in providing a *negative portrayal* of one's group members (as arrogant, misunderstood, disliked, disrespected, and rejected; $\alpha = .68$). However, reliability analyses revealed that "misunderstood" fit poorly with the other four items, possibly because of its benevolent rather than negative undertone. Thus, this item was not included in further analyses; $\alpha = .76$). The remaining five items assessed the *credibility* of the article (as scientific, ethical, truthful, accurate, and believable; $\alpha = .81$). Items were reverse-scored as needed such that higher scores indicated that the manipulation article succeeded in providing a negative portrayal of one's group in a credible manner.

Affect. A mood measure that expanded on the Positive and Negative Affect Schedule (PANAS – revised; Watson, Clark, & Tellegen, 1988) by including additional adjectives to assess other more specific group-based affective dimensions (derived from Mackie et al., 2000, and Matheson & Anisman, 2009; Yzerbyt et al., 2003) was administered following the identity threat article. Participants indicated how accurate each item on a list of adjectives (e.g., inspired, distressed) described their mood *at that moment*. Respondents rated each adjective using a 7-point scale ranging from 0 (not at all) to 6 (extremely). Five affective dimensions in total were assessed, namely *determination* (e.g., strong, determined), *sadness* (e.g., depressed, sad), *anger* (e.g., infuriated, angry), *fear* (e.g., anxious, afraid), and *contempt* (e.g., disgust, contempt). Correlations among the

dimensions were moderate to high, with the highest correlations between sadness and fear, and between anger and contempt (see Table 2.2).

Table 2.2

Correlations among Affect Dimensions in Study 2 (Cronbach's α s on the diagonal)

Affect dimension	1	2	3	4	5
1. Determination	.85				
2. Sadness	.00	.89			
3. Anger	.22*	.69***	.91		
4. Fear	.12	.80***	.70***	.87	
5. Contempt	.22*	.59***	.76***	.55***	.75

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

Collective self-esteem. Luhtanen and Crocker's (1992) 16-item measure of collective self-esteem was modified to refer to students' religious and university affiliation.

Participants rated the extent to which they agreed with each statement, ranging from 1 (strongly disagree) to 7 (strongly agree), such that higher scores reflected more positive collective self-esteem *at that moment*, following the identity-threat manipulation. Four dimensions of collective self-esteem were measured, including *membership* esteem (e.g., "I am a worthy member of the religious group that I belong to"), *private* esteem (e.g., "I feel good about the religious group that I belong to"), *public* esteem (e.g., "Others respect the religious group that I am a member of"), and *importance* of the identity (e.g., "Right

now, belonging to my religious group is an important part of my self-image”).

Correlations among the subscales were moderate (see Table 2.3).⁶

Table 2.3

Correlations among Collective Self-Esteem Dimensions (Cronbach's α s on the diagonal)

Collective self-esteem	1	2	3	4
1. Membership	.87			
2. Private	.51***	.80		
3. Public	.07	.23*	.74	
4. Importance	.55***	.36***	.07	.82

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

Actions endorsed. Participants indicated the extent to which they would be willing to participate in each of 13 actions (based on Wright, Taylor, & Moghaddam, 1990) along a 7-point scale ranging from 0 (not at all) to 6 (extremely likely). These items covered a range of actions including acceptance of the situation, and denial of one's identity, requests for individual or collective support, or confronting the authors and publishers of the article, either as an individual or collectively.

A principal components analysis with varimax rotation was conducted on the 13 action endorsements. A scree test (Stevens, 2002) identified three components, explaining 71.3% of the variance. Based on factor loadings of .60 or higher, the first factor reflected *support-seeking* actions (6 items), in terms of both individual (e.g., “I would try to talk to

⁶Although a scale of state *personal* self-esteem (Heatherton & Polivy, 1991) was also included in the present investigation, results indicated that it was unrelated to identity strength or any of the appraisal-coping variables; as such, it was not included in subsequent analyses.

people I know from other religions to understand their concerns”), and collective actions (e.g., “I would try to get together with other [Catholics/ Protestants/ Muslims/ Carleton students] in this study and on campus and help support each other in this experience”) ($\alpha = .89$). The second factor reflected *confrontational* actions (5 items), in terms of both individual (e.g., “I would go to the media so that the people who published the article will be reprimanded and not get away with their behaviour”), and collective actions (e.g., “I would get together with other [Catholics/ Protestants/ Muslims/ Carleton students] in this study and on campus and write to confront the authors of the article”) ($\alpha = .87$). The third factor comprised a single item reflecting *denial*, namely “I will try not to let others know my [religion/ university affiliation] so that they will not treat me differently”. Finally, although the single item reflecting *acceptance* of the situation (i.e., “I will accept the situation as is, and just go on with my life ignoring the problem”) did not load onto any of the factors, it was also deemed important to retain as an index of “inaction”.

Correlations among the action factors were moderate, with the highest correlation between the support-seeking and confrontational action endorsements (see Table 2.4).

Table 2.4

Correlations among Action Endorsement Dimensions

Action endorsement	1	2	3
1. Support-seeking	—		
2. Confrontation	.70***	—	
3. Acceptance	-.58***	-.52***	—
4. Denial	.05	.08	.13

 $p < .001$

Results

As in Study 1, preliminary analyses were conducted to assess outliers and missing data, as were a series of diagnostic measures to ensure that the assumptions of our planned analyses (e.g., normality, skewness) were met. Box's test was also conducted on each set of dependent variables to assess the assumption of homogeneity of the covariance matrices⁷. Once again, in an effort to retain data accuracy, raw responses were assessed in subsequent analyses.

To assess the effects of an identity threat on participants' perceptions of the threat (as both negative and credible), and on stressor appraisals and coping strategies, affect, collective self-esteem, and action intentions as a function of the type of identity threat (university vs. religious) and religious affiliation (Catholic, Protestant, Muslim), a series of multivariate analyses of variance (MANOVAs) was conducted. When the multivariate effect was significant, univariate results were examined and, where appropriate, follow-up analyses were conducted. For multiple comparisons, the family-wise error rate was maintained at $p < .05$ using Bonferroni corrections. As the study design created an unbalanced model in which to examine the responses of atheists or agnostics (i.e., who only responded to a university identity threat, given no religious identity), additional analyses were conducted to examine patterns of responses to the threat when individuals with no religious affiliation were considered.

⁷In all instances the assumption of homogeneity of the covariance matrices was met, with the exception of non-religious stressor appraisals, affect, and action endorsements. However, examination of the generalized variances for each group revealed larger determinants for the groups with larger sample sizes, indicating that our analyses would be conservative (Stevens, 2002). One exception existed, in that the generalized variance for Muslims who were exposed to a religious identity threat ($n = 15$) was greater than those of the remaining two religious groups ($ns > 20$). Nonetheless, the former generalized variance was not markedly higher than that of the Protestant group.

Following these analyses, associations between identity *strength* and appraisal-coping responses, as well as the various psychological and social outcomes of interest were examined (separately for religious vs. university identity strength). Finally, as in Study 1, a series of bootstrapping analyses (Preacher & Hayes, 2004, 2008) was conducted in order to evaluate the potential mediating roles of appraisal-coping responses in the relations between identity strength and the outcome variables.

Pre-manipulation Identity Strength Differences

Religious group differences. One-way ANOVAs revealed a significant difference in levels of religious identity strength across the religious affiliations, $F(2, 60) = 4.87, p < .05$. Specifically, as in Study 1, Muslims ($M = 3.31, SD = 0.78$) reported higher levels of religious group identification than did Catholics, ($M = 2.41, SD = 0.86$), $p < .05$. However, Protestants ($M = 2.97, SD = 1.08$) did not significantly differ from the other religious affiliations in levels of religious identity. None of the religious affiliations differed from each other in levels of university identification (including atheists/agnostics), $F < 1$.

Identity threat condition differences. An independent samples t-test revealed that identity strength was significantly different in the two identity threat conditions, $t(141) = 3.41, p < .01$, in that individuals who responded in terms of their university identity ($M = 3.27, SD = 0.57$) reported significantly higher levels of identification than did individuals who reported on the strength of their religious identity ($M = 2.82, SD = 0.99$)⁸. Although this finding was contrary to expectations that religious identity would be more important

⁸ Pre-manipulation identity strength differences were comparable with and without atheists and agnostics included in the analyses.

to individuals than other social identities (including university affiliation), it is not particularly surprising given that the sample primarily comprised young undergraduate students; previous research has indicated that older people tend to be more religious than younger people (Argue, Johnson, & White, 1999), and the role of university membership is likely to be especially central in undergraduate students' lives.

Threat Manipulation Check

In order to assess whether participants' perceptions of the identity threat as both *negative* and *credible* significantly differed from zero, one sample t-tests were conducted separately for the religious versus university identity threat conditions. Among those who were exposed to the religious identity threat, the threat was perceived to present a negative portrayal of their religious group, $t(62) = 61.11, p < .001$ ($M = 5.57, SD = 0.72$), and in a credible manner, $t(62) = 30.80, p < .001$, ($M = 4.66, SD = 1.20$). Likewise, among those who experienced the university identity threat, participants also indicated the threat presented a negative portrayal of their university affiliation, $t(79) = 47.76, p < .001$ ($M = 5.63, SD = 1.05$), and in a credible manner, $t(79) = 45.06, p < .001$, ($M = 5.14, SD = 1.02$).

To examine whether perceptions of the identity threat significantly differed across the threat conditions and religious affiliations, a 2 (identity threat condition) x 3 (religious affiliation) MANOVA was conducted on the two manipulation check subscales.

Although the main effects for threat condition, Pillai's = .027; $F(2, 114) = 1.55, ns$, and religious affiliation, Pillai's = .036; $F(4, 230) = 1.05, ns$, were not significant, their interaction was significant, Pillai's = .096; $F(4, 230) = 2.89, p < .05$; however, univariate results indicated that neither perceptions of the threat scenario as negative, $F(2, 115) =$

2.48, *ns*, nor as credible, $F(2, 115) = 3.51$, *ns*, significantly differed across groups.⁹

Taken together, these results suggest that the identity threat scenario used in the present study was perceived as sufficiently negative and credible. Moreover, the effectiveness of the threat manipulation did not vary as a function of the type of threat (religious vs. university) or as a function of participants' religious affiliation (Catholic, Protestant, or Muslim).

Responses as a Function of Identity Threat Type and Religious Affiliation

Appraisals. In order to examine non-religious appraisals of the identity threat stressor as a function of the type of threat and religious affiliation, a 2 (religious vs. university identity threat) x 3 (Catholic, Protestant, or Muslim religious affiliation) MANOVA was conducted. The main effect for type of identity threat was significant, Pillai's = .206; $F(6, 110) = 4.74$, $p < .001$. Univariate analyses revealed that individuals whose university identity was threatened appraised the situation as more central, as more controllable by oneself, and as more of a positive challenge than did participants who experienced a religious identity threat (see Table 2.5).

⁹The results of this MANOVA and those that follow were conducted excluding the atheist/agnostic participants.

Table 2.5

Stressor Appraisals (Means, SDs) as a Function of Identity Threat Type

Stressor appraisals	Identity Threat		<i>F</i> (1,115)
	University (<i>n</i> = 59)	Religious (<i>n</i> = 62)	
Threat	3.02 (0.12)	2.90 (0.12)	0.49
Challenge	2.48 (0.97)	2.18 (0.09) *	5.10*
Centrality	3.38 (0.16)	2.72 (0.15) **	9.14**
Controllable by oneself	3.63 (0.12)	3.25 (0.11) *	5.12*
Controllable by others	3.19 (0.12)	3.11 (0.11)	0.23
Uncontrollable by anyone	1.93 (0.10)	1.91 (0.10)	0.03

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

The main effect for religious affiliation was also significant with regard to non-religious appraisals, Pillai's = .307; $F(12, 222) = 3.36$, $p < .001$. Specifically, as seen in Table 2.6, post-hoc multiple comparisons revealed that Muslims were more inclined to perceive an identity threat (to either university or religious affiliation) as threatening, as a challenge, and as central to well-being than either Protestants or Catholics. However, Protestants were more likely to appraise an identity threat as being controllable by others than were Catholics. There were no differences between the religious groups in terms of appraisals of how controllable the situation was by oneself or by anyone. The interaction between identity threat type and religious affiliation was not significant with regard to non-religious stressor appraisals, Pillai's = .106; $F(12, 222) = 1.03$, *ns*.

Table 2.6

Stressor Appraisals (Means, SDs) as a Function of Religious Affiliation

Stressor appraisals	Religious Affiliation			<i>F</i> (2,115)
	Catholic (<i>n</i> = 50)	Protestant (<i>n</i> = 46)	Muslim (<i>n</i> = 26)	
Threat	2.68 (0.13) _a	2.76 (0.13) _a	3.45 (0.18) _b	6.94 ^{**}
Challenge	2.22 (0.10) _a	2.07 (0.10) _a	2.70 (0.14) _b	6.90 ^{**}
Centrality	2.81 (0.16) _a	2.82 (0.17) _a	3.53 (0.23) _b	3.92 [*]
Controllable by oneself	3.51 (0.13) _a	3.38 (0.13) _a	3.44 (0.17) _a	0.30
Controllable by others	2.83 (0.12) _a	3.30 (0.13) _b	3.31 (0.17) _{a, b}	4.42 [*]
Uncontrollable by anyone	1.92 (0.10) _a	1.84 (0.11) _a	2.01 (0.14) _a	0.46

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

Note. Means in the same row that do not share sub-scripts differ at $p < .05$ using Bonferroni comparisons.

Finally, an ANOVA was conducted to examine religious appraisals as a function of the type of identity threat and religious affiliation. Whereas religious appraisals did not differ based on the type of identity threat that individuals experienced, $F < 1$, the main effect for religious affiliation was significant, $F(2, 116) = 21.86$, $p < .001$. Specifically, Catholic individuals ($M = 1.58$; $SD = 0.15$) were significantly *less* likely to appraise an identity threat (regardless of type) in positive religious terms than were Muslim ($M = 3.19$; $SD = 0.21$, $p < .001$) or Protestant individuals ($M = 2.51$; $SD = 0.15$, $p < .001$). However, Protestants were also significantly less likely to appraise the threat in religious terms than were Muslims ($p < .05$). The interaction between identity threat type and

religious affiliation was not significant, $F < 1$.

In summary, as expected, these findings suggest that a threat to one's university identity resulted in less negative appraisals of the situation compared to a religious identity threat. Although the university identity threat was appraised as more central to well-being than was a religious identity threat, individuals also perceived that they had greater control over the outcome of a university identity threat, and felt that it was a challenge from which they might learn and grow. However, individuals' religious affiliation also influenced appraisals of an identity threat, regardless of whether their university or religious identity had been threatened. Interestingly, Muslim individuals were more likely to appraise either identity threat as particularly threatening and central to their well-being compared to Catholic and Protestant individuals; however, Muslims were also more inclined to view the threat as a positive challenge and in religious terms.

Coping. To investigate coping responses (i.e., problem-focused, emotion-focused, and avoidant) as a function of identity threat condition and across religious affiliations, as in the previous analyses, a 2 x 3 MANOVA was conducted. The main effect for type of identity threat with regard to coping revealed no significant differences, Pillai's = .039; $F(3, 114) = 1.54$, *ns*. However, the main effect of religious affiliation was significant, Pillai's = .162; $F(6, 230) = 3.37$, $p < .01$. Univariate analyses conducted to examine differences in coping as a function of religious affiliation revealed a significant difference in the use of problem-focused coping, $F(2, 116) = 7.26$, $p < .01$. Post-hoc multiple comparisons revealed that Catholics ($M = 2.06$, $SD = 0.11$) were significantly *less* likely to employ problem-focused coping than were Muslims ($M = 2.75$; $SD = 0.15$, $p < .01$) or Protestants ($M = 2.42$, $SD = 0.11$, $p = .055$). There were no differences across religious

groups regarding the endorsement of emotion-focused or avoidant coping strategies, and the interaction between threat condition and religious affiliation was not significant, Pillai's = .021; $F < 1$.

A comparable MANOVA conducted to examine religious coping also indicated that the main effect for type of identity threat with regard to religious coping strategies (i.e., positive and negative) was not significant, Pillai's = .018; $F(2, 115) = 1.03$, *ns*. However, the main effect of religious affiliation was once again significant, Pillai's = .298; $F(4, 232) = 10.14$, $p < .001$. Univariate analyses indicated a significant difference in the use of positive religious coping across the religious affiliations, $F(2, 116) = 22.39$, $p < .001$. Specifically, Catholics ($M = 0.69$, $SD = 0.12$), were significantly *less* inclined to endorse positive religious coping than were Muslims ($M = 1.98$, $SD = 0.17$, $p < .001$) or Protestants ($M = 1.51$, $SD = 0.13$, $p < .001$). No differences existed in the use of negative religious coping across the religious affiliations, nor was the interaction between threat condition and religious affiliation significant, Pillai's = .007; $F < 1$.

Thus, examination of coping strategies in terms of both the type of identity threat and religious affiliation revealed that, although coping endorsements did not vary as a function of whether individuals' university or religious identity had been threatened, Catholics were least likely to cope adaptively with the threat (regardless of which group membership had been targeted), in that they were less inclined to deal with the stressor using either problem-focused or positive religious coping strategies.

Affect. A 2 x 3 MANOVA assessing differences in affective reactions (i.e., determination, sadness, anger, fear, contempt) indicated the main effect for type of identity threat was not significant, Pillai's = .060; $F(5, 112) = 1.43$, *ns*, whereas the main

effect for religious affiliation was significant, Pillai's = .213; $F(10, 226) = 2.69, p < .01$.

As seen in Table 2.7, Muslims reported significantly higher levels of determination following an identity threat than did Protestants; however, Muslims also reported significantly higher levels of sadness, anger, and fear than did Catholics or Protestants, as well as marginally higher levels of contempt than did Protestants. The interaction between the type of identity threat and religious affiliation was not significant, Pillai's = .101; $F(10, 226) = 1.20, ns$.

Table 2.7

Affect (Means, SDs) as a Function of Religious Affiliation

Affect dimension	Religious Affiliation			$F(2, 116)$
	Catholic ($n = 50$)	Protestant ($n = 46$)	Muslim ($n = 26$)	
Determination	2.72 (0.15) _{a,b}	2.38 (0.16) _a	3.21 (0.21) _b	5.02**
Sadness	1.30 (0.19) _a	1.30 (0.20) _a	2.35 (0.27) _b	6.40**
Anger	1.79 (0.19) _a	1.38 (0.20) _a	2.63 (0.27) _b	6.93**
Fear	1.37 (0.17) _a	1.16 (0.18) _a	2.21 (0.24) _b	6.25**
Contempt	1.73 (0.20) _{a,b}	1.36 (0.21) _a	2.19 (0.28) _b	2.84 [†]

[†] $p < .10$; ** $p < .01$

Note. Means in the same row that do not share sub-scripts differ at $p < .05$ using Bonferroni comparisons.

Collective self-esteem. A 2 x 3 MANOVA was conducted to examine differences in collective self-esteem (i.e., membership, private, public, and importance) following the identity threat. The main effect for type of identity threat was significant, Pillai's = .349; $F(4, 113) = 15.17, p < .001$. Univariate analyses revealed that individuals in the two

threat conditions differed with regard to their levels of membership collective self-esteem, $F(1, 116) = 21.10, p < .001$, in that individuals who had experienced a threat to their university identity ($M = 5.47, SD = 0.19$) reported significantly higher levels of group membership esteem following the threat compared to those who had experienced a religious identity threat ($M = 4.31, SD = 0.17$).

The main effect for religious affiliation was also significant, Pillai's $\lambda = .146; F(8, 228) = 2.24, p < .05$, in that differences existed in the importance of the identity across the religious groups, $F(1, 116) = 8.09, p < .001$. Specifically, Catholics ($M = 3.19, SD = 0.21$) reported lower levels of identity importance following an identity threat than did Protestants ($M = 3.99, SD = 0.22, p < .05$) or Muslims ($M = 4.57, SD = 0.30, p < .001$).

Finally, the interaction between type of identity threat and religious affiliation was also significant, Pillai's $\lambda = .191; F(8, 228) = 3.01, p < .01$. Univariate analyses revealed that significant differences existed with regard to both private, $F(2, 116) = 4.83, p < .05$, and public collective self-esteem, $F(2, 116) = 4.56, p < .05$. Simple effects analyses of religious affiliation were thus conducted separately for the two threat types. As seen in Figure 2.2, following the university-related threat, no differences in *private* collective self-esteem were evident across the religious groups, $F < 1$. However, following a religious threat, a significant group difference was revealed, $F(2, 60) = 8.53, p < .001$. Follow-up multiple comparisons indicated that Catholics had lower levels of private collective self-esteem compared with both Protestants ($p < .05$) and Muslims ($p < .001$) after experiencing the religious threat.

Figure 2.2

Private Collective Self-Esteem as a Function of Identity Threat Type and Religious Affiliation in Study 2

Similarly, no differences in *public* collective self-esteem were evident across the religious groups following the university-related threat, $F(2, 56) = 1.73$, *ns*. However, there was a marginally significant religious group difference in public collective self-esteem following the religious identity threat, $F(2, 60) = 3.03$, $p = .056$. Specifically, as

seen in Figure 2.3, Muslim individuals reported slightly lower levels of public collective self-esteem than did Catholics ($p = .059$) following the religious threat.

Figure 2.3

Public Collective Self-Esteem as a Function of Identity Threat Type and Religious Affiliation in Study 2

To summarize, collective self-esteem variations following an identity threat appeared to be complex. Regardless of individuals' religious affiliation, group membership esteem (feeling that one makes a contribution to the group) was lower

following the threat to individuals' religious identity compared to their university affiliation. However, Catholics were least likely to indicate that their identity was important to them following an identity threat, regardless of whether their religious or university group membership had been targeted. Moreover, Catholics reported the lowest levels of private collective self-esteem (i.e., pride in their identity), but only when the threat directly targeted their religious affiliation. Conversely, Catholics reported somewhat higher levels of public collective self-esteem (i.e., that others valued their group) than did Muslims when religious identity had been threatened.

Actions endorsed. To assess whether individuals' behavioural intentions following an identity threat differed as a function of the threat type or religious affiliation, a 2 x 3 MANOVA was conducted on the four action factors (i.e., support-seeking, confrontation, acceptance, and denial). The main effect of identity threat type was not significant, Pillai's = .052; $F(4, 113) = 1.56$, *ns*; however, significant differences existed across religious groups, Pillai's = .358; $F(8, 228) = 6.22$, $p < .001$. Univariate analyses indicated differences across the religious affiliations with regard to all types of actions endorsed with the exception of denial. As seen in Table 2.8, irrespective of the nature of the identity threat, Muslim individuals were more likely than either Protestants or Catholics to endorse social-support seeking and confrontational actions, and likewise were less inclined to simply accept the situation. The interaction between the type of identity threat and religious affiliation was not significant, Pillai's = .068; $F(8, 228) = 1.01$, *ns*.

Table 2.8

Action Endorsements (Means, SDs) as a Function of Religious Affiliation

Action endorsement	Religious Affiliation			<i>F</i> (2, 116)
	Catholic (<i>n</i> = 50)	Protestant (<i>n</i> = 46)	Muslim (<i>n</i> = 26)	
Support-seeking	1.52 (0.19) _a	1.74 (0.20) _a	3.68 (0.27) _b	23.88 ^{***}
Confrontation	1.19 (0.18) _a	0.94 (0.19) _a	2.80 (0.25) _b	19.54 ^{***}
Acceptance	3.07 (0.23) _a	3.25 (0.24) _a	1.73 (0.33) _b	7.68 ^{***}
Denial	1.02 (0.21) _a	1.17 (0.22) _a	1.25(0.30) _a	0.22

^{***}
p < .001

Note. Means in the same row that do not share sub-scripts differ at *p* < .01 using Bonferroni comparisons.

Summary. When responses to an identity threat were examined as a function of the type of threat (religious vs. university) and religious affiliation (Catholic, Protestant, or Muslim), several interesting patterns emerged (to partially support Hypothesis 1). In keeping with the finding that appraisals of a university-related threat were *less* negative compared with a religious threat, group membership esteem (i.e., feeling that one makes a contribution to the group) was lower following the threat to individuals' religious identity compared to their university affiliation, regardless of individuals' religious affiliation.

However, religious affiliation nonetheless played an important role in determining the outcomes of an identity threat, regardless of which identity (religious or university) had been targeted (Hypothesis 2). The responses of the Muslim individuals appeared to be particularly unique, and to a lesser extent, those of Catholics. In particular, Muslims were more likely to appraise the situation in both positive (i.e., challenging, religious) and

negative (i.e., threatening, central) terms, and at the same time reported higher levels of determination and negative affect following an identity threat. Muslim participants were also more likely to endorse action and to refuse to accept the situation than were the other religious groups. Catholic individuals, conversely, were the least likely religious group to cope adaptively with the threat (i.e., reduced problem-focused and positive religious coping), and tended to deny the importance of their identity (regardless of which group membership had been targeted).

The combination of the type of threat and religious affiliation (Hypothesis 3), however, was only evident when collective self-esteem was examined. When individuals' *religious* identity was targeted, Catholics demonstrated the lowest levels of private esteem (i.e., pride in their identity), and higher levels of public esteem (i.e., that others valued their group) compared with Muslim individuals. Such variations did not emerge when individuals' university-related identity was targeted.

Responses to a University Identity Threat as a Function of Religious versus Non-religious Affiliation

In the previous analyses, religious affiliation was an important factor in determining responses to an identity threat. However, the possibility also existed that individuals with *any* religious affiliation might respond to an identity threat differently than individuals with no such affiliation. Thus, it was important to evaluate individuals' responses as a function of whether they were affiliated with a religion (i.e., Catholic, Protestant, or Muslim) or not (i.e., atheists and agnostics). A series of MANOVAs was conducted to determine if differences existed between atheists/agnostics and religious individuals in terms of (non-religious) appraisal-coping processes, affect, collective self-esteem, and

actions endorsed following the *university* identity threat (given no atheists/agnostics in the religious identity threat condition). Atheists/agnostics differed from religious individuals only when action endorsements were examined in the present study, Pillai's = .465; $F(12, 225) = 3.44, p < .001$. Specifically, differences were revealed with regard to support-seeking actions, $F(3, 76) = 13.76, p < .001$, confrontational actions, $F(3, 76) = 8.88, p < .001$, and individuals' willingness to accept the situation, $F(3, 76) = 4.30, p < .01$. As was the case with Catholic and Protestant individuals, atheists/agnostics were *less* likely to endorse either social-support seeking ($M = 2.27, SD = 1.09$) or confrontational ($M = 1.42, SD = 1.01$) actions compared with Muslim participants ($M = 3.86, SD = 0.92; M = 2.98, SD = 1.21$, respectively), and were *more* willing to accept the situation ($M = 2.90, SD = 1.55$) than were Muslims ($M = 1.45, SD = 0.93$).

In summary, when the responses of atheists and agnostics following an identity threat targeting university group membership were compared to religious participants, there were no differences in the way individuals appraised or coped with the threat or in resulting levels of affect or collective self-esteem. Although atheists/agnostics were less likely to endorse various actions and were more likely to accept the threat than were Muslim individuals, their responses were comparable to those of the Protestant and Catholic participants, thus supporting the unique responses of the Muslim group.

The Role of Identity Strength

In addition to differences between the two types of identity threats and those across the religious affiliations, it was of interest to assess whether the *strength* of individuals' group identity was related to appraisal-coping processes, affect, collective self-esteem, and action endorsements. Prior to conducting these analyses, the moderating effects of

religious affiliation (i.e., Catholic, Protestant, Muslim) were examined in the relations between identity strength and the variables of interest in the present study (using hierarchical regression analyses). As in Study 1, none of the interactive effects was found to be significant. Thus, subsequent analyses were collapsed across religious affiliation¹⁰.

When the moderating effects of identity threat condition were examined (wherein university identity was coded as 0 and religious identity was coded as 1), the interactive effects between the threat condition and identity strength on a number of the variables of interest were significant. In these analyses, hierarchical regressions were conducted wherein each outcome variable (i.e., appraisals, coping, affect, collective self-esteem, action endorsements) was regressed (in separate analyses) onto identity strength on the first step, identity threat condition on the second step, and the interaction between identity strength and condition (i.e., their cross-product) on the third step.

Outcome variables. When the moderating effects of identity threat condition were examined on the relations between identity strength and the outcomes of interest in the present study (i.e., affect, collective self-esteem, and action endorsements), only one significant interactive effect was revealed. Specifically, the strength of the relations between identity strength and anger differed as a function of which identity had been threatened, in that highly-identified individuals felt angrier following a religious identity threat compared with a university-related threat (see Table 2.9). However, zero-order correlations conducted to assess the relations between identity strength and the outcome variables as a function of which group membership had been targeted indicated several

¹⁰Due to the study design, these analyses are conducted using only those participants who self-identified as being associated with a religious group (i.e., analyses excluded atheists and agnostics).

additional diverging patterns. Specifically, when university affiliation was threatened, strength of identification was related to an increased propensity to report higher levels of collective self-esteem related to group membership and the importance of one's identity, along with increased intentions to take support-seeking action. However, when religious affiliation was threatened, strength of identification with one's religious group was not only related to these outcomes, but in addition, high-identifiers reported greater levels of private collective self-esteem, were more likely to take confrontational action and less likely to accept the situation, and reported a greater inclination toward several additional affective responses, including determination, sadness, and contempt.

Table 2.9

Hierarchical Regression Analyses and Zero-order Correlations between Identity Strength and Outcome Variables as a Function Identity Threat Type in Study 2

	Identity Threat		$F_{cha}(1, 118)$
	University r	Religious r	
Affect dimension			
Determination	.24 [†]	.40 ^{**}	0.03
Sadness	-.08	.30 [*]	3.13 [†]
Anger	.02	.51 ^{***}	4.85 [*]
Fear	.00	.22 [†]	0.81
Contempt	-.02	.30 ^{***}	1.82
Collective self-esteem			
Membership	.39 ^{**}	.72 ^{***}	2.26
Private	.19	.67 ^{***}	2.58
Public	.18	.05	1.08
Importance	.55 ^{***}	.82 ^{***}	0.60
Action endorsement			
Support-seeking	.27 [*]	.62 ^{***}	1.78
Confrontation	.14	.49 ^{***}	1.59
Acceptance	-.15	-.36 ^{**}	0.69
Denial	-.03	.03	0.12

[†] $p < .10$; ^{*} $p < .05$; ^{**} $p < .01$; ^{***} $p < .001$

Note. The pattern of correlations following the university threat did not vary when atheists/agnostics were included, except that identity was related to determination and private collective-esteem ($r_s = .24, .23, p < .05$).

Appraisals and coping. When the moderating effects of identity threat condition were examined on the relations between identity strength and appraisal-coping processes, several significant interactive effects were revealed. In particular, the strength of the relations between identification and threat appraisals, religious appraisals, and positive religious coping varied as a function of the type of identity threat (see Table 2.10). Once again, such relations were more evident following a religious threat, compared to when university affiliation had been targeted. When university affiliation was threatened, strength of identification was solely related to an increased propensity to appraise the threat as controllable by oneself and to use problem-focused coping. Conversely, when religious affiliation was threatened, identification with one's religious group was also related to an increased inclination to appraise the situation as challenging and central, as well as a reliance on problem-focused, emotion-focused, and negative religious coping.

Table 2.10

Hierarchical Regression Analyses and Zero-order Correlations between Identity Strength and Appraisal-Coping Variables as a Function of Identity Threat Type in Study 2

	Identity Threat		
	University <i>r</i>	Religious <i>r</i>	<i>F</i> _{cha} (1, 118)
Stressor appraisals			
Threat	-.04	.54 ^{***}	7.04 ^{**}
Challenge	.21	.47 ^{***}	0.48
Centrality	.00	.36 ^{**}	2.42
Controllable by oneself	.28 [*]	.21	0.75
Controllable by others	.17	.15	0.28
Uncontrollable by anyone	-.21	-.22	0.43
Religious	.15	.70 ^{***}	4.05 [*]
Coping strategies			
Problem-focused	.35 ^{**}	.56 ^{***}	0.14
Emotion-focused	-.05	.32 [*]	2.48
Avoidant	-.14	-.08	0.32
Positive religious	.09	.82 ^{***}	9.54 ^{**}
Negative religious	-.02	.48 ^{***}	3.85 [†]

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note. The pattern of correlations following the university identity threat did not vary when atheists and agnostics were included in the analyses.

In summary, despite the finding that participants in the present study reported stronger identification related to one's university affiliation compared to their religious group, relations between identity strength and the remaining variables of interest suggested that religious identification evoked a considerably broader set of responses when an identity threat occurred (in line with Hypotheses 4, 5 and 6). On the one hand, university identification was solely related to collective self-esteem in terms of group membership and identity importance, along with increased endorsements of support-seeking action when this identity was threatened¹¹. Likewise, the university identity threat only evoked greater appraisals of the threat as controllable by oneself and an increased use of problem-focused coping among highly-identified individuals. On the other hand, when religious identity was threatened, highly-identified individuals were more inclined to respond with a variety of affective and behavioural responses, to show significantly increased levels of collective self-esteem (with the exception of public collective self-esteem), and to use a host of appraisal-coping processes to deal with the threat.

The Mediating Roles of Appraisal-Coping Processes in the Relations between Religious Identity Strength and Responses to an Identity Threat

Given the role of appraisal-coping processes in dealing with stressful experiences (in this case, a threat to individuals' group identity), it was hypothesized that appraisals and coping strategies would mediate the relations between identity strength and the outcome variables of interest in the present study (namely, affective responses, collective self-esteem, and action endorsements; recall Figure 2.1). For that to be true, appraisal-coping

¹¹ It should be noted, however, that private collective self-esteem and determination were also related to university identification when atheists and agnostics were included.

responses and these outcome variables must also be related; thus, a series of correlations was conducted (separately for university vs. religious identity threat conditions) to examine such possibilities, with a particular focus on those variables that were significantly related to identity strength in the previous analyses (and thus could serve as potential mediators)¹².

Preacher and Hayes' (2004, 2008) procedures for examining simple and multiple mediation models were subsequently followed, using 1,000 bootstrap samples in each analysis and 95% confidence intervals to determine which appraisals and coping variables served as significant mediators. An appraisal or coping strategy was considered as a potential mediator if it was significantly correlated with both the independent variable (i.e., identity strength) and the dependent variable (i.e., affect, collective self-esteem, or action endorsement). However, given the variations in relations among these variables as a function of the type of identity threat in previous analyses, mediation models were pursued separately for the religious versus university identity threats.

Mediated paths between religious identity strength and affect. As seen in Table 2.11, several significant relations emerged when the zero-order correlations between appraisals and affective responses following a religious identity threat were examined. It will be recalled that religious identity strength was related to increased appraisals of the situation as threatening, challenging, central, and in religious terms. Thus, it was of particular interest to assess whether these appraisals were also related to the affective responses that

¹² As the pattern of correlations with identity strength following a university identity threat did not vary to a great extent when atheists and agnostics were included in the analyses (see Table 2.9 *Note*, for the exception), these participants were also included in the following correlational analyses with regard to the university-related threat, as well as subsequent mediation models.

were associated with religious identification, namely determination, sadness, anger, and contempt. Although none of these appraisal dimensions was significantly related to determination, all four were positively associated with sadness, anger, and contempt, and thus could serve as possible mediators in the relations between religious identity strength and affect.

When the zero-order correlations among coping strategies and affective dimensions (that were related to identity strength) following the religious identity threat were examined, several significant relations emerged (see Table 2.11). In particular, increased endorsements of both problem-focused and positive religious coping were associated with higher levels of determination. Likewise, these coping strategies, along with emotion-focused and negative religious coping, were associated with higher levels of anger. Finally, emotion-focused coping and both positive and negative religious coping endorsements were associated with increased reports of sadness and contempt following the religious identity threat.

Table 2.11

Zero-order Correlations between Appraisal-Coping Processes and Affect following Religious Identity Threat

	Affect dimensions			
	Determination	Sadness	Anger	Contempt
Stressor appraisals				
Threat	.15	.52***	.76***	.60***
Challenge	.22	.25*	.40**	.32**
Centrality	.08	.35**	.54***	.38**
Religious	.17	.40**	.44**	.29*
Coping strategies				
Problem-focused	.26**	.17	.25*	.24
Emotion-focused	-.04	.33**	.25*	.25*
Positive religious	.32*	.36**	.52***	.33**
Negative religious	.22	.35**	.45***	.24*

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

When the mediating roles of coping strategies (namely problem-focused and positive religious coping) in the relation between religious identity strength and determination were assessed, this relation was reduced to marginal significance when coping strategies were controlled. Nonetheless, as seen in Table 2.12, the 95% confidence intervals for both problem-focused and positive religious coping overlapped zero (as did the confidence interval for the total mediation effect, $CI = -.41, .49$), indicating that coping strategies did not account for the relation between religious identity strength and

determination. The mediating roles of appraisal-coping processes in the relations between religious identity and the negative affective indices of sadness, anger, and contempt were also assessed (in separate analyses). These relations were reduced to non-significance when appraisals and coping were controlled, with the exception of the relation between identification and contempt (see Table 2.12). In these instances, however, threat appraisals served as a critical mediator in accounting for highly-identified religious individuals' increased negative affective responses when their religious group had been threatened. In addition, with regard to their feelings of contempt, centrality appraisals appeared to have a suppression effect.

Overall, although coping strategies did not significantly mediate the relations between religious identification and affect, appraisals played a key role. Specifically, threat appraisals were important in accounting for highly-identified individuals' increased levels of negative affect (i.e., sadness, anger, and contempt).

Table 2.12

Multiple Mediation Estimates for Religious Identity Strength and Affect, Controlling for Appraisal-Coping Processes in Response to a Religious Identity Threat in Study 2

	Affect dimensions			
	Determination	Sadness	Anger	Contempt
Total effect	.43**	.43*	.20*	.62***
Direct effect	.38 [†]	-.30	.01	.35***
Stressor appraisals				
Threat	/	.56 (.19, 1.07)	.78 (.42, 1.33)	.77 (.35, 1.33)
Challenge	/	-.11 (-.38, .17)	-.06 (-.27, .12)	-.02 (-.26, .23)
Centrality	/	-.15 (-.52, .01)	-.11 (-.40, .04)	-.20 (-.55, -.01)
Religious	/	.20 (-.08, .62)	-.14 (-.49, .15)	.08 (-.48, .38)
Coping strategies				
Problem-focused	.13 (-.10, .39)	/	-.12 (-.36, .07)	/
Emotion-focused	/	.06 (-.05, .23)	-.03 (-.16, .05)	.03 (-.06, .16)
Positive religious	-1.08 (-.67, .32)	.10 (-.30, .72)	.23 (-.17, .85)	.07 (-.32, .59)
Negative religious	/	.07 (-.18, .32)	.11 (-.08, .38)	.01 (-.17, .26)

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note. Total effect=unstandardized coefficient for the effect of religious identity strength on the affective response; Direct effect=unstandardized coefficient for the effect of religious identity strength on the affective response, controlling for appraisal-coping processes. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Mediated paths between religious identity strength and collective self-esteem. As seen in Table 2.13, when the zero-order correlations among the stress appraisals and dimensions of collective self-esteem that were related to religious identification were examined, appraisals of the situation as a threat, as a challenge, as central, and in religious terms were each significantly related to collective self-esteem related to group membership, private collective self-esteem, and the importance of individuals' religious identity. Thus, all four of these appraisals could serve as potential mediators in the relations between religious identity strength and collective self-esteem.

When the zero-order correlations among the coping strategies and collective self-esteem subscales related to religious identity strength were examined, problem-focused and both positive and negative religious coping were significantly related to group membership collective self-esteem (see Table 2.13). Problem-focused and positive religious coping were also related to private collective self-esteem, as were emotion-focused coping endorsements. Finally, all four coping strategies that were related to religious identity (namely problem-focused, emotion-focused, positive and negative religious coping) were significantly related to collective self-esteem in terms of the importance of individuals' religious identity.

Table 2.13

Zero-order Correlations between Appraisal-Coping Processes and Collective Self-Esteem following Religious Identity Threat

	Collective self-esteem		
	Membership	Private	Importance
Stressor appraisals			
Threat	.44***	.51***	.57***
Challenge	.50***	.44***	.57***
Centrality	.36**	.39**	.47***
Religious	.54***	.56***	.72***
Coping strategies			
Problem-focused	.63***	.54***	.64***
Emotion-focused	.23 [†]	.27*	.40**
Positive religious	.72***	.62**	.80***
Negative religious	.25*	.19	.48***

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

When the mediating roles of appraisal-coping processes in the relations between religious identification and the three types of collective self-esteem were assessed (in separate analyses), those relations remained significant when appraisals and coping were controlled (see Table 2.14). Thus, appraisal-coping processes could only serve as partial mediators, at best. However, whereas appraisals did not appear to be useful in accounting for those relations, problem-focused coping played a key role in accounting for highly-identified religious individuals' increased collective self-esteem following the religious identity threat.

In addition, high-identifiers' tendency to employ positive religious coping following the threat also partially accounted for the positive relation between religious identification and group membership esteem (i.e., feeling that one makes a contribution to the group).

Table 2.14

Multiple Mediation Estimates for Religious Identity Strength and Collective Self-Esteem, Controlling for Appraisal-Coping Processes in Response to a Religious Identity Threat in Study 2

	Collective self-esteem		
	Group membership	Private	Importance
Total effect	1.14***	.73***	1.48***
Direct effect	.61*	.40*	.70**
Stressor appraisals			
Threat	-.13 (-.41, .13)	.07 (-.13, .25)	-.08 (-.39, .22)
Challenge	.07 (-.10, .27)	.01 (-.14, .09)	.06 (-.11, .24)
Centrality	.10 (-.06, .35)	-.01 (-.09, .17)	.08 (-.05, .33)
Religious	-.02 (-.26, .19)	-.07 (-.15, .34)	.22 (-.02, .54)
Coping strategies			
Problem-focused	.20 (.02, .41)	.15 (.01, .43)	.21 (.05, .42)
Emotion-focused	/	-.02 (-.16, .05)	.01 (-.10, .09)
Positive religious	.49 (.03, .91)	.04 (-.41, .47)	.28 (-.09, .62)
Negative religious	-.17 (-.36, .03)	/	.00 (-.13, .14)

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

Note. Total effect=unstandardized coefficient for the effect of religious identity strength on collective self-esteem sub-scale; Direct effect=unstandardized coefficient for the effect of religious identity strength on collective self-esteem sub-scale, controlling for appraisal-coping processes. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Mediated paths between religious identity strength and actions endorsed. Zero-order correlations among the stress appraisals and action endorsements related to religious identification were examined and, as seen in Table 2.15, individuals who appraised the identity threat as particularly threatening, as a challenge, as central to well-being, and in religious terms were also more likely to take both support-seeking and confrontational actions, and were less likely to accept the situation. Thus, these four appraisals served as potential mediators in the relations between religious identity strength and actions endorsed following the religious threat.

Zero-order correlations among coping strategies and action endorsements following the religious identity threat revealed that endorsements of problem-focused, emotion-focused and both positive and negative religious coping were associated with a greater likelihood of taking support-seeking and confrontational action in response to the identity threat (see Table 2.15). Moreover, problem-focused and positive religious coping were also associated with a diminished likelihood of accepting the situation.

Table 2.15

Zero-order Correlations between Appraisal-Coping Processes and Action Endorsements following Religious Identity Threat

	Action endorsements		
	Support-seeking	Confrontational	Acceptance
Stressor appraisals			
Threat	.67***	.73***	-.52***
Challenge	.68***	.65***	-.48***
Centrality	.61***	.68***	-.53***
Religious	.54***	.47***	-.26*
Coping strategies			
Problem-focused	.66***	.47***	-.57***
Emotion-focused	.31**	.37***	-.16
Positive religious	.65***	.55***	-.35**
Negative religious	.32*	.44***	-.12

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

When the mediating roles of appraisal-coping processes in the relations between identity strength and the three action endorsements were assessed (in separate analyses), those relations were reduced to non-significance when appraisals and coping were controlled (see Table 2.16). As with collective self-esteem, problem-focused coping accounted for highly-identified religious individuals' support-seeking action intentions, as well as their refusal to accept the threatening situation. In the case of confrontational action endorsements, however, both threat and challenge appraisals served as critical mediators.

Table 2.16

Multiple Mediation Estimates for Religious Identity Strength and Actions Endorsed, Controlling for Appraisal-Coping Processes in Response to a Religious Identity Threat in Study 2

	Action endorsements		
	Support-seeking	Confrontation	Acceptance
Total effect	1.09***	.76***	-.71**
Direct effect	.20	.02	-.24
Stressor appraisals			
Threat	.13 (-.11, .44)	.28 (.03, .66)	-.21 (-.67, .28)
Challenge	.18 (-.02, .48)	.19 (.01, .51)	-.08 (-.42, .20)
Centrality	.14 (-.03, .49)	.10 (-.05, .38)	-.19 (-.69, .06)
Religious	-.05 (-.39, .28)	-.16 (-.47, .23)	.30 (-.04, .68)
Coping strategies			
Problem-focused	.30 (.11, .54)	.06 (-.15, .27)	-.53 (-.90, -.21)
Emotion-focused	-.04 (-.19, .05)	-.02 (-.10, .13)	/
Positive religious	.33 (-.06, .75)	.19 (-.25, .57)	.23 (-.34, .89)
Negative religious	-.09 (-.29, .10)	.06 (-.10, .27)	/

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

Note. Total effect=unstandardized coefficient for the effect of religious identity strength on the action endorsement; Direct effect=unstandardized coefficient for the effect of religious identity strength on the action endorsement, controlling for appraisal-coping processes. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Summary. Appraisal-coping processes appeared to account for many of the relations between religious identification and responses to a religious identity threat in the present study (Hypothesis 7). Threat appraisals were particularly important in accounting for religious high-identifiers' negative affective responses and confrontational action intentions, whereas problem-focused coping appeared to be vital in promoting both collective self-esteem and more prosocial action endorsements.

The Mediating Roles of Appraisal-Coping Processes in the Relations between University Identity Strength and Responses to an Identity Threat

Mediated paths between university identity strength and determination. It will be recalled that strength of identification related to university affiliation was only related to one affect dimension, namely determination. Thus, the relations between determination and the appraisal-coping responses that were significantly related to university identity strength were also examined. Indeed, determination was associated with both increased appraisals of the identity threat as controllable by oneself and problem-focused coping ($r_s = .27, p_s < .05$).

As was the case with religious identity, when appraisal-coping processes were controlled, the relation between university identity strength and determination, $B = 0.48, p < .05$, was reduced to non-significance, $B = 0.32, ns$. However, once again, appraisal-coping processes (namely appraisals of the threat as controllable by oneself, $B = 0.09$, 95% CI = $-.01, .29$, and problem-focused coping, $B = 0.07$, 95% CI = $.00, .25$) did not account for the relation between identity strength and determination.

Mediated paths between university identity strength and collective self-esteem. When the correlations between collective self-esteem and appraisals of the university identity

threat as controllable by oneself were examined, these appraisals were significantly related to higher levels of both group membership ($r = .31, p < .01$) and private collective self-esteem ($r = .31, p < .01$); however, appraisals of the threat as controllable by oneself and collective self-esteem reflecting the importance of individuals' university identity were not related ($r = -.09, ns$). Thus, those appraisals could not serve as a mediator in the latter relation. Zero-order correlations between problem-focused coping and collective self-esteem following the university identity threat, however, were non-significant in all cases ($r_s = .04, .06, .12, ns$, for membership, private, and importance, respectively). Problem-focused coping could therefore not serve as a mediator in any of the relations between university identity strength and collective self-esteem.

When appraisals of the threat as controllable by oneself were controlled, although the relation between university identity strength and private collective self-esteem, $B = 0.44, p < .05$, was reduced to non-significance, $B = 0.33, ns$, identity strength remained a significant predictor of membership esteem, $B = 0.68, p < .001$ and $B = 0.58, p < .01$, respectively. Moreover, the 95% confidence intervals both overlapped zero (private: $B = 0.11, 95\% \text{ CI} = -.01, .31$; group membership: $B = 0.10; 95\% \text{ CI} = -.01, .27$), indicating that, as in the case of religious identity, appraisals did not mediate the relations between university identity strength and collective self-esteem.

Mediated path between university identity strength and support-seeking action.

Appraisals of the university identity threat as controllable by oneself were unrelated to any of the action endorsements following the threat (that were related to university identity strength; $r_s = .01, -.03, .01, ns$, for support-seeking, confrontational, and acceptance, respectively). Consequently, the relations between university identity

strength and the actions endorsed could not be mediated by appraisals of the identity threat as controllable by oneself. Problem-focused coping, however, was associated with a greater likelihood of taking support-seeking ($r = .47, p < .001$) and confrontational actions ($r = .35, p < .01$), and with a reduced likelihood of acceptance ($r = -.29, p < .01$). Given that university identity strength was also related to support-seeking action, problem-focused coping potentially acted as a mediator in this relation.

As in the case of religious identification, the relation between university identity strength and support-seeking action, $B = 0.52, p < .05$, was reduced to non-significance when coping was controlled, $B = 0.27, ns$. Indeed, problem-focused coping once again played a critical role in accounting for this relation, $B = 0.25, 95\% \text{ CI} = .04, .54$.

Summary. Although appraisal-coping processes were important in accounting for the relations between religious identification and various outcomes following the religious identity threat in the present study, the same did not appear to be true following the university identity threat. Of the four potential mediating relations assessed, only one achieved significance, namely problem-focused coping in accounting for highly-identified university students' increased tendency to endorse support-seeking actions¹³.

Discussion

Taken together, the results of the present study demonstrated that although university-related identification was of high import to participants, threats to this identity did not evoke psychological and behavioural responses to the same extent as did threats to religious identity among highly-identified individuals. Moreover, the appraisals and

¹³ As in Study 1, the mediating roles of appraisals in the relations between identity strength and coping in Study 2 are presented in Appendix D.

coping strategies used differed markedly depending on whether one's religious or university affiliation had been targeted, the former resulting in an array of appraisal-coping processes that informed the outcomes following identity threat. These findings present compelling support for the notion that the content of social identities is important (Livingstone & Haslam, 2008) in determining responses to group-based threat. In particular, social identities that are linked to belief systems (in this instance, religious beliefs) may be especially vulnerable when threatened, despite the equivalent (or greater) centrality of other social identities to an individual's self-concept.

The Impact of Religious Identity Threat

As in Study 1, religious identification was related to higher levels of esteem. However, in Study 2, increased *collective* self-esteem (related to group membership, private group-respect, and importance of the identity) was linked to strength of identification with one's religious group when it was under threat. In addition, religious identity strength was associated with higher levels of *determination*, representing a more positive array of affective responses (e.g., strength, vigilance, pride). Taken together, these findings corroborate earlier research indicating that identity salience increases following an identity threat (Jetten et al., 2005), perhaps reflecting group-level strategies to contend with discrimination (Branscombe & Ellemers, 1998), and that identification with a devalued group will result in higher levels of subjective psychological well-being (Branscombe et al., 1999). Nevertheless, as expected, religious identification was also associated with a range of negative affective responses (namely sadness, anger, and contempt), revealing that the emotional state of highly-identified religious individuals immediately following an identity threat did not mirror the general positive (i.e., less

negative) affect of individuals in Study 1 who had reflected on a previous distressing life event. Moreover, in a reversal of the pattern of findings in Study 1, interpretations of the situation as particularly threatening served to explain the higher levels of sadness, anger, and contempt experienced by highly-identified religious individuals in the present study. Such associations are consistent with previous research concerning the emotional repercussions of such threats, both in general (Ashmore et al., 2001; Branscombe & Ellemers, 1998; Mackie et al., 2000; Dumont et al., 2003; Yzerbyt et al., 2003) and notably when one's religious group has been targeted specifically (Marshall et al., 2007; Skitka et al., 2006).

As with the negative affective responses evoked by religious identity threat, the relations between religious identification and appraisal-coping processes were somewhat inverted with those of Study 1. Specifically, highly-identified individuals in the present study interpreted the identity threat as *more* threatening, central, and challenging, and were more likely to engage in problem- as well as emotion-focused coping strategies following the threat. It might be that stronger identification with one's religious group may have a protective effect (consistent with other research on religiosity and religious beliefs in general; see Koenig et al., 2001) with regard to perceptions of the impact of the traumatic stressors one encounters in life. But when the religious group itself was attacked directly (in the present study), highly-identified individuals may have interpreted the effects of the event as more far-reaching and in need of a more active response, in that it challenged not only the self but, in addition, one's group, coping resources, and beliefs. Indeed, highly-identified religious individuals reported an increased tendency to engage in negative religious coping strategies (e.g., questioning God's power) in the present

study, possibly reflecting the impact of the religious identity threat as an assault on their belief system itself. It is possible that heightened levels of emotional arousal in the face of religious intolerance, coupled with the perceived availability of more adaptive responses, might have been particularly motivating for highly-identified individuals to engage in active responses following the threat (Branscombe & Ellemers, 1998; Frijda et al., 1989; Matheson & Cole, 2004; Yzerbyt et al., 2003).

In line with this, highly-identified individuals demonstrated a greater propensity to endorse various actions (and a refusal to do nothing) in an effort to remedy the threatening situation. These findings also support the notion that highly-religious individuals may be more likely to actively respond when faced with challenges (Frankl, 1985; Ghandi, 1962; King, 1968), especially those that directly threaten one's religious belief system (Ellens, 2007). Indeed, it has been suggested that religion (and notably those beliefs based in Western tradition as opposed to the more "inward-oriented" Eastern religions) is often an inspiration for action. Highly-identified religious individuals' tendency to engage in problem-focused coping efforts accounted for their endorsements of support-seeking action, and played a critical role in the decision to take *any* kind of action as well (as opposed to accepting the situation). Moreover, this coping style was important in determining highly-identified religious individuals' increased levels of collective self-esteem (including private, membership, and identity importance) following the threat. Thus, it may be that those who felt their religious group membership was central to their self-concept not only sought support from other group members in an effort to cope (Haslam et al., 2004, 2005; Haslam & Reicher, 2006), but might also have been able to re-frame the situation (i.e., cognitive restructuring) or engage in problem-

solving tactics (e.g., seeking information to help resolve the problem) in order to maintain high levels of collective self-esteem after the threat and to advance prosocial action. The role of positive religious coping in accounting for highly-identified religious individuals' increased levels of collective self-esteem perhaps suggests a spiritual alternative akin to the problem-focused efforts used by those individuals in an effort to minimize the threat (e.g., seeking support from God, re-framing the situation as one used by God to strengthen the individual, and putting plans into action while concurrently relying on spiritual strength; Pargament et al., 1998).

Although religious values often have a positive influence on culture and society (e.g., humanitarian causes), when prosocial efforts are deemed insufficient to deal with the threat, some individuals might resort to confrontation as a means for social change (Mackie et al., 2000), especially in the presence of religious intolerance (Ellens, 2007). Indeed, in the present study, appraisals of religious discrimination as particularly threatening not only accounted for individuals' negative affective responses, but also appeared to play a critical role in accounting for their intentions to take confrontational action following the threat. This link is consistent with previous research wherein the ongoing threat of terrorists attacks in the United States was associated with an increased willingness to support military action (Cheung-Blunden & Blunden, 2008) and with the deportation of various religious and ethnic groups associated with the attackers (Skitka et al., 2006). Thus, the vulnerability associated with such a construal, coupled with appraisals of the situation as a challenge, may have motivated highly-identified individuals to confront those responsible for the discrimination against their religious group in an effort to resolve the situation by any means necessary (Ellens, 2007).

The Impact of University Identity Threat

The suggestion that individuals facing religious identity threat might be more inclined toward active responses when their belief system is attacked was further supported by the pattern of results following the university identity threat in the present study. Despite the finding that pre-threat identification levels were higher for university compared to religious affiliation, individuals with high levels of university identification were only slightly more likely than low-identifiers to endorse support-seeking action following a threat to that identity. However, those same individuals were no more likely to take confrontational action or to reject the idea of accepting the situation, a stark contrast to the pattern of actions following religious identity threat. Moreover, although highly-identified university students reported higher levels of collective self-esteem related to group membership and importance of their university identity (as was the case following religious identity threat), private collective self-esteem was unrelated to university identity strength, as were affective responses. Thus, as expected, religious identity threat evoked far more psychological and social responses in an effort to deal with the situation than did a threat to individuals' university identification, suggesting that the impacts of threats to religious identity may exceed those of threats to identities that are of more "secular" importance. It should be noted that although many of the differences between the two identity threat types were not significant, a larger sample size might have facilitated the statistical power to find such effects. Nonetheless, the number of significant versus non-significant relations under the two threat conditions suggests that the differential pattern of responses was not due to chance factors alone.

Appraisal-coping responses following the university identity threat also differed markedly compared with the pattern following the religious threat. Although university identification was unrelated to religious appraisals or coping (not surprisingly), highly-identified university students interpreted the threat as more controllable by oneself and reported a greater inclination to endorse problem-focused coping. Thus, the impact of the university identity threat may have been perceived as relatively limited, simply requiring problem-solving efforts, social-support seeking, or cognitive restructuring in order to resolve a situation that was largely within highly-identified individuals' power to do so. Moreover, whereas a host of appraisals and coping strategies accounted for highly-identified religious individuals' responses, only one mediated model achieved significance with regard to the university identity threat, namely, the role of problem-focused coping in accounting for highly-identified university students' increased endorsements of support-seeking action. This finding should not be particularly surprising, given that social support-seeking was one of the components of problem-focused coping in the present investigation, thus reinforcing the observation that highly-identified students believed the situation would be best resolved primarily through support-seeking efforts. The contrasting pattern of appraisal-coping processes following the religious threat may have reflected greater distress among highly-identified religious individuals (given the broader ramifications of the threat compared to one targeted toward university affiliation) or, alternatively, a superior capacity among such individuals to invoke a broader array of coping methods when faced with such a challenge. However, as levels of religious identification among those who experienced the *university* identity threat were unknown, these explanations could not be assessed.

Implications of Religious Group Affiliation

Finally, as in Study 1, although religious affiliation did not moderate the relations between identity strength and the remaining variables of interest, responses to an identity threat in many cases differed across religious groups (regardless of the extent of group identification). Once again, the responses of Muslim individuals were most unique. Consistent with Study 1 and with other research (e.g., Fischer et al., 2007), Muslims reported the highest levels of identification and pride in their religious group membership, even prior to the threatening situation presented in the current study. Moreover, following the identity threat, differences were also apparent with regard to appraisals of the situation, affective responses, and intentions for action-taking, regardless of which identity had been targeted (religious vs. university). Given the minority status of Muslims, their higher pre-threat levels of group identification were predictable (Branscombe et al., 1999). This status, coupled with relatively consistent discrimination on the basis of religious affiliation (due in part to fundamentalist representatives of this particular religious group on a more global scale; Byng, 2008), Muslim individuals might simply be more sensitized to identity threats of any kind. Indeed, as has been noted in previous research, “people’s reactions to negative treatment are likely to depend on the length of time they are exposed to the negative treatment” (Branscombe et al., 1999, p.136). Thus, in the present study, whereas the religious identity threat presented to the Protestant and Catholic participants might have been a relatively isolated incident (not to say that these groups do not experience religious intolerance as well), for the Muslim participants the same religious identity threat may have represented “yet another” incident of discrimination against their group, resulting in more negative appraisals,

stronger affective and behavioural responses, as well as reduced public collective self-esteem (i.e., that others valued their group) when their religious identity was targeted. Moreover, that they reacted in much the same way when their *university* identification was threatened might be attributed to exposure to discriminatory events as a conditioned stimulus, and their stronger reactions represented a generalized conditioned response (LeDoux & Gorman, 2001).

Limitations

As in Study 1, these results are based on the responses of a relatively young university student sample, and thus the generalizability of the findings to the general population should be interpreted cautiously. In addition, although the present study endeavoured to employ a quasi-experimental design in presenting the identity threat to participants, the relations among the outcome variables remain correlational in nature. Thus, for example, although threat appraisals significantly accounted for highly-identified religious individuals' increased levels of negative affect (i.e., sadness, anger, and contempt), the possibility exists that such emotional reactions preceded cognitive appraisals of the situation, thereby resulting in increased arousal and perceptions of threat. This said, when such alternative mediated models were evaluated, anger only partially accounted for highly-identified religious individuals' increased threat appraisals.

Finally, although several differences emerged as a function of the nature of the identity that was threatened (religious vs. university), social identities do not exist in isolation. Some identities might be more salient than others or might evoke different patterns of responses when threatened (as evidenced in the present study). However, individuals often embrace several social identities (e.g., ethnic, national, political), all of

which could influence interpretations of the world around them and responses to threat (Deaux, 1993; Settles, 2004). As such, an evaluation of the strength of multiple identities, including religious identity, in determining the ways in which people cope with identity-threatening stressors may also be informative. Although previous research has demonstrated that threats to university identification can evoke strong affective and behavioural responses (e.g., Matheson & Cole, 2004; Yzerbyt et al., 2003) and differences were observed in the present study with regard to the type of identity that was targeted, an examination of threat responses in relation to a social identity that might have broader implications than university affiliation (e.g., ethnicity, nationality) may yield a more accurate comparison to situations when religious identification is threatened.

STUDY 3

Based on the findings of Studies 1 and 2, strength of religious identification appears to be related to both psychological and social outcomes following distressing life events, including threats to religious identity itself. Furthermore, the ways in which individuals interpret and cope with such events are evidently important in accounting for these relations, particularly in cases where religious identity has been targeted directly. However, social identity is multifaceted, and may include many aspects with varying degrees of importance within each individual (Abes, Jones, & McEwen, 2007; Deaux, 1993, 1996; Evan, 1997; Stryker & Serpe, 1994). For example, whereas personal identity or “the self” is thought to be at the centre of one’s identity, any number of social groups often shape the individual’s self-concept, ranging from personal relationships (e.g., family and friendships), nation and ethnicity, to the superordinate identity of the human species (Evan, 1997; Turner et al., 1987; Wohl & Branscombe, 2005).

Competition between social identities might also exist (Stryker, 2000) (e.g., ethnic vs. national, as might be the case for an Asian-American, for instance). However, such competing motivations might be resolved by one identity asserting dominance over the others (Deaux, 1996). For example, although an individual might define himself as male (gender), Asian (ethnicity), and Buddhist (religion), one of these identities could be more important to that individual’s self-concept, or could be more prominent than other group memberships when dealing with stressful circumstances or in daily situations more generally. Indeed, the importance of identification with any given group in shaping an individual’s self-conception, as well as the lens through which they view the world, is rarely uniform across identity domains (Stryker & Serpe, 1994).

Within the framework of multiple identities, it has been argued that some facets of social identity, such as nationalism or ethnicity, might serve a function equal to or greater than that achieved by religious identity (Evan, 1997; Kinnvall, 2004; Verkuyten & Yildiz, 2007; Worchel, 2004). For example, the assertion that ethnicity is the *bedrock* of social identity is based on the notion that ethnic identity cannot be changed: “Once born a Kurd, always a Kurd” (Worchel, 2004, p. 292). Indeed, when ethnic conflict erupts, the unchanging nature of ethnicity often results in actions aimed at eliminating the outgroup (e.g., genocide), yet such atrocities do little to “win them over” to the ingroup’s side. Conversely, the power of a religion is often determined by the number of people who have adopted and adhere to that set of beliefs—a conversion that is not possible where ethnicity is concerned. Moreover, “one of the valued outcomes of a holy war is the number of infidels who can be converted to the victor’s religion” (Worchel, 2004, p. 293). That the goal of religious conflict is often to capture the mind rather than the body (Worchel, 2004) may lend religious identity a particularly powerful substance when that identity is threatened.

The perceived implications of an identity threat may evoke varying degrees of distress depending on the group membership that is targeted. Threats to some identities (e.g., religion, nationality, ethnicity) might be perceived as having broader or longer-lasting ramifications than threats to identities associated with other groups (e.g., sports teams, universities, friendships), and as such might be perceived as particularly threatening or stressful. However, even among those identities, it could be argued that a threat to social identity stemming from religion would be perceived as paramount, given the “eternal” significance of this identity and the system of beliefs to which it is attached

(Kinnvall, 2004; Verkuyten & Yildiz, 2007; Wellman & Tokuno, 2004). Accordingly, the appraisals and coping methods used to deal with threats to religious identity should be more apparent (e.g., heightened perceptions of threat and challenge, increased use of problem- and emotion-focused coping) even when compared to responses following threats to such salient identities as ethnicity or nationality. In addition, as noted earlier, national and ethnic social identities lack the additional coping resources afforded by belief in a “higher power” (Pargament, 2002; Snyder, 2001), along with the sense of irrefutable moral empowerment that fuels religious beliefs, identity, and sometimes conflict (Wellman & Tokuno, 2004). Thus, highly-identified religious individuals are likely to endorse a magnified and broader array of responses when that identity is under threat. Moreover, such a pattern of responses is apt to be most apparent among members of minority religious groups, given previous evidence (including Studies 1 and 2 of the present investigation) that the importance of religious identity and responses to threats might be heightened among members of at least some of those affiliations (e.g., Muslims; Fischer et al., 2007).

Religious identity may also influence appraisals, coping strategies, or psychosocial outcomes when *other* facets of social identity are threatened. For example, the strength of identification with one’s religious group and beliefs might alter responses when an individual’s ethnic or racial identity is threatened (King, 1968; Tutu, 1999), as it inherently provides a system of beliefs that guides actions in relation to any injustice. To refer to an earlier noted example, in the case of Martin Luther King Jr., although his racial identity (African-American) was directly targeted, he called not only on the social support network that this group membership afforded him to further civil rights for his

race, but also relied on the social support and additional coping resources offered by his strong religious identity (Christianity) to promote his cause with non-violent philosophies (King, 1968). Indeed, social identities often combine in a complex manner such that one identity might augment or undermine another. For example, in a study of Arab-American women, Arab political identity was positively related to feminism, whereas Muslim religious and feminist identities were inversely related; nonetheless, Arab political, ethnic, and religious identities were all positively associated (Marshall & Read, 2003). This line of research suggests that yet another outcome of ethnic or religious identification and threat may intersect within the political realm. Indeed, *identity politics* (see Bernstein, 2005, for an overview) has been described as explaining “political divisions derived from group identities based not on economic grievances and class conflict, but in defence of more expressive issues of cultural identity, such as religion, ethnicity, gender, and sexuality” (Marshall & Read, 2003, p. 876).

Numerous illustrations of political movements and conflicts derived from ethnic or religious identity threat are apparent. However, it has also been argued that some ostensibly ethnic conflicts having political consequences (e.g., land acquisition, Worchel, 2004; social or political gain, Eriksen, 2001) were (and are) essentially the result of religious group differences (Eriksen, 2001; Rao, 1999), notwithstanding considerable overlap in some cases. In the former Yugoslavia, for example, the three primary ethnic groups that currently inhabit Bosnia-Herzegovina differ mainly in their religious ideology: Most Serbs are Orthodox Christian, Croats are primarily Catholic, and Bosnians are almost all Muslim. Although ethnic and religious identities are certainly related in this context, religion became the defining marker of collective identity and

intergroup strife in the Bosnian conflict, and has been likened to the political disputes among Protestants and Catholics in Northern Ireland (Eriksen, 2001). Likewise, much political discord in India has resulted from religious conflict, propelled in part by members of the *hindutva* movement who advocate Hindu nationalism (Eriksen, 2001; Rao, 1999). Indeed, it has been argued that religion in India has engulfed the politics of identity more so than any other force, including caste, tribe, gender, and class (Rao, 1999), a sentiment illustrated by Ghandi's assertion that "politics divorced from religion has absolutely no meaning" (1949, p. 122). Outcomes stemming from political Islamism are obvious. The religious basis for Islamic terrorism is due in part to the concept of *da'wah* (i.e., the religious mission to urge people to embrace Islam), which has taken on political connotations in an effort to enhance Islamic identity and unity (Kahani-Hopkins & Hopkins, 2002). Unfortunately, this mission often exists alongside extreme interpretations of religious doctrine that sanction the use of violence in order to protect geopolitical interests (Venkatraman, 2007). However, even among mainstream members of the Muslim faith in the Netherlands (where the Islamic faith has been publicly condemned by political leaders; Verkuyten & Zaremba, 2005), religious identification has been positively linked to attitudes endorsing Muslim political organization (Verkuyten & Yildiz, 2007), and to the justification of terrorism when the perpetrator was believed to be an ingroup member (i.e., Muslim vs. Christian; Fischer et al., 2007).

Given the aforementioned examples, it should be no surprise that religious *political consciousness* is often an important marker of social identity, which may help to alleviate or exacerbate religious intergroup conflict (Read, 2007). Group consciousness is generally regarded as involving both group identification and commitment (Greenwood

& Christian, 2008), as well as being enhanced by the awareness of global (as opposed to individual) attributions for discrimination (Foster, 2000). Political consciousness, in particular, is grounded in the notion that “the personal is political”, along with the perception that group members have a common fate based upon some shared identity (Foster, 2000; Foster & Matheson, 1995; Greenwood & Christian, 2008). In effect, as an individual’s perception that their group is the target of discrimination increases, a stronger political consciousness should develop (Foster, 2000). As with other responses to identity threat, although increased political consciousness might result to some extent from discrimination against ethnicity or religion, there is evidence to suggest that it may be especially linked to the latter. Religious identification has been shown to promote political consciousness and activity among Muslim-Americans (Read, 2007), as well as among both African-Americans and Caucasians (Harris, 1994).

Thus, the influence of religious identity in shaping political consciousness and action is far-reaching, from prosocial civil rights movements at best to violent political terrorism at worst. However, empirical investigations designed to disentangle the complexities of the relations among religious identification and political attitudes are few. Moreover, at present, no such research exists that also takes into account the function that individuals’ interpretations of threatening situations or methods used to cope with a religious identity threat might serve, which may also be important in determining political consciousness, as well as the emotions and actions that potentially follow such threats.

The Present Study

Whereas Study 1 assessed religious identification, psychological outcomes, and appraisal-coping responses following an array of previous distressing life events, and

Study 2 assessed these constructs (and others) following a fictitious identity threat, Study 3 aimed to combine those approaches to better understand how religious identification might influence individuals' responses to the various threats they have experienced to their social identities. Specifically, responses similar to those examined in Study 2 (e.g., affective responses, collective self-esteem, and actions *taken*) as well as political consciousness were assessed following participants' recollection of a previous incident of religious discrimination that they encountered (similar to Sahdra & Ross, 2007). It was expected that the recollection of such an event would offer a picture of how individuals appraise and cope with an actual incident of identity threat in their life, thereby allowing for an assessment of psychological, social, and political responses closer to the true nature of those experienced when religious identification is targeted. A threat aimed directly at one's religion may not only be highly stressful but also entails an attack on one's belief system itself, thus potentially undermining the individual's coping resources as well. Moreover, although such a pattern of findings was evident in Study 2 following a *fictitious* religious identity threat, responses to a lived event should be further magnified, given the broader implications that an actual experience of religious identity threat might have had (or continues to have) for the individual. Finally, by asking participants to freely recall an event, the scope of identity threats that individuals belonging to a variety of religious faiths have endured, as well as the impacts of those events, could be assessed.

Given the suggestion that religious and ethnic identity may share similar characteristics and thus might invoke arguably comparable responses when threatened (Evan, 1997; Kinnvall, 2004; Verkuyten & Yildiz, 2007; Worchel, 2004), the recollection of an ethnic identity threat served as an appropriate comparison against which to examine

the range of responses elicited by an experience of religious identity threat. Moreover, it was argued that levels of religious identification might also inform the responses that are chosen following an ethnic identity threat (King, 1968; Tutu, 1999). Thus, appraisal-coping responses and the outcomes of interest were assessed in relation to *both* dimensions of identity strength (i.e., religious and ethnic). Those responses were primarily examined as a function of the group membership that was targeted in participants' recollection of a threatening event (ethnicity vs. religion), but also as a function of religious affiliation (i.e., the majority Christian group, atheists/agnostics, as well as religious minorities), and ethnic group membership (i.e., Euro-Caucasian vs. ethnic minorities). Finally, as in Studies 1 and 2, the extent to which individuals' responses to an identity threat (religious or ethnic) might vary as a function of appraisals and coping propensities was assessed (see Figure 3.1).

In Study 2 an unbalanced design was created in which atheists and agnostics did not respond to a "religious" identity threat (given no association with a religious group). However, it has been suggested that some atheists might be "religious" about their *unbelief* (Dawkins, 2006; Hitchens, 2007), might identify highly with other members of their group (e.g., as might be evidenced by membership in organizations such as the *Freedom from Religion Foundation*), and could also feel that their "secular" identity is sometimes threatened by religious individuals or groups (e.g., as suggested by the creation of the *Atheist Bus Campaign*; BBC News, 2009). Moreover, some evidence exists indicating that religiously-based political attitudes are linked to the intolerance of atheists in both primarily Protestant America and predominantly Catholic Poland (Karpov, 2002). Thus, it was of interest in the present study to not only examine the

responses of atheists and agnostics asked to recall an ethnic identity threat, but their responses to a religious (i.e., “irreligious”) identity threat as well. Nonetheless, as the responses of atheists and agnostics undoubtedly differ from the other religious groups on some variables, the results of the present investigation (and in particular associations with “religious” identity strength) were examined both with atheists/agnostics included with the remaining sample, as well as separately.

Lastly, in order to enhance the external validity and generalizability of the findings in the present study, the responses of a community sample of participants were assessed. As alluded to earlier, older people tend to be more religious than younger people (Argue et al., 1999). In addition, appraisals and coping strategies might also differ as a function of age. For example, lower levels of rumination and more positive thinking have been observed in older adults compared to adolescents and young adults (Hunt, Wisocki, & Yanko, 2003; Wadsworth et al., 2004), whereas younger adults preferred to cope with their stressors using humour (Hunt et al., 2003). By eliciting participants from the wider community, a more diverse range of ages and backgrounds could be represented, thus offering a more general picture of the Canadian population (e.g., education levels, citizenship status, etc.) and bringing with it a greater diversity of life experiences.

Thus, in the present study, in addition to hypotheses following from Study 2 (i.e., relating to affective responses, collective self-esteem, and actions endorsed, where university affiliation is replaced by ethnicity) the following hypotheses were made.

Responses as a function of identity threat type and religious/ethnic affiliation:

1) Political consciousness would be more apparent (e.g., stronger political attitudes) when a religious identity threat was recalled compared to when an ethnic identity threat was recalled.

2) Responses following an identity threat recollection (religious or ethnic) would vary as a function of religious and ethnic affiliation, in that the magnitude and breadth of responses of individuals belonging to minority groups would be stronger.

3) Religious/ethnic affiliation and the type of threat would interact to influence responses to the identity threat; specifically, given Hypotheses 1 and 2, it was expected that religious minorities responding to the religious identity threat would demonstrate the most distinct outcomes (e.g., strongest political consciousness).

Relations with identity strength (see Figure 3.1):

4) Identity strength (i.e., related to one's religious *or* ethnic affiliation) would be related to the outcomes of interest (e.g., stronger political consciousness) following the relevant identity threat recollection. However, religious and ethnic identity strength would be differentially related to those outcomes, such that religious identity strength would have a greater impact on responses (e.g., more strongly related to political attitudes) regardless of whether a religious or ethnic identity threat was recalled.

5) Identity strength (i.e., related to one's religious *or* ethnic affiliation) would be related to heightened stress appraisals (e.g., threat, centrality, challenge) following the relevant identity threat. However, religious and ethnic identity strength would be differentially related to stress appraisals depending on the type of identity threat recalled,

in that religious identity strength would have a greater impact on appraisals (e.g., increased challenge appraisals) irrespective of the type of identity threat.

6) Identity strength (i.e., related to one's religious *or* ethnic affiliation) would be related to coping. Specifically, following recollection of the relevant identity threat, a stronger identity was expected to be positively related to problem- and emotion-focused coping (given the results of Study 2), while negatively related to avoidant coping. However, religious (compared to ethnic) identity strength would have a greater impact on coping (e.g., increased problem-focused coping) irrespective of the type of identity threat recalled.

7) Appraisal-coping processes were expected to mediate the relations between identity strength (religious and ethnic) and the various psychological, social, and political outcomes. However, it was expected that those mediated relations would be moderated by the type of threat. Specifically, appraisals and coping strategies would mediate the relations between *ethnic* identity strength and outcomes following an ethnic threat, but would fail to do so following a religious threat. Conversely, the mediated relations involving *religious* identification were expected to be significant regardless of the type of threat (i.e., mediation would *not* be moderated by the type of threat) (see Figure 3.1).

Figure 3.1

Conceptual Moderated Mediation Model of Relations among Identity Strength (Predictor), Appraisal-Coping Processes (Mediators), and Outcome Variables as a Function of Identity Threat Type (Moderator) in Study 3

Method

Participants

A community sample of men ($n = 89$) and women ($n = 331$), ranging in age from 17 to 65 years ($M = 32.36$, $SD = 11.42$) participated in the present study, described as assessing ways of coping with stressful life events in relation to group membership.

Given the personal nature of discussing previous experiences of ethnic or religious identity threat, the study was conducted online so that participants could articulate their thoughts and experiences in a private and confidential environment. Individuals of varying religious faiths and ethnicities were recruited by advertising the study through several community based organizations (e.g., churches, synagogues, community centres) and websites, and through Canadian university campus clubs related to various religious and ethnic groups. Participants recruited via non-religious organizations (e.g., *Ottawa Community Immigrant Services Organization*) also included atheists and/or agnostics. Moreover, additional participants of all faiths (or lack thereof) were eventually recruited through the snowball technique (i.e., word-of-mouth). Data validity checks were conducted, and data from participants who responded at random were deleted.

A large portion of participants in the present study identified their religious affiliation as Protestant ($n = 82$, 19.5%) or Catholic ($n = 78$, 18.6%). Other participants self-identified as Muslim ($n = 44$, 10.5%), Bahá'í ($n = 31$, 7.4%), Jewish ($n = 22$, 5.2%), Buddhist ($n = 21$, 5.0%), or Hindu ($n = 13$, 3.1%). In addition, some individuals reported that they were affiliated with one of various other religions (e.g., Sikh, Wicca, Jehovah's Witness; $n = 51$, 12.1 %). Finally, 50 (11.9%) participants reported that they were agnostic, and another 28 (6.4%) self-identified as atheist. There was strong ethnic minority representation in this sample, as just over half of participants who reported their ethnic status indicated that they were Euro-Caucasian ($n = 237$, 56.4%), whereas the remainder self-identified as Asian ($n = 59$, 14.0%), South Asian ($n = 38$, 9.0%), Arab/West Asian ($n = 38$, 9.0%), Aboriginal ($n = 11$, 2.6%), Black ($n = 7$, 1.7%), South

East Asian ($n = 6$, 1.4%), Hispanic ($n = 2$, 0.5 %), or as being of mixed ethnic status (e.g., Asian/Caucasian) ($n = 22$, 5.2%).

Procedures and Measures

After being provided with a written overview of the study, participants completed an online informed consent form and a series of background information questions (see Appendix E). Participants were then asked to complete a measure assessing strength of religious identity ($\alpha = .86$) as in Studies 1 and 2 (Cameron, 2004; see Appendix A), as well as strength of their *ethnic* identity ($\alpha = .82$; see Appendix E; the correlation between identification types was moderate, $r = .26$, $p < .001$). Next, participants were asked to freely recall a previous incident (elicited using instructions developed by Sahdra & Ross, 2007) in which they experienced insults or sentiments of hatred or discrimination on the basis of either their religious or ethnic affiliation (i.e., participants were randomly assigned to one of the two identity threat conditions)¹⁴.

Following the threat recall, as in Studies 1 and 2, participants completed measures assessing appraisals (SAM, Peacock & Wong, 1990; see Table 3.1 for r s and Cronbach's α s) and coping strategies in relation to the threat event that individuals recalled (SCOPE,

¹⁴ Although 579 individuals completed at least some of the measures in the present study, 123 of those participants chose not to proceed further than completing the initial measures of religious and ethnic identity. Not surprisingly, those who completed the study past this point were more highly-identified with both their religious ($M = 2.73$, $SD = 1.13$), $t(540) = -2.56$, $p < .05$, and ethnic groups ($M = 2.88$, $SD = 0.95$), $t(541) = -2.02$, $p < .05$, than were participants who ended their participation after completing the identity measures ($M = 2.43$, $SD = 1.15$; $M = 2.68$, $SD = 0.96$, for religious and ethnic identity, respectively). Participants who did not complete the study further than the initial identity measures are not included in any analyses. Thus, the data analyzed in the present study may be from participants who are somewhat more highly-identified with such groups than the general population.

In addition, another 36 individuals attempted to complete the entire study but could not think of an incident of threat or discrimination toward their religious ($n = 22$) or ethnic group ($n = 14$), and thus were also excluded from the analyses. Of those who could not recall an incident of religious discrimination, 5 were Protestant, 5 agnostic, 4 atheist, 3 Catholic, 2 Muslim, and the remaining 3 self-identified as Hindu, Wiccan, and Pagan. Of those who could not recall an incident of ethnic discrimination, 11 self-identified as Euro-Caucasian, whereas the remaining 3 were Asian, South Asian, and South-East Asian.

Matheson & Anisman, 2003). The 14 coping strategies were clustered to follow the same dimensions used in Studies 1 and 2 (i.e., problem-focused, emotion-focused, and avoidant). The correlations among these coping dimensions were moderate (r s ranged from .23 to .49, p s < .001; α s > .75 with the exception of avoidant coping, α = .66)¹⁵.

Table 3.1

Correlations among Stress Appraisal Dimensions in Study 3

(Cronbach's α s on the diagonal)

Stressor appraisals	1	2	3	4	5	6
1. Threat	.80					
2. Challenge	.43***	.67				
3. Centrality	.73***	.50***	.88			
4. Controllable by oneself	-.10*	.28***	-.01	.76		
5. Controllable by others	.02	.28***	.09	.34***	.86	
6. Uncontrollable by anyone	.19***	.12*	.18***	-.11*	.07	.70

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

Similar to Study 2, affective responses at the time of event (Watson et al., 1988; see Table 3.2 for r s and Cronbach's α s), public and private collective self-esteem (Luhtanen

¹⁵ Measures of religious appraisals (α = .84) and coping (Pargament et al., 1998; positive α = .96, negative α = .92; r = .25, p < .001) were also included in the present study. However, given the unsurprising results of Studies 1 and 2 wherein highly-identified religious individuals were more likely to use religious appraisals and coping, coupled with the relative lack of significant mediated relations when these variables were considered, analyses concerning religious appraisal-coping processes in Study 3 are not presented.

& Crocker, 1992; α s $> .80$; $r = .41$, $p < .001$), and retrospective reports of action-taking (i.e., support-seeking, confrontation, acceptance; r s ranged from $-.29$ to $.45$, p s $< .001$; Wright et al., 1990) were assessed. To reduce the amount of time required for participants to complete the present study, abbreviated versions of the measures used in Studies 1 and 2 were employed in Study 3 (see Appendix E). These abridged versions were based on both theoretical (i.e., inclusion of items from each subscale) and empirical considerations (i.e., combinations of two to three items yielding the greatest reliability values based on data from Studies 1 and 2).

Table 3.2

Correlations among Affect Dimensions in Study 3 (Cronbach's α s on the diagonal)

Affect dimension	1	2	3	4	5
1. Determination	.82				
2. Sadness	.06	.85			
3. Anger	.29***	.46***	.81		
4. Fear	.09	.72***	.47***	.86	
5. Contempt	.33***	.41***	.69***	.39***	.81

*** $p < .001$

New to Study 3 was the examination of religious/ethnic political consciousness (see Appendix E). In order to assess participants' political attitudes related to their religious/ethnic group, participants were asked to rate the extent to which they agreed with each of four statements (Verkuyten & Yildiz, 2007) on a scale ranging from 1 (strongly disagree) to 7 (strongly agree), (e.g., "Members of my [religious/ethnic] group

have to start to work together in order to gain political influence in Canada”). Higher scores reflected greater religiously/ethnically-based political consciousness ($\alpha = .88$).

Participants received compensation in the form of \$10 gift cards for their participation in the study. Full debriefing was given along with a list of contact information for counselling services across Canada (e.g., Crisis/Distress Centre phone numbers and websites for various cities within each province, and/or province-wide services) should participants experience any distress. Finally, in an effort to alleviate any adverse emotional effects that might have occurred during the recollection of a previous discriminatory or threatening event, participants also completed a written task designed to elicit positive recollections of interactions with members of their own or other religious/ethnic groups.

Results

Preliminary Analyses

As in Studies 1 and 2, preliminary analyses were conducted to assess outliers and missing data, as well as a series of diagnostic measures to ensure that the assumptions of our planned analyses were met. No assumptions were violated, and thus raw responses were assessed in subsequent analyses.

To examine responses (i.e., stressor appraisals, coping strategies, affect, collective self-esteem, action intentions, and political consciousness) as a function of the type of identity threat (ethnic ($n = 213$) vs. religious ($n = 207$) discrimination), ethnicity (minority ($n = 183$) vs. majority ($n = 237$), with Euro-Caucasians representing the majority), and religious affiliation (minority ($n = 182$) vs. majority, with Protestants/Catholics representing the “Christian” majority ($n = 160$), and the addition of

an atheist/agnostic “non-believer” group ($n = 78$)), a series of multivariate analyses of variance (MANOVAs) was conducted¹⁶. When the multivariate effect was significant, univariate results were examined and, where appropriate, follow-up analyses conducted. For multiple comparisons, the family-wise error rate was maintained at $p < .05$ using Bonferroni corrections.

Following the MANOVAs, associations between identity strength (i.e., religious and ethnic, in separate analyses), appraisal-coping responses, and the various psychological, social, and political outcomes of interest were examined as a function of which type of identity threat had been recalled (i.e., the potential moderating effect of threat type). Finally, as in Studies 1 and 2, a series of regression analyses using Preacher and Hayes’ (2004, 2007) procedures (i.e., bootstrapping) was conducted in order to evaluate the potential mediating roles of appraisal-coping responses in the relations between identity strength and the outcome variables. However, given the potential moderating role of the type of identity threat (i.e., religious vs. ethnic), a moderated mediation framework was employed where appropriate (see Edwards & Lambert, 2007 and Preacher, Rucker, & Hayes, 2007).

Qualitative identity threat descriptions. Common themes among the religious identity threats that Christians (i.e., Protestants and Catholics) recalled included experiences of discrimination while in Middle Eastern countries, accusations of “cult-like” teachings or behaviour, insults and demeaning jokes at Christianity’s expense

¹⁶ It should be noted that the distribution of religious groups was not equal across minority versus majority ethnic group status, $\chi^2(2) = 36.54$, $\phi = 0.295$, $p < .001$. Not surprisingly, most individuals belonging to a minority religious group also self-identified as ethnic minorities ($n = 109$) rather than Euro-Caucasian ($n = 73$). Conversely, Christians were overwhelmingly Euro-Caucasian ($n = 115$) as opposed to ethnic minorities ($n = 45$). Similarly, atheists/agnostics self-identified more often as Euro-Caucasian ($n = 49$) than as belonging to an ethnic minority group ($n = 29$).

(especially from atheist sources), and acts of church vandalism. Experiences reported by atheists and agnostics primarily centred on feeling discriminated against or insulted for their *lack* of religious belief, as well as attempts to be “converted” by religious individuals. The religious identity threats recalled by religious minorities in some cases shared commonalities with those reported by Christians, such as insulting jokes or demeaning remarks at the expense of one’s religion, and acts of vandalism toward religious landmarks. Those experiences often varied, of course, based on the unique characteristics of the religious group (e.g., Byng, 2008). Some experiences reported by religious minorities, however, were more severe in nature, including physical attacks and the deaths of family members or friends killed on the basis of their religious belief (e.g., Bahá’í persecution in Iran).

Among those who were asked to recall an ethnic identity threat, common themes among Euro-Caucasians included feelings of reverse-discrimination in the workplace, and insults or discrimination while in contexts where Caucasians were not the majority (e.g., foreign countries, “Black” or “Asian neighbourhoods”), especially threats and physical attacks by those of Aboriginal ethnic origin. In addition, experiences of discrimination based on European heritage (e.g., “German Nazis”) and accusations of being racist based on Caucasian group membership were reported (analogous to *collective threat* as noted by others; e.g., Cohen & Garcia, 2005). Finally, common themes among the identity threats that ethnic minorities described included race-based insults and derogatory name-calling, feelings of ostracism, and having to deal with acts reflecting stereotypical attitudes (e.g., Arabs being extensively searched at airports).

Age differences. The wider range of ages in the present study compared with Studies 1 and 2 provided an opportunity to examine whether any of the variables differed as a function of age. Given previous research suggesting that older people are often more religious than younger people (Argue et al., 1999), it was of particular interest to assess whether religious identification levels were higher with age. However, surprisingly, age and religious identification were unrelated, $r = -.02$, *ns*. Conversely, ethnic identity appeared to mildly *decrease* with advanced age, $r = -.15$, $p < .01$. When the relations between age and the appraisal-coping and outcome variables were assessed, increased age was associated with reduced appraisals that the situation was controllable by others, $r = -.10$, $p < .05$, lower endorsements of avoidant coping, $r = -.15$, $p < .01$, decreased political consciousness, $r = -.14$, $p < .01$, fewer intentions to take confrontational action, $r = -.12$, $p < .05$, as well as lower levels of determination, $r = -.10$, $p < .05$, and increased sadness, $r = .12$, $p < .05$. However, despite their levels of significance, these correlations were all relatively small, suggesting that age did not profoundly alter responses to identity threats.

Responses as a Function Identity Threat Type, Religious Affiliation, and Ethnicity

Appraisals. In order to examine appraisals of an identity threat as a function of the type of threat (religious vs. ethnic discrimination), religious affiliation (minority, majority/Christians, atheists/agnostics), and ethnicity (minority vs. majority/Euro-Caucasians), a $2 \times 3 \times 2$ MANOVA was conducted. Contrary to expectations, the main effect for type of identity threat was not significant, Pillai's $\lambda = .024$; $F(6, 403) = 1.65$, *ns*, indicating that appraisals of the threat did not differ depending on whether one's ethnic versus religious group had been targeted. The main effect for religious affiliation,

however, was significant, Pillai's = .054; $F(12, 808) = 1.85, p < .05$, and univariate analyses revealed that centrality appraisals differed across the religious groups, $F(2, 408) = 4.88, p < .01$. Specifically, post-hoc multiple comparisons indicated that individuals affiliated with a minority religious group ($M = 3.16; SD = 1.11$) perceived an identity threat (regardless of whether their ethnic or religious group had been targeted) as more central to their well-being than did Christians ($M = 2.72; SD = 1.09, p < .001$). Atheists/agnostics ($M = 2.89; SD = 1.24$) did not significantly differ from the other two religious groups in these appraisals. Similarly, the main effect of ethnicity was significant, Pillai's = .073; $F(6, 403) = 5.25, p < .001$. As seen in Table 3.3, univariate analyses revealed that individuals belonging to a minority ethnic group were more likely than members of the majority (i.e., Euro-Caucasians) to appraise an identity threat as challenging, central, and uncontrollable. None of the interactions between identity threat type, religious affiliation, and ethnic group status were significant.

Table 3.3

Stressor Appraisals (Means, SDs) as a Function of Ethnicity

Stressor appraisals	Ethnic group status		<i>F</i> (1,408)
	Minority (<i>n</i> = 183)	Majority (<i>n</i> = 237)	
Threat	3.26 (1.00)	3.15 (1.01)	0.53
Challenge	3.02 (0.90)	2.68 (0.98)	8.65**
Centrality	3.14 (1.07)	2.79 (1.16)	9.01**
Controllable by oneself	3.35 (0.91)	3.34 (1.02)	0.96
Controllable by others	2.72 (1.14)	2.53 (1.10)	1.49
Uncontrollable by anyone	2.62 (1.00)	2.23 (1.03)	11.40**

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

Note. SAM scores ranged from 1 (not at all) to 5 (extremely).

In summary, although stressor appraisals did not differ as a function of which identity (ethnic vs. religious) had been the target of individuals' threatening or discriminatory experience, individuals belonging to a minority religious or ethnic group appraised either threat as more central to their well-being than did the majority group members. Moreover, ethnic minorities perceived either identity threat as a challenge from which they might learn and grow, yet felt the experience was less controllable in general than did Euro-Caucasians.

Coping. Differences in coping strategies (i.e., problem-focused, emotion-focused, and avoidant) were also examined with a 2 x 3 x 2 MANOVA. Neither the main effect for

the type of threat, Pillai's = .003; $F < 1$, nor religious affiliation was significant, Pillai's = .024; $F(6, 804) = 1.65$, *ns*. However, the main effect for ethnicity was significant, Pillai's = .028; $F(3, 401) = 3.87$, $p < .01$. Specifically, individuals belonging to a minority ethnic group were more inclined to use both emotion-focused, $F(1, 403) = 10.08$, $p < .01$, ($M = 1.69$, $SD = 0.75$) and avoidant coping, $F(1, 403) = 3.83$, $p = .051$, ($M = 1.95$, $SD = 0.75$) in an effort to deal with the identity threat they had experienced than were Euro-Caucasians ($M = 1.44$, $SD = 0.75$; $M = 1.74$, $SD = 0.71$, for emotion-focused and avoidant coping, respectively). The ethnic groups did not differ in their endorsement of problem-focused coping as a function of minority ($M = 1.89$, $SD = 0.92$) versus majority ($M = 1.72$, $SD = 0.96$) status. As with the analysis of appraisals, none of the interactions were significant.

Affect. A 2 x 3 x 2 MANOVA assessing differences in affective reactions (namely, determination, sadness, anger, fear, and contempt) revealed significant main effects for both identity threat type, Pillai's = .028; $F(5, 393) = 2.30$, $p < .05$, and ethnicity, Pillai's = .037; $F(5, 393) = 3.06$, $p < .01$, whereas the main effect for religious affiliation was only marginally significant, Pillai's = .043; $F(10, 788) = 1.74$, $p = .069$. Univariate results indicated that, as hypothesized, individuals responding to a *religious* identity threat ($M = 2.34$, $SD = 1.58$) reported higher levels of determination, $F(1, 397) = 5.96$, $p < .05$, following that threat than did individuals who had experienced an *ethnic* identity threat ($M = 1.88$, $SD = 1.56$). Significant differences also existed between the minority versus majority ethnic groups in levels of sadness, $F(1, 397) = 5.76$, $p < .05$, and contempt, $F(1, 397) = 5.50$, $p < .05$. Consistent with hypotheses, ethnic minorities reported more sadness ($M = 2.91$, $SD = 1.85$) and contempt ($M = 2.80$, $SD = 1.68$) than did Euro-Caucasians (M

= 2.56, $SD = 1.87$; $M = 2.50$, $SD = 1.85$, respectively). Once again, none of the interactions between the type of threat, religious affiliation, or ethnicity were significant.

Collective self-esteem. A $2 \times 3 \times 2$ MANOVA was conducted to examine differences in collective self-esteem (private and public) following individuals' identity threat recollection. Neither the main effect for type of identity threat, Pillai's = .003; $F < 1$, nor ethnicity, Pillai's = .000; $F < 1$, was significant. However, the main effect for religious affiliation indicated significant differences existed across those groups, Pillai's = .058; $F(4, 788) = 5.91$, $p < .001$. In particular, levels of *public* collective self-esteem (i.e., perceptions of how others view one's religious group) differed, $F(2, 394) = 10.81$, $p < .001$. Post-hoc multiple comparisons indicated this difference was due to higher levels of public collective self-esteem among Christians ($M = 5.27$, $SD = 1.27$) compared to both minority religious group members, ($M = 4.73$, $SD = 1.55$, $p < .01$) and atheists/agnostics ($M = 4.39$, $SD = 1.41$, $p < .001$).

A significant interaction also existed between the type of identity threat and religious affiliation, Pillai's = .077; $F(4, 788) = 7.93$, $p < .001$. Following a similar pattern to Study 2, this finding was due to differences in both private, $F(2, 394) = 4.07$, $p < .05$, and public collective self-esteem, $F(2, 394) = 14.38$, $p < .001$. Simple effects analyses (i.e., one-way ANOVAs) of religious affiliation were thus conducted separately for the two threat types. As seen in Figure 3.2, following an ethnic threat, no differences in *private* collective self-esteem were evident across the religious groups, $F(2, 207) = 2.36$, *ns*. However, following a religious threat, religious group differences were revealed, $F(2, 193) = 5.30$, $p < .01$. Follow-up multiple comparisons indicated that this difference was due to religious minorities having significantly higher levels of private collective self-esteem

compared with atheists/agnostics ($p < .01$) and marginally higher levels compared with Christians ($p = .059$) after recalling a previous religious threat.

Figure 3.2

Private Collective Self-Esteem as a Function of Identity Threat Type and Religious Affiliation in Study 3

Conversely, differences in public collective self-esteem were evident across the religious groups following the recollection of both an ethnic threat, $F(2, 207) = 10.04, p < .001$, and a religious threat, $F(2, 193) = 19.22, p < .001$. Specifically, as seen in Figure

3.3, religious minorities reported significantly lower levels of public collective self-esteem than did Christians ($p < .001$) or atheists/agnostics ($p < .05$) following an *ethnic* threat. However, following a *religious* threat, public collective self-esteem was lowest among atheists and agnostics compared to the other two religious groups ($ps < .001$). None of the remaining interactive effects were significant.

Figure 3.3

Public Collective Self-Esteem as a Function of Identity Threat Type and Religious Affiliation in Study 3

Actions endorsed. To assess whether behavioural intentions following an identity threat differed as a function of the type of threat or as a function of religious affiliation or ethnic group status, a $2 \times 3 \times 2$ MANOVA was conducted on participants' action intentions (i.e., support-seeking, confrontational, and acceptance). Neither the main effect for type of identity threat, Pillai's $\lambda = .003$; $F < 1$, nor ethnicity, Pillai's $\lambda = .011$; $F(3, 397) = 1.51$, *ns*, was significant. However, the main effect for religious affiliation was significant, Pillai's $\lambda = .037$; $F(6, 796) = 2.49$, $p < .05$. As seen in Table 3.4, univariate results indicated this effect was attributable to differences across the religious groups in both support-seeking action and intentions to simply accept the situation. Post-hoc comparisons revealed that, irrespective of the nature of the identity threat, individuals belonging to a minority religious group were more likely to endorse support-seeking action than were either Christians or atheists/agnostics. Moreover, minority religious group members were less likely to accept the situation (i.e., simply do nothing) than were atheists/agnostics. None of the interactions with respect to action intentions were significant.

Table 3.4

Action Endorsements (Means, SDs) as a Function of Religious Affiliation in Study 3

Action endorsement	Religious Affiliation			<i>F</i> (2, 399)
	Minority (<i>n</i> = 177)	Christian (<i>n</i> = 157)	Atheist/ Agnostic (<i>n</i> = 77)	
Support-seeking	1.35 (1.61) _a	0.99 (1.16) _b	0.81 (1.20) _b	3.76*
Confrontational	1.08 (1.43)	0.95 (1.22)	1.21 (1.51)	0.71
Acceptance	3.19 (1.82) _a	3.49 (1.79) _a	3.86 (1.88) _{a,b}	3.40*

**p* < .05

Note. Means in the same row that do not share sub-scripts differ at *p* < .05 using Bonferroni comparisons.

Political consciousness. Finally, a univariate 2 x 3 x 2 ANOVA was conducted to assess potential differences in political consciousness as a function of the type of threat, religious affiliation, and ethnic group status. The main effect for the threat type (ethnic vs. religious) was significant, $F(1, 391) = 4.63, p < .05$; however, unexpectedly, individuals reported higher levels of ethnic ($M = 4.47, SD = 1.77$) compared to religious political consciousness ($M = 4.07, SD = 1.81$). As hypothesized, the main effect for ethnic group status (minority vs. majority) was also significant, $F(1, 391) = 12.67, p < .001$, in that individuals belonging to a minority ethnic group reported higher levels of political consciousness (related to either ethnicity or religion; $M = 4.72, SD = 1.65$) than did Euro-Caucasians ($M = 3.94, SD = 1.84$). Contrary to expectations, the main effect for religious affiliation was not significant, $F(2, 391) = 1.78, ns$. Once again, none of the interactions were significant.

Summary. Although it had been anticipated (Hypothesis 1) that responses would be stronger following a religious compared with an ethnic identity threat, appraisal-coping processes, collective self-esteem, and action intentions did not differ depending on which identity had been threatened. However, individuals felt more determination following a religious (compared to an ethnic) threat. Furthermore, in contrast to what was hypothesized, participants reported the greatest political consciousness in response to an ethnic threat.

Ethnic and religious minorities were also expected to demonstrate stronger responses compared to the majority groups (Hypothesis 2). Indeed, ethnic minorities perceived any identity threat as more central to well-being and as a challenge from which they might learn and grow, yet felt the situation was less controllable than did Euro-Caucasians. In addition, ethnic minorities were least likely to cope adaptively with either threat, reporting greater use of emotion-focused and avoidant coping as well as higher levels of sadness, contempt, and political consciousness. Likewise, religious minorities appraised an identity threat as more central to well-being and endorsed more support-seeking actions than did Christians (i.e., the majority group). Moreover, religious minorities were least likely to endorse *inaction*.

Finally, it was expected that religious minorities would demonstrate the most distinct responses following the recollection of a religious threat (Hypothesis 3). As in Study 2, however, such an interaction was only evident when collective self-esteem was examined in that religious minorities reported higher levels of *private* collective self-esteem compared with the other two groups (Christians and atheists/agnostics) after recalling a religious threat. Yet, contrary to expectations, religious minorities also demonstrated the

lowest levels of *public* collective self-esteem (i.e., that others valued one's religious group) following an *ethnic* threat.

The Role of Identity Strength

A one-way ANOVA revealed a significance difference in levels of religious identity strength across religious groups, $F(2, 417) = 28.62, p < .001$. Specifically, similar to the findings of Studies 1 and 2, individuals belonging to a minority religious group ($M = 3.07, SD = 1.09$) reported higher levels of religious group identification than did Christians, ($M = 2.70, SD = 1.015, p < .01$) or atheists/agnostics ($M = 1.99, SD = 0.71, p < .001$). Moreover, despite atheists' and agnostics' responses to the religious identity measure in terms of their "group membership with other atheists and agnostics", the mean difference between Christians and atheists/agnostics was also significant, $p < .001$. None of the religious affiliations differed from each other in levels of ethnic identification, $F(2, 417) = 1.78, ns$.

Independent-samples t-tests indicated significant differences between the ethnic groups in levels of both religious identity, $t(418) = 2.55, p < .05$, and ethnic identity, $t(418) = 4.23, p < .001$. As expected, individuals belonging to a minority ethnic group reported higher levels of ethnic identity ($M = 3.10, SD = 1.00$) compared to the Euro-Caucasian majority ($M = 2.71, SD = 0.87$). In addition, however, ethnic minorities also reported higher levels of *religious* identity ($M = 2.89, SD = 1.04$) compared to Euro-

Caucasians ($M = 2.61$, $SD = 1.17$)¹⁷.

The moderating roles of religious affiliation and ethnic group status on the relations between levels of identification and the remaining variables were examined (see Appendix F). However, given few significant interactive effects and in an effort to facilitate more parsimonious analyses, subsequent analyses were collapsed across both religious affiliation and ethnic group status. Of primary interest in Study 3 were the potential moderating effects of the type of identity threat (wherein *ethnic* identity threat was coded as 0 and *religious* identity threat was coded as 1) on the relations between ethnic and religious identification and responses to the identity threat. In these analyses, hierarchical regressions were conducted wherein each outcome variable (i.e., appraisals, coping, affect, collective self-esteem, action endorsements, political consciousness) was regressed (in separate analyses) onto identity strength on the first step (with ethnic and religious identity in separate analyses), identity threat condition (i.e., ethnic vs. religious) on the second step, and the interaction between identity strength and condition (i.e., their cross-product) on the third step.

Outcome variables. When the moderating effects of threat condition were examined on the relations between *ethnic* identity strength and the outcomes of interest in the

¹⁷ One-way ANOVAs were conducted to ensure that levels of religious or ethnic identity strength did *not* differ as a function of the type of threat recollection (ethnic vs. religious) prior to participants being asked to recall an incident. Indeed, neither levels of religious, $F(1, 418) = 1.11$, *ns*, nor ethnic identity, $F < 1$, differed across the two study conditions. Parenthetically, the total mean level of religious identity ($M = 2.73$, $SD = 1.12$) was slightly lower than that of ethnic identity ($M = 2.88$, $SD = 0.95$) when all participants were included in the analysis. However, when atheists and agnostics were excluded, the means were nearly equal ($M = 2.90$, $SD = 1.14$; $M = 2.92$, $SD = 0.97$, for religious and ethnic identity, respectively). Nonetheless, in light of theoretical considerations suggesting that atheists and agnostics may also experience religious (i.e., “irreligious”) identity threat, despite their lower levels of religious identity strength and, consequently, the slight increase in overall levels of religious identification across the sample when atheists/agnostics were excluded, subsequent analyses presented in the main text include this group. Analyses conducted *excluding* atheists/agnostics (in order to identify potential variations in the patterns of relations among the variables of interest) are presented as footnotes.

present study, only one significant interactive effect was revealed. Specifically, the strength of the relations between ethnic identification and private collective self-esteem differed as a function of the type of identity threat (i.e., the slopes representing the relations between ethnic identity strength and private collective self-esteem for the two identity threat conditions differed from one another). Regardless of which type of threat had been recalled, ethnic identity strength was associated with increased private collective self-esteem (i.e., perceiving one's group membership as valuable), although this relation was still stronger when participants ethnic identity was threatened (see Table 3.5). Moreover, although the slopes did not significantly differ across the two threat conditions on any other variables, zero-order correlations indicated that high ethnic identification was associated with increased anger, support-seeking action intentions, and political consciousness, regardless of which group membership had been targeted. Conversely, ethnic identity strength was significantly correlated with increased levels of sadness, fear, contempt, and public collective self-esteem only following an ethnic threat. Interestingly, ethnic identity strength was also positively correlated with determination, but only following a *religious* threat.

Table 3.5

Hierarchical Regression Analyses and Zero-order Correlations between Identity Strength and Outcome Variables as a Function of Identity Threat Type in Study 3

Identity Threat	Ethnic Identity Strength			Religious Identity Strength		
	Ethnic (<i>n</i> = 211) <i>r</i>	Religious (<i>n</i> = 200) <i>r</i>	<i>F</i> _{cha} (1,407)	Ethnic (<i>n</i> = 211) <i>r</i>	Religious (<i>n</i> = 200) <i>r</i>	<i>F</i> _{cha} (1,407)
Affect dimension						
Determination	.12 [†]	.16 [*]	0.09	.15 [*]	.26 ^{***}	1.55
Sadness	.17 [*]	.02	2.58	-.01	.26 ^{***}	7.31 ^{**}
Anger	.14 [*]	.20 ^{**}	0.28	-.11	.14 [*]	6.17 [*]
Fear	.19 ^{**}	.13 [†]	0.49	-.01	.38 ^{***}	16.54 ^{***}
Contempt	.16 [*]	.09	0.74	-.02	.09	1.38
Collective self-esteem						
Private	.48 ^{***}	.15 [*]	15.79 ^{***}	.05	.53 ^{***}	27.12 ^{***}
Public	.21 ^{**}	.13 [†]	1.10	-.13 [†]	.23 ^{***}	13.11 ^{***}
Action endorsement						
Support-seeking	.24 ^{***}	.20 ^{**}	0.08	.19 ^{**}	.48 ^{***}	14.44 ^{***}
Confrontational	.10	.05	0.30	.10	.10	0.02
Acceptance	-.04	.11	1.94	-.13 [†]	-.20 ^{**}	0.54
Political consciousness	.39 ^{***}	.32 ^{***}	1.08	.13 [†]	.36 ^{***}	6.34 [*]

[†] *p* < .10; * *p* < .05; ** *p* < .01; *** *p* < .001

When the moderating effects of condition were examined on the relations between *religious* identity strength and the outcomes of interest, several significant interactions emerged (i.e., the slopes were significantly different). As seen in Table 3.5, highly-identified religious individuals reported more sadness, anger, and fear upon recalling a religious identity threat, whereas religious identification was not related to those affective responses when the threat was based on ethnicity. Likewise, high-identifiers indicated greater collective self-esteem (both private and public) and political consciousness, but only following a religious identity threat. Regardless of which type of threat had been recalled, religious identity strength was associated with increased support-seeking action intentions, although this relation was stronger when participants' religious identity was threatened. Finally, although the slopes did not significantly differ across the two threat conditions on the remaining variables, zero-order correlations indicated that high-identifiers were less likely to accept the situation following a religious identity threat. Interestingly, highly-identified religious individuals reported more determination (e.g., strength) regardless of whether an ethnic or religious threat had occurred¹⁸.

Lastly, a series of hierarchical regressions was conducted to assess the moderating effects of threat condition on the relations between identity strength (ethnic *or* religious) and the outcomes of interest *only* in relation to the corresponding threat (i.e., comparing

¹⁸ It should be noted that these relations with religious identity strength were conducted with atheists and agnostics included in the sample, given the argument that atheists and agnostics may also be "religious about their unbelief" (e.g., Dawkins, 2007). However, when atheists/agnostics were *excluded*, minor differences in the pattern of relations emerged. In particular, highly-identified religious individuals were (paradoxically) more likely to endorse confrontational action intentions ($r = .19, p < .05$) in an effort to deal with an *ethnic* identity threat. Yet, religious identity strength and public collective self-esteem (i.e., that others value one's group; $r = .09, ns$) were unrelated following the recollection of a religious threat when atheists and agnostics were excluded, suggesting that highly-identified atheists/agnostics especially may perceive that others value their group when they value the group themselves.

the outermost correlation columns of Table 3.5; analyses parallel to those conducted in Study 2 to compare the university-related and religious identity threats). However, only one interaction was significant. Specifically, highly-identified religious individuals endorsed support-seeking action in response to a religious threat significantly more so than did individuals who identified highly with their ethnic group when responding to an ethnic threat, $R^2_{cha} = .011$, $F_{cha}(1, 407) = 5.40$, $p < .05$.

In sum, as expected (Hypothesis 4), affective responses, collective self-esteem, actions taken, and political consciousness were related to identity strength following recollection of the relevant identity threat (i.e., highly-identified religious individuals reported stronger responses following a religious group threat, whereas individuals who identified highly with their ethnic group reported the strongest responses following an ethnic group threat). Also as hypothesized, highly-identified religious individuals reported more determination and were more likely to endorse support-seeking action following both threats, and the latter was significantly stronger following a religious threat. However, contrary to expectations, individuals who highly-identified with their *ethnic* group also endorsed support-seeking action regardless of which group identity had been threatened, and (unexpectedly) were more inclined to feel anger and to report higher levels of political consciousness than were low-identifiers following either threat. Finally, it is interesting to note that those who highly-identified with their ethnic group curiously reported more determination only following the recollection of a *religious* identity threat.

Appraisals and coping. When the moderating effects of condition were examined on the relations between *ethnic* identity strength and appraisal-coping processes, only one significant interactive effect was revealed. Not surprisingly, individuals who highly-

identified with their ethnic group appraised an ethnic identity threat as significantly more central to well-being than a threat to their religious group and used marginally more emotion-focused coping to deal with an ethnic threat (see Table 3.6). Moreover, although the slopes did not significantly differ across the threat conditions, zero-order correlations also indicated that when one's ethnic group was threatened, individuals who highly-identified with that group appraised the situation as particularly threatening, challenging, and were more inclined to endorse problem-focused, emotion-focused, and avoidant coping strategies compared to low-identifiers. Conversely, ethnic identity strength and appraisal-coping responses following a religious threat were completely unrelated¹⁹.

¹⁹ Given that some individuals who highly identified with their ethnic group responded to a *religious* threat, analyses were also conducted with atheists/agnostics excluded from the sample. In this case, the relations between ethnic identification and both emotion-focused and avoidant coping were reduced to marginal significance ($r_s = .15$, $p_s = .057$).

Table 3.6

Hierarchical Regression Analyses and Zero-order Correlations between Identity Strength and Appraisal-Coping Variables as a Function of Identity Threat Type in Study 3

Identity Threat	Ethnic Identity Strength			Religious Identity Strength		
	Ethnic (<i>n</i> = 213)	Religious (<i>n</i> = 207)	<i>F</i> _{cha} (1,416)	Ethnic (<i>n</i> = 213)	Religious (<i>n</i> = 207)	<i>F</i> _{cha} (1,416)
	<i>r</i>	<i>r</i>		<i>r</i>	<i>r</i>	
Stressor appraisal						
Threat	.14*	.01	2.06	-.01	.27***	8.16**
Challenge	.21**	.08	2.07	.13 [†]	.36***	6.86**
Centrality	.15*	-.05	3.89*	.09	.23***	2.56
Controllable by oneself	.05	.07	0.06	-.02	-.04	0.04
Controllable by others	.09	.09	0.01	.11	.29***	4.40*
Uncontrollable by anyone	.03	.05	0.03	-.03	.15*	3.64 [†]
Coping strategies						
Problem-focused	.16*	.11	0.32	.19**	.41***	7.27**
Emotion-focused	.15*	-.02	3.04 [†]	.00	.23***	5.59*
Avoidant	.14*	.10	0.34	.04	-.06	0.94

[†] *p* < .10; * *p* < .05; ** *p* < .01; *** *p* < .001

The moderating effects of condition on the relations between *religious* identity strength and appraisal-coping processes demonstrated several interactions. Specifically, the slopes differed across the threat conditions due to highly-identified religious individuals' appraisals of a religious identity threat (compared to an ethnic identity threat) as especially threatening, challenging, and controllable by others (see Table 3.6). High-identifiers were also more inclined to endorse problem-focused and emotion-focused coping when their religious group had been targeted, although such individuals also endorsed problem-focused coping to some extent when their *ethnic* group had been threatened. In addition, although the slopes did not significantly differ across the threat types, zero-order correlations indicated that highly identified religious individuals appraised a religious threat as more central and uncontrollable than did low-identifiers²⁰.

Lastly, the moderating effects of threat condition on the relations between identity strength (*ethnic or religious*) and appraisal-coping processes *only* in relation to the corresponding threat were examined (i.e., comparing the outermost correlation columns of Table 3.6). In this case, a marginal interaction emerged for appraisals of the threat as controllable by others, $R^2_{cha} = .007$, $F_{cha}(1, 416) = 3.19$, $p = .075$, and significant interactions were revealed for both problem-focused coping, $R^2_{cha} = .011$, $F_{cha}(1, 411) = 4.89$, $p < .05$, and avoidant coping, $R^2_{cha} = .010$, $F_{cha}(1, 411) = 4.25$, $p < .05$. As seen in Table 3.6, highly-identified religious individuals were more inclined to appraise their experience of religious threat as controllable by others and to endorse problem-focused

²⁰ As with the relations among religious identity strength and the outcome variables of interest, some minor differences in appraisal-coping processes related to religious identity strength emerged when atheists and agnostics were excluded from the analyses. In particular, an *ethnic* identity threat was perceived as central to well-being ($r = .16$, $p < .05$) among highly-identified religious individuals. In addition, when atheists and agnostics were absent, a *religious* identity threat was no longer appraised as uncontrollable ($r = .08$, *ns*).

coping in response to such a threat than were individuals who highly-identified with their ethnic group in an effort to cope with an ethnic threat. Conversely, highly-identified ethnic individuals endorsed avoidant coping to deal with an ethnic threat whereas highly-identified religious individuals did not employ such coping efforts in response to a religious threat.

In summary, as hypothesized (Hypotheses 5 & 6), high-identifiers (ethnic or religious) appeared to report more extreme appraisals (e.g., threat, challenge, centrality) and greater use of problem-focused and emotion-focused coping strategies when the corresponding identity had been threatened. Indeed, ethnic identity strength was completely unrelated to appraisal-coping processes when a religious identity threat was considered. Contrary to expectations (Hypothesis 6), however, rather than ethnic identification serving to diminish maladaptive coping strategies, ethnic identity strength was associated with *increased* avoidant coping following an ethnic threat. Nonetheless, in line with what had been hypothesized, highly-identified religious individuals reported using problem-focused coping in an effort to deal with either threat, although such coping strategies were used to a greater extent when individuals' religion had been targeted.

The Mediating Roles of Appraisal-Coping Processes in the Relations between Religious Identity Strength and Responses to an Identity Threat

As in Studies 1 and 2, it was expected that appraisal-coping responses would account for the relations between identity strength and responses to an identity threat in the present study (recall Figure 3.1). Of course, appraisal-coping responses and the outcome variables must also be related for that to be true. A series of correlations was therefore conducted (separately for ethnic vs. religious identity threat conditions, given no

significant relations between ethnic identity strength and appraisal-coping processes following a religious identity threat recall, therefore precluding the possibility of mediating relations in that context) to examine such possibilities. The correlations presented were restricted to those variables that were significantly related to the relevant form of identification (i.e., ethnic vs. religious) in the previous analyses, and thus could serve as potential mediators. Mediation models were also pursued separately for ethnic versus religious identification, and only in response to the corresponding threat (i.e., ethnic vs. religious threat, respectively). Two exceptions existed, in that determination and social-support seeking action intentions were positively correlated with religious identification across both threats, and problem-focused coping potentially mediated these relations. Thus, in these cases, moderated mediation models were assessed.

Mediated paths between religious identity strength and affect. Nearly all appraisal-coping responses that were related to religious identification following a religious group threat were also related to the affective responses evoked by such threats. As seen in Table 3.7, with the exception of appraisals of a previous religious threat as uncontrollable, all other appraisals and coping strategies that were related to religious identity strength were also related to heightened feelings of determination. Without exception, appraisal-coping responses were related to increased sadness following a religious identity threat²¹. Similarly, all appraisals and coping strategies with the exception of control were associated with increased anger and fear. Therefore, the

²¹ When atheists/agnostics were excluded from these analyses, the relation between sadness and appraisals of one's experience as controllable by others was reduced to marginal significance, $r = .14$, $p = .071$.

relations between religious identity strength and these affective dimensions might be accounted for by a number of the appraisal-coping processes evoked by religious threats.

Table 3.7

Zero-order Correlations between Appraisal-Coping Processes and Affect Related to Religious Identity Strength following a Religious Identity Threat

	Affect dimensions			
	Determination	Sadness	Anger	Fear
Stressor appraisals				
Threat	.22**	.64***	.48***	.60***
Challenge	.48***	.31***	.24***	.34***
Centrality	.30***	.54***	.36***	.49***
Controllable by others	.18*	.15*	-.01	.12
Uncontrollable by anyone	.08	.30***	.06	.27***
Coping strategies				
Problem-focused	.47***	.39***	.25***	.44***
Emotion-focused	.21**	.67***	.40***	.66***

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

Indeed, challenge appraisals and problem-focused coping strategies accounted for highly-identified religious individuals' determination following a religious threat (see Table 3.8). This finding was in contrast to responses following the fictitious religious threat in Study 2, wherein appraisal-coping processes did not mediate the relation between religious identity strength and determination. Similar to Study 2, however,

appraisals of one's experience as particularly threatening accounted for high-identifiers' increased feelings of sadness and anger. In addition, emotion-focused coping strategies also accounted for their increased sadness in Study 3. Finally, highly-identified religious individuals' threat appraisals emotion-focused coping endorsements accounted for their increased fear following a religious identity threat. Nonetheless, the direct relation remained significant suggesting that such appraisal-coping processes only served as partial mediators.

Table 3.8

Multiple Mediation Estimates for Religious Identity Strength and Affect, Controlling for Appraisal-Coping Processes in Response to a Religious Identity Threat

	Affect dimensions			
	Determination	Sadness	Anger	Fear
Total effect	.37***	.44***	.20*	.62***
Direct effect	.08	.12	.01	.35***
Stressor appraisals				
Threat	-.08 (-.21, .01)	.16 (.06, .31)	.17 (.04, .31)	.13 (.05, .28)
Challenge	.16 (.08, .28)	-.06 (-.16, .02)	-.01 (-.12, .08)	-.03 (-.11, .06)
Centrality	.06 (-.01, .18)	.03 (-.04, .14)	-.01 (-.11, .06)	-.01 (-.11, .06)
Controllable by others	-.04 (-.12, .02)	.03 (-.03, .10)	/	/
Uncontrollable by anyone	/	.02 (-.01, .08)	/	.01 (-.01, .06)
Coping strategies				
Problem-focused	.22 (.11, .37)	-.01 (-.11, .09)	.00 (-.10, .10)	.02 (-.08, .10)
Emotion-focused	-.03 (-.11, .02)	.16 (.07, .30)	.05 (-.02, .16)	.16 (.07, .29)

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

Note. Total effect=unstandardized coefficient for the effect of religious identity strength on the affective response; Direct effect=unstandardized coefficient for the effect of religious identity strength on the affective response, controlling for appraisal-coping responses. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Mediated paths between religious identity strength and collective self-esteem. The correlations among appraisal-coping processes and collective self-esteem were less consistent than those concerning affective responses. As seen in Table 3.9, only appraisals of a religious threat as a challenge and as controllable by others were associated with higher levels of private collective self-esteem. Appraisals that the experience was both controllable by others yet uncontrollable by anyone were associated with higher levels of public collective self-esteem, as was problem-focused coping²².

When the mediating roles of appraisal-coping processes were assessed, the direct relation between religious identification and private collective self-esteem remained significant. Moreover, the 95% confidence intervals for both challenge and control appraisals overlapped zero, suggesting that factors other than appraisal-coping processes accounted for this relation (see Table 3.10). This finding was in contrast to Study 2, wherein problem-focused coping endorsements accounted for highly-identified religious individuals' increased private collective self-esteem following a fictitious religious threat. Likewise, problem-focused coping did not mediate the relation between religious identification and public collective self-esteem in Study 3; however, appraisals of a religious threat as controllable by others appeared to at least partially mediate this relation.

²² When atheists/agnostics were excluded from the correlational analyses, the relation between private collective self-esteem and appraisals of one's experience as controllable by others was reduced to marginal significance, $r = .15$, $p = .062$, yet its relation with problem-focused coping was significant, $r = .17$, $p < .05$. The relations between public collective self-esteem and both uncontrollable appraisals, $r = .11$, ns , and problem-focused coping, $r = .08$, ns , were reduced to non-significance when atheists/agnostics were excluded.

Table 3.9

Zero-order Correlations between Appraisal-Coping Processes and Outcomes Related to Religious Identity Strength following a Religious Identity Threat

	Outcomes				
	Private CSE	Public CSE	Support-seeking action	Acceptance	PC
Stressor appraisals					
Threat	-.02	-.09	.32***	-.32***	.13 [†]
Challenge	.18*	.11	.44***	-.29***	.13 [†]
Centrality	-.06	-.05	.32***	-.29***	.07
Controllable by others	.18*	.31***	.42***	-.27***	.07
Uncontrollable by anyone	-.04	.16*	.26***	.03	.14 [†]
Coping strategies					
Problem-focused	.14 [†]	.16*	.59***	-.45***	.15*
Emotion-focused	-.09	-.11	.34***	-.18*	.18**

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note. CSE = collective self-esteem; PC = political consciousness.

Table 3.10

Multiple Mediation Estimates for Religious Identity Strength and Outcomes, Controlling for Appraisal-Coping Processes in Response to a Religious Identity Threat

	Outcomes				
	Private CSE	Public CSE	Support-seeking action	Acceptance	PC
Total effect	.59***	.29**	.64***	-.32**	.59***
Direct effect	.59***	.19*	.32***	.04	.58***
Stressor appraisals					
Threat	/	/	.00 (-.08, .07)	-.10 (-.25, .01)	/
Challenge	-.01 (-.05, .05)	/	.04 (-.03, .12)	.01 (-.10, .12)	/
Centrality	/	/	.02 (-.03, .11)	-.04 (-.17, .03)	/
Controllable by others	.01 (-.03, .06)	.10 (.04, .19)	.06 (.01, .14)	-.04 (-.11, .04)	/
Uncontrollable by anyone	/	.02 (-.01, .07)	.03 (.00, .07)	/	/
Coping strategies					
Problem-focused	/	-.02 (-.10, .06)	.19 (.09, .35)	-.29 (-.48, -.14)	-.04 (-.16, .05)
Emotion-focused	/	/	-.01 (-.07, .06)	.10 (.02, .24)	.05 (-.01, .14)

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

Note. CSE = collective self-esteem; PC = political consciousness; Total effect=unstandardized coefficient for the effect of religious identity strength on the outcome variable; Direct effect=unstandardized coefficient for the effect of religious identity strength on the outcome variable, controlling for appraisal-coping responses. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Mediated paths between religious identity strength and actions taken. As seen in Table 3.9, action endorsements (namely support-seeking and the “inaction” of acceptance) were associated with each of the appraisal-coping responses that were also related to religious identity strength. One exception existed in that appraisals of the situation as uncontrollable were unrelated to individuals’ propensities toward accepting the experience²³.

As was the case following a religious threat in Study 2, problem-focused coping endorsements played an important role in accounting for highly-identified individuals’ increased support-seeking action in response to a religious threat. However, as seen in Table 3.10, given that the direct relation remained significant, such coping strategies only partially mediated this relation in Study 3. In addition, appraisals of a religious threat as controllable by others also partially accounted for high-identifiers’ support-seeking actions. Highly-identified religious individuals’ refusal to accept a religious threat was not only accounted for problem-focused coping (as in Study 2), but also by emotion-focused coping endorsements. Thus, high-identifiers who were particularly inclined to take a problem-solving approach yet were also emotionally-charged following a religious threat were more likely to reject the notion of *inaction*.

Mediated paths between religious identity strength and political consciousness. Only problem-focused and emotion-focused coping were significantly related to political consciousness following a religious threat (see Table 3.9), and thus could serve as potential mediators in its relation with religious identification²⁴. As seen in Table 3.10, however,

²³ The correlation between acceptance and emotion-focused coping was not significant when atheists/agnostics were excluded, $r = -.12$, *ns*.

²⁴ The correlations between political consciousness and both threat and challenge appraisals, $r_s = .16$, $p_s < .05$, were significant when atheists/agnostics were excluded, yet its relation with problem-focused coping was reduced to non-significance, $r = .15$, $p = .067$.

neither type of coping significantly accounted for this relation. Indeed, the direct relation remained significant when coping was controlled. These findings suggest that high-identifiers' increased political consciousness following a religious threat was motivated by factors other than their appraisal-coping processes.

Summary. In line with predictions (Hypothesis 7), appraisal-coping responses following a religious threat served mediating roles in the relations between religious identity strength and some of the outcomes in the present study. In particular, threat appraisals and emotion-focused coping accounted for religious high-identifiers' increased negative affect (i.e., sadness, anger, fear). In addition, challenge appraisals fostered feelings of determination (e.g., strength) among individuals who highly-identified with their religious group. High-identifiers' appraisals of a religious threat as controllable by others accounted for their greater levels of public collective self-esteem, as well as their intentions to take support-seeking action. Finally, as expected, problem-focused coping served to promote several adaptive responses (i.e., determination, support-seeking action, reduced *inaction*) among high-identifiers following a religious threat, although emotion-focused coping was also implicated in such individuals' refusal to accept the situation. Contrary to what had been hypothesized, however, appraisal-coping processes failed to account for highly-identified religious individuals' increased political consciousness following a religious threat, suggesting that other factors might better explain that relation.

The Mediating Roles of Appraisal-Coping Processes in the Relations between Ethnic Identity Strength and Responses to an Identity Threat

Mediated paths between ethnic identity strength and affect. As seen in Table 3.11, similar to the relations among appraisal-coping processes and affective responses following a religious threat, nearly all appraisals and coping strategies that were related to ethnic identity strength were also related to the affective responses evoked in those individuals by ethnic threats (i.e., the only exception was the marginal relation between avoidant coping and sadness). Thus, any of those appraisals or coping strategies could potentially account for ethnic high-identifiers' affective responses.

Table 3.11

Zero-order Correlations between Appraisal-Coping Processes and Affect Related to Ethnic Identity Strength following an Ethnic Identity Threat

	Affect dimensions			
	Sadness	Anger	Fear	Contempt
Stressor appraisals				
Threat	.66 ^{***}	.52 ^{***}	.61 ^{***}	.34 ^{***}
Challenge	.30 ^{***}	.41 ^{***}	.22 ^{**}	.33 ^{***}
Centrality	.50 ^{***}	.43 ^{***}	.40 ^{***}	.33 ^{***}
Coping strategies				
Problem-focused	.33 ^{***}	.35 ^{***}	.28 ^{***}	.31 ^{***}
Emotion-focused	.70 ^{***}	.43 ^{***}	.63 ^{***}	.35 ^{***}
Avoidant	.12 [†]	.14 [*]	.14 [*]	.17 [*]

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Indeed, as seen in Table 3.12, the relations between ethnic identity strength and affective responses were reduced to non-significance when appraisals and coping strategies were considered. Emotion-focused coping appeared to account for high-identifiers' increased sadness following such threats, as was the case in the relation between religious identification and sadness. Perceptions of one's experience as particularly threatening and as a challenge led to higher levels of anger. Similarly, both threat appraisals and emotion-focused coping strategies endorsed by highly-identified individuals accounted for their increased fear following an ethnic threat (mirroring the mediating role of appraisals and coping in fear responses following a religious identity threat). However, neither appraisals nor coping strategies mediated the relation between ethnic identity strength and contempt²⁵.

²⁵ Although no specific appraisal or coping response served as a mediator in the relation between ethnic identification and contempt, the 95% confidence interval for the total mediation effect did *not* overlap zero (CI = .06, .32).

Table 3.12

Multiple Mediation Estimates for Ethnic Identity Strength and Outcomes, Controlling for Appraisal-Coping Processes in Response to an Ethnic Identity Threat

	Outcomes					
	Sadness	Anger	Fear	Contempt	Support-seeking action	PC
Total effect	.35*	.24*	.37**	.32*	.34***	.77***
Direct effect	.14	.03	.20 [†]	.14	.22*	.70***
Stressor appraisals						
Threat	.10 (-.01, .44)	.10 (.01, .26)	.11 (.01, .26)	.04 (-.01, .18)	.03 (-.01, .11)	.02 (-.02, .12)
Challenge	-.01 (-.01, .24)	.08 (.02, .18)	-.04 (-.11, .01)	.06 (-.01, .19)	.03 (-.01, .11)	.05 (-.01, .15)
Centrality	-.01 (-.11, .05)	-.01 (-.06, .05)	-.04 (-.13, .01)	.01 (-.04, .10)	-.01 (-.07, .02)	-.01 (-.11, .05)
Coping strategies						
Problem-focused	.01 (-.02, .09)	.02 (-.02, .10)	.02 (-.02, .09)	.03 (-.02, .11)	.09 (.01, .19)	/
Emotion-focused	.13 (.01, .26)	.01 (-.04, .05)	.11 (.01, .27)	.02 (-.02, .11)	-.01 (-.08, .02)	.00 (-.03, .07)
Avoidant	/	.02 (-.01, .07)	.01 (-.02, .05)	.02 (-.01, .08)	.00 (-.04, .02)	/

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note. PC = political consciousness; Total effect=unstandardized coefficient for the effect of ethnic identity strength on the outcome variable; Direct effect=unstandardized coefficient for the effect of ethnic identity strength on the outcome variable, controlling for appraisal-coping responses. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Mediated paths between ethnic identity strength and support-seeking action. As seen in Table 3.13, none of the appraisal-coping processes related to ethnic identity strength were related to collective self-esteem, and thus could not serve as mediators in those relations. However, all of the appraisals and coping strategies that were correlated with ethnic identification were also related to intentions for support-seeking action and so potentially mediated that relation.

Table 3.13

Zero-order Correlations between Appraisal-Coping Processes and Outcomes Related to Ethnic Identity Strength following an Ethnic Identity Threat

	Outcomes			
	Private CSE	Public CSE	Support-seeking action	PC
Stressor appraisals				
Threat	.03	-.10	.25***	.15*
Challenge	.09	-.06	.36***	.23**
Centrality	.02	-.09	.26***	.15*
Coping strategies				
Problem-focused	-.03	-.11	.46***	.13 [†]
Emotion-focused	-.04	-.11	.26***	.15*
Avoidant	.01	.03	.14*	.09

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Note. CSE = collective self-esteem; PC = political consciousness.

Following the pattern of responses to the “non-religious” threat in Study 2 (i.e., university affiliation), as well as coinciding with responses to a religious threat in the present study, high-identifiers’ increased propensities to endorse problem-focused coping accounted for their support-seeking action following an ethnic identity threat (see Table 3.12). Nonetheless, when appraisal-coping processes were controlled, the relation remained significant, suggesting that problem-focused coping only partially mediated the relation between ethnic identity strength and the support-seeking actions taken.

Mediated paths between ethnic identity strength and political consciousness. As seen in Table 3.13, appraisals of an ethnic identity threat as particularly threatening, challenging, and central were associated with increased political consciousness, as was emotion-focused coping. However, when the mediating roles of those appraisal-coping processes were assessed, the relation between ethnic identification and political consciousness remained significant (see Table 3.12). Indeed, mirroring the findings following a religious identity threat, none of the appraisal-coping responses reached significance, suggesting that high-identifiers’ increased political consciousness following an ethnic threat was motivated by factors other than their appraisals of the experience or the coping strategies they used.

Summary. As expected (Hypothesis 7), appraisal-coping responses following an ethnic threat served a mediating function in the relations between ethnic identity strength and some of the outcomes of interest. Similar to religious identification, threat appraisals and emotion-focused coping appeared to play a key role in accounting for high-identifiers’ increased negative affect (i.e., sadness, anger, fear). However, rather than promoting prosocial feelings of determination, in this case challenge appraisals served to promote higher levels of anger among individuals who highly-identified with their ethnic

group. Also in line with expectations and the findings of Study 2, problem-focused coping at least partially accounted for high-identifiers' increased support-seeking actions following an ethnic threat. However, contrary to what had been hypothesized, but parallel to the mediated model assessed with religious identification, appraisal-coping processes did not serve a mediating role in the relation between ethnic identity strength and political consciousness. Moreover, neither appraisals nor coping strategies were related to collective self-esteem following an ethnic threat, and so mediated models with those outcome variables could not even be assessed.

Moderated Mediation: The Role of Problem-focused Coping across Identity Threats

Religious identity strength and determination. It will be recalled that religious identity strength was positively correlated with both problem-focused coping and determination, regardless of which identity had been threatened. Problem-focused coping served as a significant mediator in the relation between religious identity strength and determination following a *religious* identity threat (recall Table 3.8). However, it was anticipated that the same mediating relation would hold true following an ethnic identity threat as well, given the suggestion that religious identification may promote adaptive responses following *any* threat (see Hypothesis 7)²⁶. Preacher, Rucker, and Hayes (2007) steps for assessing moderated mediation were thus followed, with 5000 bootstrap samples in each analysis. As expected, the interaction term between the mediator (problem-focused coping) and moderator (ethnic vs. religious threat type) in predicting

²⁶ Although a significant moderated mediation effect was hypothesized for the relations when ethnic identity strength was the predictor, given that this form of identification was completely unrelated to appraisal-coping processes following a *religious* identity threat in previous analyses, moderated mediation with ethnic identification as the predictor was not pursued.

determination was *not* significant, $B = -.09$, $SE = .15$, $t = -.63$, *ns*. Indeed, as seen in Table 3.14, although the indirect effect of problem-focused coping was slightly stronger following a religious identity threat, it remained significant following an ethnic identity threat as well.

Table 3.14

Moderated Mediation Estimates for Conditional Indirect Effects of Problem-focused Coping in the Relations between Religious Identity Strength and Outcomes

Outcome	Threat type	Boot indirect effect	Boot SE	Boot z	Boot p
Determination					
	Ethnic	.12	.05	2.46	.0139
	Religious	.25	.06	3.92	.0001
Support-seeking					
	Ethnic	.09	.04	2.48	.0131
	Religious	.26	.06	4.39	.0000

Note. Boot indirect effect = unstandardized regression values.

Religious identity strength and support-seeking action. It will also be recalled that religious identity strength was positively correlated with support-seeking action following both threat types in previous analyses. When moderated mediation was conducted in this case, once again the interaction term between the mediator (problem-focused coping) and moderator (threat type) in predicting support-seeking was not significant, $B = .11$, $SE = .13$, $t = .84$, *ns*. Following the same pattern as with determination, although the indirect effect of problem-focused coping was slightly stronger following a religious identity

threat, it also remained a significant mediator in the relation between religious identity strength and support-seeking action following an ethnic identity threat (see Table 3.14).

Taken together, these findings confirm what had been expected (Hypothesis 7), in that problem-focused coping, which was endorsed by highly-identified religious individuals regardless of whether their ethnic or religious group had been targeted, would promote more adaptive affective and behavioural outcomes following *either* threat²⁷.

Discussion

The present study aimed to build on the previous two studies by examining the role of religious identification in shaping appraisal-coping processes, psychological, social, and political responses to a lived experience of identity threat. In contrast to the previous study, however, religious identification was compared with *ethnic* identification and identity threat in an effort to demonstrate that the farther-reaching implications of religious identity threats would hold even against threats to an identity of potentially comparable importance. In addition, the adaptive function that religious identification may have in response to identity threats of a non-religious nature was examined. Support for the hypotheses of the present study was mixed; however, the results nonetheless point to religious identification and threat as having a powerful impact and the role of appraisal-coping processes critical when religious identification was considered.

The Role of Religious Identification in Coping with Identity Threats

Consistent with the affective responses elicited by a religious identity threat in Study 2 and previous research wherein identity threat has evoked powerful emotional responses

²⁷ The mediating roles of appraisals in the relations between identity strength and coping in Study 3 are presented in Appendix G.

(e.g., Dumont et al., 2003; Mackie et al., 2000; Matheson & Cole, 2004; Yzerbyt et al., 2003), religious identification was associated with increased sadness, anger, and fear following a religious threat. Although religious identifiers also appraised a religious threat in positive terms (e.g., as a challenge from which they might learn or grow; Park, 2006), their interpretations of the event as particularly threatening played a critical role in accounting for their negative emotional responses (as in Study 2). Also consistent with the previous study, religious identifiers engaged in both problem-focused and emotion-focused coping strategies in an effort to deal with religious threat, suggesting that when one's religion is directly targeted, emotionally-fuelled responses are evoked alongside more constructive efforts to manage the threat. Those emotion-focused responses, in turn, accounted for the greater sadness and fear expressed in the aftermath of a religious threat. Interestingly, negative emotions were absent among highly-identified religious individuals following an *ethnic* identity threat. Although this *lack* of relation does not necessarily indicate that religious identification had a protective effect on emotional reactions per se, it might imply that highly-identified religious individuals simply did not perceive an ethnic threat to be sufficiently threatening or emotionally-taxing to warrant a strong affective response.

Despite the negative emotions elicited by a religious threat, as in Study 2, stronger religious identification was also associated with higher levels of determination (e.g., strength, pride). Parenthetically, appraisals of the threat as a challenge along with problem-focused efforts were important in accounting for high-identifiers' determination. In effect, the strength that highly-identified religious individuals felt after their religion had been targeted appeared to stem from their ability to view the threat as a situation

from which they might gain benefits, as well as their abilities to focus on problem-solving efforts, to rely on their social network for support, or to reframe the situation in a more positive light. Moreover, as anticipated, this pattern of responses among highly-identified religious individuals was not restricted to situations wherein religious group membership had been targeted, but was also evident following *ethnic* identity threat. These findings provide further support for the contention that religious identity and beliefs may promote adaptive responses across a variety of stressors including threats targeting identities other than religion (i.e., ethnicity; King, 1968; Tutu, 1999), which at the same time may have presented an opportunity for religious individuals to grow in their faith (Park, 2006).

Also consistent with Studies 1 and 2 as well as previous research (Branscombe et al., 1999; Jetten et al., 2001), religious identifiers reported higher levels of private collective self-esteem following the recollection of a religious threat. However, identification with one's religious group also resulted in greater perceptions of *public* collective self-esteem following recollection of a religious threat. This puzzling finding suggests that religious group identification following more severe experiences of identity threat (compared with the fictitious threat in the previous study) fostered positive perceptions of *others'* views of one's religious group, perhaps as an effort to preserve the group's image (Cohen & Garcia, 2005). Alternatively, it might be that those who endured discrimination or threat on the basis of their religious group membership assumed that others would view their group members as victims with whom to be empathized, in contrast to outgroup members who were guilty of perpetrating the threat, even by collective association (Wohl & Branscombe, 2005). However, appraisals of the situation as controllable by others served to foster more positive public collective self-esteem following a religious threat in the

present study. Thus, it might have been that those who perceived control to be in the hands of others (paradoxically) trusted that those “others” would view them favourably.

Notwithstanding the similarities regarding participants’ emotional responses and collective self-esteem following fictitious and experienced religious identity threats, the actions *taken* (Study 3) to deal with a religious threat were less consistent. Most notably, whereas confrontational action intentions were endorsed by high-identifiers following a religious identity threat in Study 2, highly-identified religious individuals did not report carrying through with those actions following the event that they recalled in the present study. It has been suggested that action intentions do not always translate into actual behaviours (Dumont et al., 2003) and this would indeed seem to be the case in the present investigation. Conceivably, this occurred as a function of the often severe nature of the threats themselves (i.e., situations in which individuals might have been powerless to take real confrontational action against the perpetrators of the threat; Branscombe & Ellemers, 1998) or perhaps as a result of shock or fear at the consequences of taking such actions (indeed, several written comments from participants indicated shock or disbelief at the time of the threat). Nonetheless, support-seeking action intentions coincided with the actual behaviours taken among highly-identified religious participants across the two studies. Likewise, high-identifiers were least likely to accept a religious threat, whether fictitious or authentic, suggesting that religious identification motivated action-taking in general (but particularly when one’s religious beliefs were under attack). Problem-focused coping was again integral in motivating efforts for both support-seeking action as well as the refusal to do nothing. In keeping with various aforementioned historical examples (King, 1968; Frankl, 1985; Tutu, 1999), religious identification appeared to

promote such problem-focused efforts as a pathway to prosocial action not only in circumstances wherein one's religious group had been targeted, but also following threats directed at one's *ethnic* group. Conversely, highly-identified religious individuals who engaged in emotional coping efforts refused to accept a threat targeting their religious group specifically, perhaps highlighting the potentially adaptive functions of emotionally-engaging coping strategies (Austenfeld & Stanton, 2004; Stanton et al., 2000; Stanton & Franz, 1999). Alternatively, the latter finding might again point to the perceived magnitude of religious threats, in that coping efforts such as ruminating over the offense or blaming one's offenders perhaps led high-identifiers to conclude that they must do something, even in cases where they were not quite certain what action to take.

Finally, given the frequent intersection among culture, religion, and politics (Marshall & Read, 2003) political consciousness was also examined in the present study. Although religious identification was associated with the anticipated high levels of political consciousness following a religious threat, contrary to what had been expected, only a marginal relation was observed between religious identification and ethnic political attitudes. Furthermore, neither appraisals nor coping strategies played any role in explaining high-identifiers' political consciousness. Thus, although political attitudes appear to be strongly associated with religious identification, they are evidently motivated by factors other than appraisal-coping processes.

The Role of Ethnic Identification in Coping with Identity Threats

Identification with one's ethnic group is often important to an individual's self-concept and, as mentioned previously, has been shown to buffer the negative effects of discrimination (Branscombe et al., 1999). Nonetheless, it will be recalled that ethnic and

religious identities differ conceptually in that the latter is linked to a system of beliefs that might not only enhance coping efforts but may also have increasingly detrimental effects when threatened. Not to exaggerate those differences, however, responses to identity threats among individuals who identified with their ethnic group in many ways mirrored those of religious identifiers in the present study. For example, an ethnic identity threat evoked a variety of negative emotional responses, higher levels of both private and public collective self-esteem, support-seeking action, and greater political consciousness. Ethnic high-identifiers also appraised a threat targeting their ethnicity as central, challenging, particularly threatening, and used problem- and emotion-focused strategies to cope. Moreover, problem-focused coping served to promote the support-seeking actions taken, whereas threat appraisals and emotional coping strategies fuelled negative affective responses following an ethnic threat. It will be recalled that neither negative affective responses nor emotionally-laden appraisals and coping strategies were associated with identity strength following the university-related threat in Study 2, providing support for the contention that ethnicity might serve as a more appropriate comparison, perhaps evoking responses equal in strength to those induced by religious identity threat (Evan, 1997; Kinnvall, 2004; Verkuyten & Yildiz, 2007; Worchel, 2004).

Nonetheless, once again, the content of the identity proved to be of great importance (Livingstone & Haslam, 2008). As expected, religious identity threat elicited stronger negative affect (namely, sadness and fear) among highly-identified religious individuals compared with the affective responses concerning ethnic identification following an ethnic threat. Although the magnitude of this comparison was not statistically significant, it does suggest that religious identity threat was at least somewhat more emotionally-

trying than threats to ethnic identification. Moreover, unlike highly-identified religious individuals, ethnic identifiers endorsed emotional avoidant strategies following an ethnic threat. Given that such coping efforts are generally considered to be maladaptive and are consistently related to poorer well-being outcomes (Lodge & Feldman, 2007), the use of avoidant strategies might suggest that ethnic identifiers were simply not as well-equipped to deal with their threat as were religious identifiers who relied considerably more on problem-focused and emotionally-engaging coping strategies.

As with religious identifiers, however, those who were highly-identified with their ethnic group tended to respond with determination and support-seeking action when faced with *either* threat. It might be that high identification with a variety of social groups (i.e., university, ethnicity, religion) offers strength in the form of social support and facilitates more adaptive behavioural responses when that (or another) group membership is targeted (Branscombe & Ellemers, 1998). Consistent with expectations, however, the magnitude of the relations between identification and both determination and support-seeking action were greatest among highly-identified religious individuals responding to a religious threat. Moreover, the higher levels of determination following the recollection of a *religious* identity threat (compared with an ethnic threat) among those who identified with either group suggests that religious discrimination itself might induce feelings of strength when an individual highly-identifies with any social group. Indeed, as expected, religious threats evoked higher levels of determination than did ethnic threats, even without consideration of identity strength.

In keeping with the notion that religious threats may evoke particularly strong responses regardless of the group with which one identifies, ethnic identifiers also

reported increased anger (and to some extent fear), private collective self-esteem (i.e., pride in one's religious group), and greater political consciousness when faced with a *religious* threat. It could be that, even among individuals who identify with their ethnic group, a religious threat also elicited a strong emotional response, perhaps because their religious identity was linked to their ethnic status. Yet contrary to what had been expected, ethnic identification promoted religious political consciousness far and above the marginal relation observed between religious identification and ethnic political attitudes. In light of previous research suggesting that religious identity is often implicated in political disputes (e.g., Muldoon et al., 2007; Venkatraman, 2007; Verkuyten & Yildiz, 2007), and has fostered political consciousness among a variety of ethno-religious groups (Harris, 1994; King, 1968; Read, 2007), the reverse had been expected. It might be that religion functioned in a manner more unpredictable than had been anticipated in that, regardless of the group with which individuals identified, religious political efforts were supported.

In sharp contrast to the pattern of psychosocial outcomes in which a religious threat evoked strong responses even among those with high *ethnic* identification, appraisals and coping strategies were unrelated to ethnic identification following a religious threat. On the one hand, perhaps ethnic identifiers did not perceive a religious threat to be particularly relevant; on the other hand, they might have simply lacked the resources to cope with such an event, at least insofar as such resources were provided by the identity *per se*. Moreover, even following a threat targeted at one's ethnicity, an interesting disparity occurred with regard to challenge appraisals when compared with how highly-identified religious individuals dealt with a threat directed at their religious group

membership. Whereas such appraisals served to strengthen the determination of religious identifiers, perceptions of the threat as a challenge instead led to anger among those who identified highly with their ethnicity when that group membership was targeted. As noted earlier, it could be that highly-religious individuals facing identity threat resolved to learn from the situation to grow in their faith (Park, 2006) and in so doing gained strength; however, when faith was absent, such appraisals manifested themselves as anger toward the perpetrators of the threat, given no positive outlet for embracing the challenge.

Overall, the divergent responses of individuals both as a function of the group with which they identified as well as the type of threat to which they responded may have important implications for how we understand threats across social identities. Despite several similarities regarding how religious and ethnic identifiers dealt with threats to their respective groups, responses to a religious threat were typically stronger (e.g., higher levels of anger, collective self-esteem, and political consciousness), presumably due to perceptions of the threat as an attack on the belief system itself. Nonetheless, religious (compared with ethnic) identification appeared to foster more adaptive efforts to cope with any injustice, perhaps due to a reliance on those same beliefs or strong ties with other group members who shared their religious convictions.

Implications of Religious and Ethnic Group Membership

In keeping with Studies 1 and 2, although religious affiliation did not significantly moderate most of the relations between identification and the variables of interest in the present study, several group differences are worth noting. As in Study 2, a series of complex relations emerged when collective self-esteem was assessed as a function of group membership. Religious minorities reported greater religious private collective self-

esteem than did Christians or atheists/agnostics. However, the somewhat puzzling finding that religious minorities believed others viewed their religious group poorly following an *ethnic* threat might be attributed to the considerable overlap of ethnic and religious group status among minority individuals in the present study. The visible signs of their ethnic group status (e.g., more distinct complexion or dress compared with Euro-Caucasians) as a marker of minority disadvantage (Powell, Branscombe, & Schmitt, 2005), coupled with their more concealed religious identities (Frable et al., 1998) may have resulted in religious minorities feeling particularly vulnerable to outgroup members' approval upon feeling that their ethnicity had been targeted.

It is interesting to note that the relation between religious identification and public collective self-esteem was reduced to non-significance when atheists and agnostics were excluded from the analyses, and non-believers (regardless of identification level) demonstrated the lowest mean levels of public collective self-esteem following a religious (i.e., irreligious) threat. This group's unique set of beliefs stemming from the *rejection* of religious ideals might account for this pattern. Although highly-identified atheists might find solace among like-minded individuals in times of threat (Dawkins, 2006), such group members more generally lack the institutional and (most notably) spiritual support offered by organized religion. This absence of ingroup resources might, in turn, cultivate a more fragile self-image among atheists and agnostics. Indeed, previous research has demonstrated that self-reported religiosity (including attendance at religious services as well as personal religious identity) was associated with higher self-esteem in African Americans (Ball, Armistead, & Austin, 2003; Blaine & Crocker, 1995). Alternatively, low public collective self-esteem might manifest itself as perceptions of

outgroup hostility toward ingroup members, in that those who feel that others view their group negatively tend to expect greater conflict (Leach & Williams, 1999). In effect, in line with previous research, when non-believers felt threatened or discriminated against, their perceptions of how *others* viewed their group also suffered (Luhtanen & Crocker, 1992). However, religious individuals did not appear to have this same experience, perhaps as a result of a greater ingroup support network on which to rely.

Finally, as anticipated, ethnic minorities reported higher levels of political consciousness over Euro-Caucasians. However, unexpectedly, mean levels of political consciousness related to one's ethnic group were more pronounced than for religion. Thus, it would seem that individuals (although not necessarily ethnic minorities) are more willing to stand up for their ethnic group than for their religious group within the political arena, perhaps due to perceptions of stigma associated with religious political involvement (i.e., fundamentalism; Kruglanski et al., 2007; Post, 2005), or the increased visibility (and therefore public knowledge) of ethnic status over a religious affiliation that some might wish to remain private.

Limitations and Directions for Future Research

As with the previous studies, some limitations of the present research should be noted. Although this study involved a relatively large community sample that included a wide range of ages and backgrounds, given the use of an online survey, the sample might have been biased toward those who had internet access and/or were particularly internet-savvy. A related concern stems from the observation that individuals who completed the entire set of questionnaires were significantly more identified with their ethnic and/or religious groups than were those who ended their participation after completing the initial

identification measures. This self-selection might have thereby resulted in a more highly-identified sample than would be found randomly in the population, and thus generalizations to all Canadian residents should be made cautiously.

In addition, as with the previous studies, the relations among the variables of interest remain correlational. Thus, although it was hypothesized that identification would influence appraisal-coping processes that, in turn, would affect emotions, esteem, action, and political outcomes, it is possible that the relations among some of those variables were more dynamic and multi-directional in nature. However, several theoretical models also support the posited direction of the pathways proposed and observed in the present research (Frijda et al., 1989; Smith & Ellsworth, 1985). Of course, there remain other variables that might have had an impact as well. For example, some instances of discrimination or threat might serve as reminders of the fragility of life itself, and mortality salience has been linked to increased national identification in times of threat (Carlton-Ford, Ender, & Tabatabai, 2008). Indeed, several of the experiences reported by religious minorities in the present study (e.g., death or persecution of family members on the basis of their religious belief) may have functioned in this manner. Moreover, severe stressors such as war or torture (whether rooted in religious conflict or otherwise) could diminish the individual's capacity to trust others (Behnia, 2004), thereby potentially undermining other coping efforts as well. Future research might consider the inclusion such variables to assess those possibilities.

In terms of the religious group differences (or lack thereof) observed in the present study, a more detailed analysis between specific religious groups might have revealed comparable patterns to those found in the previous two studies. Indeed, although

individuals were categorized as “Christian”, “atheist/agnostic” or as a “religious minority”, further diversity might have surfaced between Protestants and Catholics (as seen to some extent in Study 2, and in previous research; e.g., Stringer & Cairns, 1983), or between the minority groups themselves. For example, despite their commonly held minority status in Canada, the history of severe and pervasive group discrimination might prompt Jewish individuals to respond differently to religious (or ethnic) threats than would those of the Muslim faith, who (although also historically threatened by some groups) have experienced a sudden increase in discrimination-based threats within Western culture since the events of 9/11 (Byng, 2008). Nonetheless, in an effort to include the wide range of religious groups that participated in the present study, as well as to maintain a larger sample size and fewer groups in light of statistical considerations, an analysis of the unique responses of more specific religious groups was not pursued.

GENERAL DISCUSSION

Identity threat is a stressor that individuals and groups commonly face, ranging from the devaluation of one's favourite sports team, place of employment, or educational affiliation to discrimination on the basis of gender, ethnicity, or religion. Moreover, even stressors that do not directly target one's group, such as traumatic life experiences, may threaten the self-concept. In three studies, it was suggested that religious identification is one characteristic through which the deleterious effects of such stressors might be diminished (Kinnvall, 2004; Verkuyten & Yildiz, 2007), perhaps due to particular appraisal-coping processes endorsed. Indeed, the protective effects of religious identification (e.g., adaptive appraisal-coping processes, more positive psychological outcomes) appeared to hold true following threats unrelated to religion (i.e., trauma in Study 1, ethnic identity threat in Study 3). However, when religious identity was directly challenged those benefits were undermined. Appraisal-coping processes accounted for the relations between identification and psychosocial outcomes in all three studies, but were most evident following religious threat. The importance of those processes also appeared to escalate following an actual experience of religious threat (Study 3) compared with a laboratory simulation (Study 2). These findings support the line of reasoning that, given its role as both an identity and system of beliefs for coping with stressful circumstances, religion may be particularly important in times of crisis or insecurity (Freeman, 2003; Kinnvall, 2004; Muldoon et al., 2007). But, there appears to be a down-side to strong religious identification, particularly when the identity itself is challenged. Under these conditions the threat represents not only an attack on the group, but also an assault on one's belief system and the "eternal" group membership therein.

Implications of this Research

Religious identification and coping with stressors. Consistent with previous research indicating that religiosity may offer benefits to coping with distress (Koenig et al., 2001; Pargament, 1997), the results of the present investigation suggest that those who are highly-identified with their religious group might have some advantage when dealing with stressful life events such as trauma (Study 1) or discrimination targeted at other group memberships (Study 3). However, the advantages of religious *identification* may be two-fold, such that individuals not only benefit from religion as a set of guiding beliefs that offers meaning and purpose (Pargament, 1997), but should also gain from the sense of belonging offered by social group membership in general (Haslam et al., 2009). The greater social support networks offered by organized religion may be especially important in fostering adaptive coping efforts even beyond those associated with other social identities. The pervasiveness of the positive impact of religious identification was demonstrated in Study 1 in that highly-identified individuals rejected the use of avoidant coping following traumatic experiences, and engaged in problem-focused efforts to deal with ethnic discrimination in Study 3. Moreover, it was argued that the stability of religion itself may facilitate less negative appraisals (Kinnvall, 2004; Verkuyten & Yildiz, 2007), thereby promoting more positive psychological outcomes. This position was also supported by religious identifiers' interpretations of stressful experiences as less threatening (Study 1), as well as their perceptions of an ethnic threat as a challenge from which they might learn and grow (Study 3).

In light of the findings of the present investigation, it would seem important for helping professionals in a clinical setting not to diminish the courage and strength gained

by highly-religious individuals in coping with their distress (Behnia, 2004; Pargament, 1997). Indeed, the denial or disregard of religious coping resources in dealing with traumatic experiences may reduce trust between the patient and helping professional (Behnia, 2004) and, in so doing, undermine otherwise successful coping efforts and adjustment. However, as evidenced in Studies 2 and 3, responses tended to be stronger and less constructive when the threat was of a religious nature, perhaps due to its perceived “eternal” consequences (Wellman & Tokuno, 2004). In such cases, it might be in the best interest of a client to reframe the threat itself in *less* religious terms while still acknowledging the importance of religious identification and coping resources to the individual. Although threats to other group identities are by no means benign, the present research nonetheless suggests that religious individuals might be better equipped to cope with threats that do not directly attack their religious belief system itself.

Religious identification and coping with intergroup conflict. The present research may also have implications for coping with threats at the group level. In Studies 2 and 3, several similarities were observed in the appraisal-coping processes elicited across identity threats, whether one’s university, ethnicity, or religious group had been targeted. As expected, responses among highly-identified individuals when university affiliation was threatened were relatively mild and positive for the most part (i.e., control appraisals, problem-focused coping). However, when one’s ethnicity or religion was discriminated against, such adaptive responses were accompanied by an array of more negative emotional outcomes. Moreover, across the two threats in Study 3, emotion-focused coping strategies served as a catalyst for both sadness and fear. These findings provide empirical support for earlier theorizing that sadness may result from ruminating, for

instance, over the losses associated with group threat; likewise, fear might be rooted in blaming others for threats to the group or simply in the failure to find “appropriate” coping strategies to deal with such situations (Dumont et al., 2003).

To be sure, the ethnic and religious roots of group conflict often overlap. However, as demonstrated in Study 3, threats targeting religious group membership appeared to have farther-reaching implications for emotional responses, group esteem, and political attitudes even over ethnic-based discrimination. Thus, as with individual psychological outcomes, efforts to reframe ethno-religious conflicts as primarily ethnic or political disputes (rather than as having a religious base) might serve to foster more peaceful group co-existence (e.g., less confrontational intergroup responses). For example, focussing on ongoing hostility between Protestants and Catholics in Northern Ireland in terms of Unionists versus Nationalists may remove the element of consequences that surpass “earthly concerns”, which might (at least to some extent) diminish the importance of the constitutional status of the land among religious individuals. That said, previous research has shown that national and ethnic identification remain powerful group partitions (e.g., Bond, 2006; Eriksen, 2001), and so attempts to remove the religious connotations of conflict should be made cautiously. Indeed, the historical significance of some ethno-religious conflicts (e.g., Israeli-Palestinian relations) are so profound, gains from efforts to disentangle or remove religious elements from the situation may unfortunately be negligible. Moreover, efforts by one group to remove religious markers of the conflict (e.g., the “war against terror”; Cheung-Blunden & Blunden, 2008) might not be met by the opposing group (in this case, Islamic fundamentalists; Post, 2005), and might even be interpreted as reflecting a general ignorance of the group differences that

lay at the foundation of the conflict. Conversely, the superimposition of religious indicators on ethno-cultural conflicts could exacerbate existing threats, thereby clouding appraisals of the situation and efforts to cope. In this regard, an avenue for future research involving the examination of interactions among multiple social identities that potentially influence responses to stressors (Yip, Kiang, & Fuligni, 2008) might be particularly useful.

Some group conflicts, however, are primarily religious in nature, such as disagreements between atheists and those who adhere to *any* religion (although it could be argued that such conflicts also reflect issues relating to freedom of expression rather than identity per se). Most recently, the *Atheist Bus Campaign* has emerged, which promotes the slogan “There’s probably no God”. In Study 3 of the present research, atheists and agnostics were most likely to believe that others viewed their “irreligious” group negatively. Thus, perhaps the creation of such a campaign was a reaction to perceptions that religious groups are especially hostile toward atheists. Unfortunately, despite the positive intentions of this campaign’s (presumably highly-identified) atheist creators (see Sherine, 2009), this attempt to improve atheists’ public image might instead serve to indiscriminately threaten all religious identities and promote ingroup favouritism on both sides (Long & Spears, 1998), thereby potentially escalating conflict to new levels (Leach & Williams, 1999). Nonetheless, upon experiencing an identity threat that targeted one’s religious affiliation (or lack thereof) in Study 3, highly-identified atheists’ appraisal-coping and outcome responses were similar to those of religious individuals, albeit the breadth of atheists’ responses was narrower and the magnitude lesser. Given that differences between highly-identified atheists and those with a strong religious

identity were not striking, however, it might be that belief systems held in high regard—religious or otherwise—anchor group identity, such that “an attack on our cherished ideas becomes an attack on us” (Smyth, 2002, p. 151). Clearly, more research is needed to disentangle the complexities in the making and maintenance of atheist versus religious belief systems and identity to gain a better understanding of the role religious belief systems have in responding to identity threats.

Policy implications. The findings of the present research may not only have implications for individual stress responses and intergroup conflict management, but also for Canadian policy. For example, Health Canada’s (2008) *Healthy Living* promotions related to coping with stressors ranging from individual workplace discrimination to international terrorism might be informed by the findings of the present research in terms of how religious individuals deal with stress and their subsequent outcomes for psychological health. Indeed, although some differences emerged as a function of religious affiliation, *highly-identified* religious individuals’ responses were much less variable, suggesting that different religious belief systems might actually evoke similar benefits (or reactions to religious threat) when individuals identify with their group members. Nonetheless, some important disparities were observed, especially with regard to the often unique responses of minority religious groups. Programs such as the *Security Infrastructure Pilot* (2008), through which the Government of Canada recently donated funds to Muslim, Sikh, and Jewish organizations, might gain from the knowledge of how members of those groups perceive threats to their identity and the psychosocial outcomes experienced thereafter. Such programs, being informed by current research, may help ensure a greater sense of security among ethnic and religious minority communities.

In light of Canada's increasing diversity and multiculturalism, however, the *Cultural Diversity Policy Research Initiative* (Government of Canada, 2008) might be particularly informed by the present research. Indeed, it is projected that by the year 2017 one in five Canadians will come from a visible minority group, diverse in culture, language, and religion. Thus, the needs of those Canadians who are experiencing stress that could be related to trauma, feelings of isolation, or group-based threat might be better understood, and the protective effects of adaptive coping and group belonging promoted. For example, the results of the present investigation point to problem-focused coping efforts (i.e., problem-solving, cognitive restructuring, social support) as having particularly beneficial effects for promoting support-seeking action following identity threats, regardless of the group with which individuals identified or which group had been targeted (e.g., ethnic or religious). Following from this, government-funded support groups that encourage such coping strategies and the continuation of diversity initiatives grounded in empirical evidence should help to achieve the aim of inclusive citizenship in this increasingly multicultural country.

Conclusion

The present research uniquely merged the theoretical approaches of social identity (Tajfel & Turner, 1979) and the psychology of religion (Pargament, 1997) within a stress and coping framework (Folkman & Lazarus, 1980). Overall, the results across the three studies suggest that although religious identification generally facilitates positive responses to stressors, its protective effects may be undermined when one's religious group is targeted specifically, likely reflecting the threat as an assault on the belief system itself. Indeed, when faced with threats unrelated to religious group identity, religious

identification appeared to encourage appraisal-coping processes generally considered to be adaptive in dealing with distress (and discouraging those considered to be maladaptive), thereby fostering more positive psychosocial outcomes. However, when one's religion was targeted directly, in addition to more constructive efforts to deal with the threat, an array of emotionally-charged appraisals and coping efforts promoted negative affective responses and sometimes confrontation. Nonetheless, even in the midst of such threats, both religious and non-religious appraisal-coping responses appeared to suggest that religious group membership remained of great value. Thus, although the perception that "God is on leave" (Wiesenthal, 1998) might be common in circumstances of extreme distress, in situations when an individual's religious belief system is shaken, they may well lean on the social identity shared with their religious group members to cope with such threats, at least until they can regain their faith.

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Appendix A: Study 1 Measures

Traumatic Life Events Questionnaire (short form; Kubany et al., 2000)

The purpose of this questionnaire is to identify significant experiences in one's life. The events listed below are far more common than many people realize. Please read each question carefully and indicate the answers that best describe your experience.

Please indicate whether you have had any of the following experiences:

- a) a serious shock (e.g., a car accident, experiencing a natural disaster such as an earthquake) yes no

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

When did it happen?

Most recent: In the past year; 2-5 yrs ago; 6-10 yrs ago;
 10-15 yrs ago; when you were less than 5 years old

First time (if different from above): In the past year; 2-5 yrs ago;
 6-10 yrs ago; 10-15 yrs ago; when you were less than 5

- b) living in a war zone or refugee camp yes no

If this happened:

Did you experience fear, helplessness, or horror at things that happened?

yes no

When did this happen?

Most recent: In the past year; 2-5 yrs ago; 6-10 yrs ago;
 10-15 yrs ago; when you were less than 5 years old

First time (if different from above): In the past year; 2-5 yrs ago;
 6-10 yrs ago; 10-15 yrs ago; when you were less than 5

- c) the sudden or unexpected loss of a loved one due to death

yes no

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

When did it happen?

Most recent: In the past year; 2-5 yrs ago; 6-10 yrs ago;
 10-15 yrs ago; when you were less than 5 years old

First time (if different from above): _____ In the past year; _____ 2-5 yrs ago;
_____ 6-10 yrs ago; _____ 10-15 yrs ago; _____ when you were less than 5

- d) having to see something distressing happen to someone you cared about (e.g., suffering from a life-threatening illness, being injured) yes no

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

When did it happen?

Most recent: _____ In the past year; _____ 2-5 yrs ago; _____ 6-10 yrs ago;
 _____ 10-15 yrs ago; _____ when you were less than 5 years old

First time (if different from above): _____ In the past year; _____ 2-5 yrs ago;
_____ 6-10 yrs ago; _____ 10-15 yrs ago; _____ when you were less than 5

- e) an experience of physical or sexual assault yes no

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

When did it happen?

Most recent: _____ In the past year; _____ 2-5 yrs ago; _____ 6-10 yrs ago;
 _____ 10-15 yrs ago; _____ when you were less than 5 years old

First time (if different from above): _____ In the past year; _____ 2-5 yrs ago;
 _____ 6-10 yrs ago; _____ 10-15 yrs ago; _____ when you were less than 5

- f) an experience of discrimination due to race, gender or religion

yes no

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

When did it happen?

Most recent: _____ In the past year; _____ 2-5 yrs ago; _____ 6-10 yrs ago;
 _____ 10-15 yrs ago; _____ when you were less than 5 years old

First time (if different from above): _____ In the past year; _____ 2-5 yrs ago;
 _____ 6-10 yrs ago; _____ 10-15 yrs ago; _____ when you were less than 5

- g) Have you experienced (or seen) any other events that were life threatening, caused serious injury, or were highly disturbing and distressing? (examples: lost in the wilderness; a serious animal bite; violent death of a pet; seeing a mutilated body or parts)

never once twice 3 times 4 times 5 times more than 5 times

Please describe: _____

If this happened:

Did you experience fear, helplessness, or horror when it happened?

yes no

Were you seriously injured?

yes no

- f) If any of the events (listed above) happened to you, which one event CAUSES YOU THE MOST DISTRESS? Indicate letter: _____

How much distress (anxiety, worry, sadness, or grief) does this event cause you?

None happened	no distress	slight distress	moderate distress	considerable distress	extreme distress
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Identity Scale (Cameron, 2004—modified for religious identity)

Using the scale below, please rate the extent to which you agree or disagree with each of the statements below on a scale of 0 (strongly disagree) to 5 (strongly agree). If you are not part of a religious group, please rate these statements in terms of your “group membership” with other atheists or agnostics.

0	1	2	3	4	5	
Strongly Disagree					Strongly Agree	
						1) I have a lot in common with other members of my religious group. _____
						2) I often think about the fact that I am a member of a religious group. _____
						3) In general, I'm glad to be a member of my religious group. _____
						4) The fact that I am a member of my religious group. rarely enters my mind. _____
						5) Generally, I feel good when I think about myself as a member of my religious group. _____
						6) I feel strong ties to other members of my religious group. _____
						7) I often regret that I am a member of my religious group. _____
						8) Overall, being a religious group member has very little to do with how I feel about myself. _____
						9) I don't feel good about being a member of my religious group. _____
						10) I find it difficult to form a bond with other members of my religious group. _____
						11) In general, being a member of my religious group is an important part of my self-image. _____
						12) I don't feel a sense of being “connected” with other members of my religious group. _____

Stress Appraisal Measure (Peacock & Wong, 1990)

This questionnaire is concerned with your thoughts about various aspects of the event that you described earlier as being most distressing to you. There are no right or wrong answers. Please respond according to how you viewed this situation WHEN IT HAPPENED. Please answer ALL questions. Answer each question by CIRCLING the appropriate number corresponding to the following scale.

	1 Not at all	2 Slightly	3 Moderately	4 Considerably	5 Extremely
1. Was this a totally hopeless situation?	1	2	3	4	5
2. Did this situation create tension in me?	1	2	3	4	5
3. Was the outcome of this situation uncontrollable by anyone?	1	2	3	4	5
4. Was there someone or some agency I could turn to for help if I needed it?	1	2	3	4	5
5. Did this situation make me feel anxious?	1	2	3	4	5
6. Would this situation have important consequences for me?	1	2	3	4	5
7. Would this have a positive impact in me?	1	2	3	4	5
8. How eager was I to tackle this problem?	1	2	3	4	5
9. How much was I affected by the outcome of this situation?	1	2	3	4	5
10. To what extent could I become a stronger person because of this problem?	1	2	3	4	5
11. Would the outcome of this situation be negative?	1	2	3	4	5
12. Did I have the ability to do well in this situation?	1	2	3	4	5
13. Did this situation have serious implications for me?	1	2	3	4	5
14. Did I have what it takes to do well in this situation?	1	2	3	4	5
15. Was there help available to me for dealing with this problem?	1	2	3	4	5
16. Would this situation tax or exceed my coping resources?	1	2	3	4	5
17. Were there sufficient resources available to help me in dealing with it?	1	2	3	4	5
18. Was this beyond anyone's power to do anything about this situation?	1	2	3	4	5
19. To what extent was I excited thinking about the outcome of this situation?	1	2	3	4	5
20. How threatening was this situation?	1	2	3	4	5
21. Was the problem unresolvable by anyone?	1	2	3	4	5
22. Would I be able to overcome the problem?	1	2	3	4	5

23. Was there anyone who could help me manage the problem?	1	2	3	4	5
24. To what extent did I perceive this situation as stressful?	1	2	3	4	5
25. Did I have the skills necessary to achieve a successful outcome to the situation?	1	2	3	4	5
26. To what extent did this event require coping efforts on my part?	1	2	3	4	5
27. Would this situation have long-term consequences for me?	1	2	3	4	5
28. Was this going to have a negative impact on me?	1	2	3	4	5

Religious Appraisal Measure (Ysseldyk, Matheson, & Anisman, unpublished)

The following questions are designed to assess how your religious background or beliefs (or lack thereof) influenced how you appraised or interpreted the most distressing event that you considered earlier. There are no right or wrong answers. We are simply interested in your responses.

1) To what extent did your religion influence how you interpreted this distressing event?

1	2	3	4	5
Not at all	Slightly	Moderately	Considerably	Extremely

Please briefly explain your answer.

2) To what extent did you feel that God was in control of this event *occurring*?

1	2	3	4	5
Not at all	Slightly	Moderately	Considerably	Extremely

Please briefly explain your answer.

3) To what extent did you feel that God was in control of the *outcome* of this event?

1	2	3	4	5
Not at all	Slightly	Moderately	Considerably	Extremely

Please briefly explain your answer.

4) To what extent did you feel that this event was a *positive* challenge from God?

1	2	3	4	5
Not at all	Slightly	Moderately	Considerably	Extremely

Please briefly explain your answer.

5) To what extent did you feel that this event was *God's will* in your life?

1	2	3	4	5
Not at all	Slightly	Moderately	Considerably	Extremely

Please briefly explain your answer.

Survey of Coping Profile Endorsements (Matheson & Anisman, 2003)

The following is a list of things that people may do to cope with a stressful situation. Please consider the same event you described earlier that you found the most distressing. Please read each item and then indicate the extent to which the statement describes what you did to cope with this event.

Which of the following strategies did you find yourself using in response to this situation?

<i>In response to this situation, you</i>	<i>Never</i>	<i>Seldom</i>	<i>Sometimes</i>	<i>Often</i>	<i>Almost always</i>
1. accepted that there was nothing you could do to change your situation?	0	1	2	3	4
2. tried to just take whatever came your way?	0	1	2	3	4
3. talked with friends or relatives about your problems?	0	1	2	3	4
4. tried to do things which you typically enjoy?	0	1	2	3	4
5. sought out information that would help you resolve your problems?	0	1	2	3	4
6. blamed others for creating your problems or making them worse?	0	1	2	3	4
7. sought the advice of others to resolve your problems?	0	1	2	3	4
8. blamed yourself for your problems?	0	1	2	3	4
9. exercised?	0	1	2	3	4
10. fantasized about unreal things (e.g., the perfect revenge or winning a million dollars) to feel better?	0	1	2	3	4
11. been very emotional compared to your usual self?	0	1	2	3	4
12. gone over your problems in your mind over and over again?	0	1	2	3	4
13. asked others for help?	0	1	2	3	4
14. thought about your problems a lot?	0	1	2	3	4
15. became involved in recreation or pleasure activities?	0	1	2	3	4
16. worried about your problems a lot?	0	1	2	3	4
17. tried to keep your mind off things that are upsetting you?	0	1	2	3	4
18. tried to distract yourself from your troubles?	0	1	2	3	4
19. avoided thinking about your problems?	0	1	2	3	4
20. made plans to overcome your problems?	0	1	2	3	4
21. told jokes about your situation?	0	1	2	3	4
22. thought a lot about who is responsible for your problems (besides yourself)?	0	1	2	3	4
23. shared humorous stories etc. to cheer yourself and others up?	0	1	2	3	4

<i>In response to this situation, you</i>	<i>Never</i>	<i>Seldom</i>	<i>Sometimes</i>	<i>Often</i>	<i>Almost always</i>
24. told yourself that other people have dealt with problems such as yours?	0	1	2	3	4
25. thought a lot about how you have brought your problems on yourself?	0	1	2	3	4
26. decided to wait and see how things turn out?	0	1	2	3	4
27. wished the situation would go away or be over with?	0	1	2	3	4
28. decided that your current problems are a result of your own past actions?	0	1	2	3	4
29. gone shopping?	0	1	2	3	4
30. asserted yourself and taken positive action on problems that are getting you down?	0	1	2	3	4
31. sought reassurance and moral support from others?	0	1	2	3	4
32. resigned yourself to your problems?	0	1	2	3	4
33. thought about how your problems have been caused by other people?	0	1	2	3	4
34. daydreamed about how things may turn out?	0	1	2	3	4
35. been very emotional in how you react, even to little things?	0	1	2	3	4
36. decided that you can grow and learn through your problems?	0	1	2	3	4
37. told yourself that other people have problems like your own?	0	1	2	3	4
38. wished I was a stronger person or better at dealing with problems?	0	1	2	3	4
39. looked for how you can learn something out of your bad situation?	0	1	2	3	4
40. asked for God's guidance?	0	1	2	3	4
41. kept your feelings bottled up inside?	0	1	2	3	4
42. found yourself crying more than usual?	0	1	2	3	4
43. tried to act as if you were not upset?	0	1	2	3	4
44. prayed for help?	0	1	2	3	4
45. gone out?	0	1	2	3	4
46. held in your feelings?	0	1	2	3	4
47. tried to act as if you weren't feeling bad?	0	1	2	3	4
48. taken steps to overcome your problems?	0	1	2	3	4
49. made humorous comments or wise cracks?	0	1	2	3	4
50. told others that you were depressed or emotionally upset?	0	1	2	3	4

Brief RCOPE (Pargament et al., 1998)

The following items deal with ways you coped with the distressing event in your life that you described earlier. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something different about a particular way of coping. We want to know to what extent you did what the item says—*how much or how frequently*. Don't answer on the basis of what worked or not—just whether or not you did it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1) Looked for a stronger connection with God.

Not at all				A great deal
0	1	2	3	4

2) Sought God's love and care.

Not at all				A great deal
0	1	2	3	4

3) Sought help from God in letting go of my anger.

Not at all				A great deal
0	1	2	3	4

4) Tried to put my plans into action together with God.

Not at all				A great deal
0	1	2	3	4

5) Tried to see how God might be trying to strengthen me in this situation.

Not at all				A great deal
0	1	2	3	4

6) Asked forgiveness of my sins.

Not at all				A great deal
0	1	2	3	4

7) Focused on religion to stop worrying about my problems.

Not at all				A great deal
0	1	2	3	4

8) Wondered whether God had abandoned me.

Not at all				A great deal
0	1	2	3	4

9) Felt punished by God for my lack of devotion.

Not at all				A great deal
0	1	2	3	4

10) Wondered what I did for God to punish me.

Not at all				A great deal
0	1	2	3	4

11) Questioned God's love for me.

Not at all				A great deal
0	1	2	3	4

12) Wondered whether my church (or other religious community) had abandoned me.

Not at all				A great deal
0	1	2	3	4

13) Decided the devil made it happen.

Not at all				A great deal
0	1	2	3	4

14) Questioned the power of God.

Not at all				A great deal
0	1	2	3	4

Beck Depression Inventory (Beck et al., 1961)

On this questionnaire are groups of statements. Please read the entire group of statements of each category. Then pick out ONE statement in that group which best describes the way you feel. Check off the number beside the statement you have chosen.

1. ☐ 0 = I do not feel sad
☐ 1 = I feel sad or blue
☐ 2a = I am blue or sad all of the time and I can't snap out of it
☐ 2b = I am so sad or unhappy that it is very painful
☐ 3 = I am so sad or unhappy that I can't stand it

2. ☐ 0 = I am not particularly pessimistic or discouraged about the future
☐ 1 = I feel discouraged about the future
☐ 2a = I feel I have nothing to look forward to
☐ 2b = I feel I won't every get over my troubles
☐ 3 = I feel that the future is hopeless and things cannot improve

3. ☐ 0 = I do not feel like a failure
☐ 1 = I feel I have failed more than the average person
☐ 2a = I feel I have accomplished very little that is worthwhile or that means anything
☐ 2b = As I look back on my life, all I can see is a lot of failures
☐ 3 = I feel I am a complete failure as a person

4. ☐ 0 = I am not particularly dissatisfied
☐ 1a = I feel bored most of the time
☐ 1b = I don't enjoy things the way I used to
☐ 2 = I don't get satisfaction out of anything anymore
☐ 3 = I am dissatisfied with everything

5. ☐ 0 = I don't feel particularly guilty
☐ 1 = I feel bad or unworthy a good part of the time
☐ 2a = I feel quite guilty
☐ 2b = I feel bad or unworthy practically of the time now
☐ 3 = I feel as though I am very bad or worthless

6. ☐ 0 = I don't feel I am being punished
☐ 1 = I have a feeling that something bad may happen to me
☐ 2 = I feel I am being punished or will be punished
☐ 3a = I feel I deserve to be punished
☐ 3b = I want to be punished

7. ☐ 0 = I don't feel disappointed in myself
☐ 1a = I am disappointed in myself
☐ 1b = I don't like myself
☐ 2 = I am disgusted with myself
☐ 3 = I hate myself

8. ☐ 0 = I do not feel I am any worse than anybody else
☐ 1 = I am very critical of myself for my weaknesses or mistakes
☐ 2a = I blame myself for everything that goes wrong
☐ 2b = I feel I have many bad faults

9. ____ 0 = I don't have thoughts of harming myself
 ____ 1 = I have thoughts of harming myself but I would not carry them out
 ____ 2a = I feel I would be better off dead
 ____ 2b = I have definite plans about committing suicide
 ____ 2c = I feel my family would be better off if I were dead
 ____ 3 = I would kill myself if I could
10. ____ 0 = I don't cry anymore than usual
 ____ 1 = I cry more now than I used to
 ____ 2 = I cry all the time now. I can't stop it
 ____ 3 = I used to be able to cry but now I can't cry at all even though I want to
11. ____ 0 = I am no more irritated now than I ever am
 ____ 1 = I get annoyed or irritated more easily than I used to
 ____ 2 = I get irritated all the time
 ____ 3 = I don't get irritated at all the things that used to irritate me.
12. ____ 0 = I have not lost interest in other people
 ____ 1 = I am less interested in other people than I used to be
 ____ 2 = I have lost most of my interest in other people and I have little feeling for them
 ____ 3 = I have lost all my interest in other people and don't care about them at all
13. ____ 0 = I make decisions about as well as ever
 ____ 1 = I am less sure of myself now and try to put off making decisions
 ____ 2 = I can't make decisions anymore without help
 ____ 3 = I can't make decisions at all anymore
14. ____ 0 = I don't feel I look any worse than I used to
 ____ 1 = I am worried that I am looking old or unattractive
 ____ 2 = I feel that there permanent changes in my appearance and they make me look unattractive
 ____ 3 = I feel that I am ugly or repulsive looking
15. ____ 0 = I can work about as well as before
 ____ 1a = It takes extra effort to get started at doing something
 ____ 1b = I don't work as well as I used to
 ____ 2 = I have to push myself very hard to do anything
 ____ 3 = I can't do any work at all
16. ____ 0 = I can sleep as well as usual
 ____ 1 = I wake up more tired in the morning than I used to
 ____ 2 = I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
 ____ 3 = I wake up early every day and can't get more than 5 hours sleep
17. ____ 0 = I don't get anymore tired than usual
 ____ 1 = I get tired more easily than I used to
 ____ 2 = I get tired from doing anything
 ____ 3 = I get too tired to do anything

18. ____ 0 = My appetite is no worse than usual
____ 1 = My appetite is not as good as it used to be
____ 2 = My appetite is much worse now
____ 3 = I have no appetite at all any more
19. ____ 0 = I haven't lost much weight, if any, lately
____ 1 = I have lost more than 5 pounds
____ 2 = I have lost more than 10 pounds
____ 3 = I have lost more than 15 pounds
20. ____ 0 = I am no more concerned about my health than usual
____ 1 = I am concerned about aches and pains or upset stomach or constipation or other unpleasant feelings in my body
____ 2 = I am so concerned with how I feel or what I feel that it's hard to think of much else
____ 3 = I am completely absorbed in what I feel
21. ____ 0 = I have not noticed any recent change in my interest in sex
____ 1 = I am less interested in sex than I used to be
____ 2 = I am much less interested in sex now
____ 3 = I have lost interest in sex completely

Self-esteem Scale (Ryff, 1989)

	1 Strongly disagree	2 Moderately disagree	3 Slightly disagree	4 Slightly agree	5 Moderately agree	6 Strongly agree
1. When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6
2. In general, I feel confident and positive about myself.	1	2	3	4	5	6
3. I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6
4. Given the opportunity, there are many things about myself that I would change.	1	2	3	4	5	6
5. I like most aspects of my personality.	1	2	3	4	5	6
6. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.	1	2	3	4	5	6
7. In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6
8. For the most part, I am proud of who I am and the life I lead.	1	2	3	4	5	6
9. I envy many people for the lives they lead.	1	2	3	4	5	6
10. My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6
11. Many days I wake up feeling discouraged about how I have lived my life.	1	2	3	4	5	6
12. The past had its ups and downs, but in general, I wouldn't want to change it.	1	2	3	4	5	6
13. When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6
14. Everyone has their weaknesses, but I seem to have more than my share.	1	2	3	4	5	6

Appendix B: The Mediating Roles of Appraisals in the Relations between Religious
Identity Strength and Coping in Study 1

Given the lower inclination of individuals with high levels of religious identification to endorse avoidant coping, along with their increased propensity to endorse positive religious coping, it was of interest to assess whether these relations were accounted for by appraisals of the distressing situation that were related to both religious identity and those coping strategies. As religious identification was also associated with appraisals of individuals' most distressing life event as threatening and in religious terms, zero-order correlations were conducted among these appraisal-coping processes (see Table B1). Not surprisingly, religious appraisals were associated with a greater propensity to endorse positive religious coping; however, appraisals of the event as threatening were related to a greater inclination to use avoidant and a *reduced* tendency to use positive religious coping.

Table B1

*Correlations among Appraisals and Coping Strategies related to Religious Identity
Strength in Study 1*

Stressor appraisal	Coping Strategy	
	Avoidant	Positive Religious
Threat	.21*	-.18*
Religious	-.10	.88***

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

To examine these mediated models, Preacher and Hayes' (2004, 2008) procedures for assessing simple and multiple mediation (for one or multiple potential mediators,

respectively) were followed. When the mediating role of threat appraisals in the relation between religious identification and avoidant coping ($B = -0.47, p < .001$) was assessed, religious identity remained a significant predictor ($B = -0.42, p < .01$) and hence this relation was, at best, partially mediated through consideration of threat appraisals. However, the 95% confidence interval overlapped zero ($CI = -.12, .02$), revealing that threat appraisals did not account for the negative relation between religious identity strength and avoidant coping.

When the mediating roles of appraisals in the relation between religious identification and positive religious coping ($B = 0.47, p < .001$) were assessed, the relation between identity and positive religious coping was reduced to non-significance when appraisals were controlled ($B = 0.04, ns$). Indeed, although the confidence interval for threat appraisals overlapped zero (95% $CI = -.01, .02$), for religious appraisals it did not (95% $CI = .34, .54$). Thus, religious appraisals significantly accounted for the relation between identity strength and positive religious coping.

In summary, appraisals of a distressing life event as threatening were not particularly informative in accounting for the relation between religious identification and the coping strategies endorsed; however, not surprisingly, highly-identified individuals' tendency to appraise their stressor in religious terms accounted for their choice to employ positive religious coping strategies.

Appendix C: Study 2 Measures

Identity Scale (Cameron, 2004—modified for university identity)

Using the scale below, please rate the extent to which you agree or disagree with each of the statements below on a scale of 0 (strongly disagree) to 5 (strongly agree).

0	1	2	3	4	5
Strongly Disagree					Strongly Agree
1) I have a lot in common with other Carleton students.					_____
2) I often think about the fact that I am a Carleton student.					_____
3) In general, I'm glad to be a Carleton student.					_____
4) The fact that I am a Carleton student rarely enters my mind.					_____
5) Generally, I feel good when I think about myself as a Carleton student.					_____
6) I feel strong ties to other Carleton students.					_____
7) I often regret that I am a Carleton student.					_____
8) Overall, being a Carleton student has very little to do with how I feel about myself.					_____
9) I don't feel good about being a Carleton student.					_____
10) I find it difficult to form a bond with other Carleton students.					_____
11) In general, being a Carleton student is an important part of my self-image.					_____
12) I don't feel a sense of being "connected" with other Carleton students.					_____

Religious Identity Threat Article

Study: Religion in Canada Today

This release is based on a study in the July 2006 issue of Canadian Psychological Developments entitled "Religion in Canada Today".

The majority of the data came from the 2005 Religious Diversity Survey, conducted from February to August 2005. About 50,500 people aged 15 and over were interviewed by telephone across the country.

The survey was developed by Statistics Canada to provide information on the ethnic and cultural backgrounds of people in Canada and how these backgrounds relate to their lives today.

It covered topics such as religion, ethnic or cultural ancestry and identity, family background, and social networks.

July 2006

Adult Canadians attach a higher degree of importance to religion than religious attendance figures alone would indicate, according to a study released in *Canadian Psychological Developments*. However, despite efforts to improve religious tolerance in the nation, it appears that not all religions are yet viewed as equal among Canadians.

Half of adult Canadians regularly engage in religious activities on their own

Public religious behaviour, religious affiliation and attendance have been declining among much of the population, but these developments capture only one aspect of peoples' religiosity.

To get a more complete picture, this study used the Religious Diversity Survey to examine private religious practices that people did on their own such as prayer, meditation, worship and reading of sacred texts at home or some other location.

The survey showed that Canadians do engage in such private religious behaviour either at home or in other locations, even though they may have little or no connection with religious organizations.

Survey data showed that over one-half (54%) reported that they engaged in religious activities on their own at least monthly, while about 10% did so a few times a year.

Most outstanding was the proportion of Canadians who infrequently or never attend services, yet regularly engage in personal religious practices. Of those who infrequently or never attended religious services over the year prior to the survey, 39% said they engaged in religious practices on their own on a weekly basis.

Canadians feel coldly toward religions other than their own

Despite the decline in public religious behaviour, there are still many religions represented among the Canadian population, which primarily includes people of the Catholic, Protestant, Jewish, Muslim, Buddhist, and Hindu faiths.

Each of these religions has an important history within Canada, yet despite efforts to improve religious tolerance, not all religions are viewed as equal among Canadians.

Survey data showed that nearly one-half of (46%) of religious people in Canada felt at least a moderate aversion or did not trust people of other religions.

Most striking, however, was the percentage of Canadians who felt a strong dislike for people of the [Catholic/Protestant/Muslim] religion. Approximately 75% of non-[Catholic/Protestant/Muslim] Canadians reported that they felt uncomfortable around, or generally did not like people of the [Catholic/Protestant/Muslim] faith.

For example, some strong stereotypes were expressed by several non-[Catholic/Protestant/Muslim] Canadians, who were quoted as follows:

"I just can't stand [Catholics/Protestants/Muslims]. It seems they have to involve their religion in every single thing they do."

"[Catholics/Protestants/Muslims] always come off as so self-righteous. "

"I'm so sick of constantly having to be politically correct for the sake of [Catholics/Protestants/Muslims]!"

"It seems to be a one-way street with [Catholics/Protestants/Muslims]—we have to tolerate their religious beliefs and practices but they don't want to tolerate ours."

These results will have implications for shaping public policy in terms of ensuring religious equality in Canada. Although there has been a strong initiative within the Canadian Department of Social Equity in Multiculturalism to balance the scales and improve tolerance among the diversity of religions within Canada, it appears we still have a long way to go.

The article "Religion in Canada Today" is now available for free online in the July 2006 issue of *Canadian Psychological Developments*. To obtain a copy, go to the *Products and services* page of our website.

University Identity Threat Article

Study: Canadian Universities Today

This release is based on a study in the July 2006 issue of Canadian Psychological Developments entitled "Canadian Universities Today".

The majority of the data came from the 2005 Education & Social Diversity Survey, conducted from February to August 2005. About 50,500 people aged 15 and over were interviewed by telephone across the country.

The survey was developed by Statistics Canada to provide information on the educational backgrounds of people in Canada and how these backgrounds relate to their lives today.

It covered topics such as education, family background, and social networks.

July 2006

Adult Canadians attach a higher degree of importance to education than university attendance figures alone would indicate, according to a study released in *Canadian Psychological Developments*. However, despite efforts to improve university reputations across the nation, it appears that not all universities are yet viewed as equal among Canadians.

Half of adult Canadians regularly engage in educational activities on their own

Both college and university attendance have been declining among much of the population, but these developments capture only one aspect of peoples' education.

To get a more complete picture, this study used the Education & Social Diversity Survey to examine educational practices that people did on their own such as reading and attending workshops or night-classes offered by local communities.

The survey showed that Canadians do engage in such educational practices either at home or in other locations, even though they may have little or no connection with formal educational organizations.

Survey data showed that over one-half (54%) reported that they engaged in educational activities on their own at least monthly, while about 10% did so a few times a year.

Most outstanding was the proportion of Canadians who had never attended a post-secondary institution, yet regularly engage in personal educational practices. Of those who had never attended a college or university, 39% said they engaged in educational activities on their own on a weekly basis.

Canadians feel coldly toward universities other than their own

Despite the decline in university enrollment, there are alumni from many universities among the Canadian population, which primarily includes people who graduated from some of Canada's largest universities: University of British Columbia, University of Toronto, University of Ottawa, and McGill University.

Each university has an important history within Canada, yet despite efforts to improve the reputations of some institutions, not all universities are viewed as equal among Canadians, or among employers.

Survey data showed that nearly one-half (46%) of university graduates in Canada felt at least some disdain for graduates of other universities.

Most striking, however, was the percentage of Canadian employers who felt a strong disdain for students from universities lacking professional schools (e.g., medicine, law).

~~~~~  
*[Note: The following are excerpts from the "Canadian Universities Today" article that are especially relevant to Carleton University students.]*

Approximately 75% of non-Carleton alumni and potential employers reported that they generally would not hire students from Carleton University.

For example, some strong sentiments were expressed by several Canadian employers and non-Carleton alumni, who were quoted as follows:

"I just can't stand students from Carleton University. It seems they always exaggerate their achievements to make up for their school's lack of credibility."

"Carleton students always come off as so arrogant. "

"I'm so sick of constantly having students from non-professional universities like Carleton take away resources from the *real* universities!"

"It seems to be a one-way street with Carleton students —we have to tolerate the shortcomings of their education but they expect employers to hire them without question."

~~~~~  
 These results will have implications for shaping public policy in terms of ensuring equality of university standards across Canada. Although there has been a strong initiative within the Canadian Department of Social Equity in Education to balance the scales and improve reputations among the universities across Canada, it appears we still have a long way to go.

The article "Canadian Universities Today" is now available for free online in the July 2006 issue of *Canadian Psychological Developments*. To obtain a copy, go to the *Products and services* page of our website.

[Religious identity threat scenario:]

You may or may not have already been made aware that, based on these Statistics Canada survey results indicating both a decline in public religion and general feelings of dislike toward [Catholics/Protestants/Muslims], Carleton University is considering reducing the amount of financial support and campus resources available for its [Catholic/Protestant/Muslim] students, effective September 2007.

We are therefore interested in your reactions to this article, and the implications it has for you.

[University identity threat scenario:]

You may or may not have already been made aware that, based on these Statistics Canada survey results indicating both a decline in university enrollment and several top Canadian employers' general reluctance to hire Carleton University students, the Ontario Provincial Government is considering including this kind of information its funding formula. If this goes forward, it will reduce the amount of financial support and resources provided by the province to Carleton students, effective September 2007.

We are therefore interested in your reactions to this article, and the implications it has for you.

Threat Manipulation Check (modified, Matheson & Cole, 2004)

This questionnaire was requested by the Carleton University Psychology Department, because they would like to know about what participants think when we provide them with actual published articles that may be relevant to them during research studies. Please use the following scale to indicate to what extent you agree or disagree with each question by circling one number for each answer.

Based on the published article you just read, the survey results portray [Catholics/ Protestants/ Muslims/ Carleton students] to be:

1	2	3	4	5	6	7
Humble						Arrogant
1	2	3	4	5	6	7
Understood						Misunderstood
1	2	3	4	5	6	7
Well-liked						Disliked
1	2	3	4	5	6	7
Disrespected						Respected
1	2	3	4	5	6	7
Rejected						Valued

To what extent do you believe that the research on which the survey results are based is:

1	2	3	4	5	6	7
Unscientific						Scientific
1	2	3	4	5	6	7
Unethical						Ethical
1	2	3	4	5	6	7
Truthful						Deceptive
1	2	3	4	5	6	7
Accurate						Inaccurate
1	2	3	4	5	6	7
Believable						Unbelievable

Mood Measure (PANAS – revised; Watson et al., 1988)

Using the rating scale beside each item, please indicate how much each adjective describes **how you feel at this moment**. There are no right or wrong answers, we just want you to be as honest as possible in indicating how you're feeling RIGHT NOW.

Active	Not at all	0	1	2	3	4	5	6	Extremely
Afraid	Not at all	0	1	2	3	4	5	6	Extremely
Alert	Not at all	0	1	2	3	4	5	6	Extremely
Angry	Not at all	0	1	2	3	4	5	6	Extremely
Annoyed	Not at all	0	1	2	3	4	5	6	Extremely
Anxious	Not at all	0	1	2	3	4	5	6	Extremely
Attentive	Not at all	0	1	2	3	4	5	6	Extremely
Confused	Not at all	0	1	2	3	4	5	6	Extremely
Contempt	Not at all	0	1	2	3	4	5	6	Extremely
Depressed	Not at all	0	1	2	3	4	5	6	Extremely
Determined	Not at all	0	1	2	3	4	5	6	Extremely
Disdain	Not at all	0	1	2	3	4	5	6	Extremely
Disgust	Not at all	0	1	2	3	4	5	6	Extremely
Distressed	Not at all	0	1	2	3	4	5	6	Extremely
Enraged	Not at all	0	1	2	3	4	5	6	Extremely
Enthusiastic	Not at all	0	1	2	3	4	5	6	Extremely
Excited	Not at all	0	1	2	3	4	5	6	Extremely
Frustrated	Not at all	0	1	2	3	4	5	6	Extremely
Happy	Not at all	0	1	2	3	4	5	6	Extremely
Helpless	Not at all	0	1	2	3	4	5	6	Extremely
Hostile	Not at all	0	1	2	3	4	5	6	Extremely
Infuriated	Not at all	0	1	2	3	4	5	6	Extremely
Inspired	Not at all	0	1	2	3	4	5	6	Extremely
Interested	Not at all	0	1	2	3	4	5	6	Extremely
Irritable	Not at all	0	1	2	3	4	5	6	Extremely
Jittery	Not at all	0	1	2	3	4	5	6	Extremely
Nervous	Not at all	0	1	2	3	4	5	6	Extremely
Proud	Not at all	0	1	2	3	4	5	6	Extremely
Sad	Not at all	0	1	2	3	4	5	6	Extremely
Scared	Not at all	0	1	2	3	4	5	6	Extremely
Strong	Not at all	0	1	2	3	4	5	6	Extremely
Unhappy	Not at all	0	1	2	3	4	5	6	Extremely
Upset	Not at all	0	1	2	3	4	5	6	Extremely
Worried	Not at all	0	1	2	3	4	5	6	Extremely

Collective Self-Esteem Scale
(modified for religious identification; Luhtanen & Crocker, 1992)

We would like you to consider your membership in the religious group with which you are affiliated (e.g., Catholic, Protestant, Muslim, Jewish, etc.). Please respond to the following statements on the basis of how you feel about that group and your membership in it **at this moment**. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions as they are RIGHT NOW. Please read each statement carefully, and respond by using the following scale:

1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree

1. I am a worthy member of the religious group I belong to.
1.....2.....3.....4.....5.....6.....7
2. I regret that I belong to the religious group I do.
1.....2.....3.....4.....5.....6.....7
3. At this moment, my religious group is considered good by others.
1.....2.....3.....4.....5.....6.....7
4. Right now, my religious group membership has very little to do with how I feel about myself.
1.....2.....3.....4.....5.....6.....7
5. I feel I don't have much to offer to the religious group I belong to.
1.....2.....3.....4.....5.....6.....7
6. At this moment, I'm glad to be a member of the religious group I belong to.
1.....2.....3.....4.....5.....6.....7
7. Most people consider my religious group to be more ineffective than other religious groups.
1.....2.....3.....4.....5.....6.....7
8. The religious group I belong to is an important reflection of who I am.
1.....2.....3.....4.....5.....6.....7
9. I am a cooperative participant in the religious group I belong to.
1.....2.....3.....4.....5.....6.....7
10. Right now, I feel that the religious group in which I am a member is not worthwhile.
1.....2.....3.....4.....5.....6.....7
11. Others respect the religious group that I am a member of.
1.....2.....3.....4.....5.....6.....7
12. The religious group I belong to is unimportant to my sense of what kind of person I am.
1.....2.....3.....4.....5.....6.....7
13. I feel I'm a useless member of my religious group.
1.....2.....3.....4.....5.....6.....7
14. I feel good about the religious group I belong to.
1.....2.....3.....4.....5.....6.....7

15. Others think that the religious group I am a member of is unworthy.
1.....2.....3.....4.....5.....6.....7
16. Right now, belonging to my religious group is an important part of my self-image.
1.....2.....3.....4.....5.....6.....7

Collective Self-Esteem Scale
(modified for university identification; Luhtanen & Crocker, 1992)

We would like you to consider your group membership as a Carleton student. Please respond to the following statements on the basis of how you feel about that group and your membership in it **at this moment**. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions as they are **RIGHT NOW**. Please read each statement carefully, and respond by using the following scale:

1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree

1. I am a worthy member of Carleton University.
1.....2.....3.....4.....5.....6.....7
2. I regret that I am a Carleton University student.
1.....2.....3.....4.....5.....6.....7
3. At this moment, my university is considered good by others.
1.....2.....3.....4.....5.....6.....7
4. Right now, my university group membership has very little to do with how I feel about myself.
1.....2.....3.....4.....5.....6.....7
5. I feel I don't have much to offer to Carleton University.
1.....2.....3.....4.....5.....6.....7
6. At this moment, I'm glad to be a student of Carleton University.
1.....2.....3.....4.....5.....6.....7
7. Most people consider my university to be more ineffective than other universities.
1.....2.....3.....4.....5.....6.....7
8. The university I belong to is an important reflection of who I am.
1.....2.....3.....4.....5.....6.....7
9. I am a cooperative participant as a Carleton University student.
1.....2.....3.....4.....5.....6.....7
10. Right now, I feel that the university in which I am a member is not worthwhile.
1.....2.....3.....4.....5.....6.....7
11. Others respect the university that I am a member of.
1.....2.....3.....4.....5.....6.....7
12. The university I belong to is unimportant to my sense of what kind of person I am.
1.....2.....3.....4.....5.....6.....7
13. I feel I'm a useless member of Carleton University.
1.....2.....3.....4.....5.....6.....7
14. I feel good about Carleton University.
1.....2.....3.....4.....5.....6.....7

15. Others think that the university I am a member of is unworthy.

1.....2.....3.....4.....5.....6.....7

16. Right now, belonging to Carleton University is an important part of my self-image.

1.....2.....3.....4.....5.....6.....7

Action Endorsement Measure
(modified for religious identity threat; based on Wright et al., 1990)

In light of the publication of these survey results and Carleton University's subsequent consideration to reduce resources for Protestant/Catholic/Muslim students, what will you do? Please rate how likely it is that you will take each of the following actions.

1. Accept the situation as is, and just go on with my life ignoring the problem.
Not at all 0 1 2 3 4 5 6 Extremely

2. Try to talk to people I know from other religions to understand their concerns.
Not at all 0 1 2 3 4 5 6 Extremely

3. Try not to let others know my religion so that they don't treat me differently.
Not at all 0 1 2 3 4 5 6 Extremely

4. Try to talk to people I know from other religions to make sure that they don't hold anything against me personally.
Not at all 0 1 2 3 4 5 6 Extremely

5. Seek advice from the Carleton University Student's Association (CUSA) to find a satisfactory solution to this problem.
Not at all 0 1 2 3 4 5 6 Extremely

6. Ask CUSA for mediation to prevent the reduction of resources from happening.
Not at all 0 1 2 3 4 5 6 Extremely

7. Write to confront the authors of the article to make sure that these kinds of derogatory articles are not published again.
Not at all 0 1 2 3 4 5 6 Extremely

8. File a formal complaint with CUSA to investigate Carleton's proposal.
Not at all 0 1 2 3 4 5 6 Extremely

9. Go to the media, so that the people who published the article or are considering the resource reductions at Carleton will be reprimanded and not get away with their behaviour.
Not at all 0 1 2 3 4 5 6 Extremely

10. File a legal suit against "*Canadian Psychological Developments*" publishing company, so that my rights and the rights of other [Catholics/Protestants/Muslims] are sure to be protected.

Not at all 0 1 2 3 4 5 6 Extremely

11. Get together with other [Catholics/Protestants/Muslims] in this study and on campus and help support each other in this experience.

Not at all 0 1 2 3 4 5 6 Extremely

12. Get together with other [Catholics/Protestants/Muslims] in this study and on campus and voice our objections to CUSA about the article and Carleton's subsequent proposal.

Not at all 0 1 2 3 4 5 6 Extremely

13. Get together with other [Catholics/Protestants/Muslims] in this study and on campus and write to confront the authors of the article.

Not at all 0 1 2 3 4 5 6 Extremely

Action Endorsement Measure
(modified for university identity threat; based on Wright et al., 1990)

In light of the publication of these survey results and the Ontario Provincial Government's subsequent consideration to alter the funding formula, thereby reducing the amount of financial support and resources for Carleton University students, what will you do? Please rate how likely it is that you will take each of the following actions.

1. Accept the situation as is, and just go on with my life ignoring the problem.

Not at all 0 1 2 3 4 5 6 Extremely

2. Try to talk to students I know from other universities to understand the concerns about Carleton students.

Not at all 0 1 2 3 4 5 6 Extremely

3. Try not to let others know my university so that they don't treat me differently.

Not at all 0 1 2 3 4 5 6 Extremely

4. Try to talk to students I know from other universities to make sure that they don't hold anything against me personally.

Not at all 0 1 2 3 4 5 6 Extremely

5. Seek advice from the Provincial Human Rights Commission (PHRC) to find a satisfactory solution to this problem.

Not at all 0 1 2 3 4 5 6 Extremely

6. Ask the PHRC for mediation to prevent the reduction of resources from happening.

Not at all 0 1 2 3 4 5 6 Extremely

7. Write to confront the authors of the article to make sure that these kinds of derogatory articles are not published again.

Not at all 0 1 2 3 4 5 6 Extremely

8. File a formal complaint with the PHRC to investigate the Provincial Government's proposal.

Not at all 0 1 2 3 4 5 6 Extremely

9. Go to the media, so that the people who published the article or who are considering reducing Carleton's resources in the Provincial Government will be reprimanded and not get away with their behaviour.

Not at all 0 1 2 3 4 5 6 Extremely

10. File a legal suit against "*Canadian Psychological Developments*" publishing company, so that my rights and the rights of other Carleton students are sure to be protected.

Not at all 0 1 2 3 4 5 6 Extremely

11. Get together with other Carleton students in this study and on campus and help support each other in this experience.

Not at all 0 1 2 3 4 5 6 Extremely

12. Get together with other Carleton students in this study and on campus and voice our objections to the PHRC about the article and the Provincial Government of Ontario's subsequent considerations to reduce our financial support and provincial resources.

Not at all 0 1 2 3 4 5 6 Extremely

13. Get together with other Carleton students in this study and on campus and write to confront the authors of the article.

Not at all 0 1 2 3 4 5 6 Extremely

Suspicion Measure

Lastly, we would like to make sure that you understood the nature of this study. To do so, we'd like you to complete the following questions. Point form responses are fine.

1. In your opinion, what was this study about?
2. What do you think we hope to find?
3. Is there anything about the conduct of this study that did not make sense to you (i.e. things the experimenters said or did, or questions we asked that seemed 'out of place'?)

Appendix D: The Mediating Roles of Appraisals in the Relations between Identity Strength and Coping in Study 2

As in Study 1, inasmuch as the coping strategies people use may be related to identity strength and individuals' responses following an identity threat, one's appraisals of the situation were also expected to be related to the coping strategies that were endorsed. Moreover, the possibility that stressor appraisals would mediate the relations between identity strength and coping was also examined in Study 2. Preacher and Hayes' (2004, 2008) procedures for examining simple and multiple mediation models were again followed, using 1,000 bootstrap samples in each analysis. An appraisal was considered as a potential mediator if it was significantly correlated with both the independent variable (i.e., identity strength) and the dependent variable (i.e., coping strategy).

Although university identity strength was positively related to appraisals of the identity threat as controllable by oneself and endorsements of problem-focused coping, the latter two variables were only marginally related to each other ($r = .21, p = .064$). Thus, the potential mediating role of appraisals in the relation between university identity strength and coping was not examined.

Religious identity strength, however, was related to a host of appraisals and coping strategies. When the zero-order correlations among these appraisal-coping processes were examined, several significant relations were revealed. As seen in Table D1, problem-focused coping was significantly associated with increased threat and religious appraisals and thus, these two appraisals served as possible mediators in the relation between religious identity strength and problem-focused coping. Emotion-focused coping was also associated with increased threat appraisals, yet in addition was related to increased

perceptions of the threat as central to well-being. When the correlations of appraisals with religious coping were examined, positive religious coping was solely related to increased religious appraisals, whereas negative religious coping was not only associated with religious appraisals, but also with increased threat and centrality appraisals.

Table D1

Correlations among Appraisals and Coping Strategies related to Religious Identity Strength in Study 2

Stressor appraisal	Coping Strategy			
	Problem-focused	Emotion-focused	Positive religious	Negative religious
Threat	.05	.56***	.17	.31**
Challenge	.30**	.07	.04	.10
Centrality	.01	.39***	.10	.25*
Religious	.30**	.13	.82***	.29**

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

The Mediating Roles of Appraisals in the Relations between Religious Identity Strength and Coping Strategies following an Identity Threat in Study 2

Problem-focused coping. When the mediating roles of appraisals (namely challenge and religious appraisals) in the relation between religious identification and problem-focused coping were assessed, this relation remained significant when appraisals were controlled; hence the relation was, at best, partially mediated through consideration of stressor appraisals. However, as seen in Table D2, the 95% confidence interval for appraisals of the identity threat as a challenge did not overlap zero, indicating that these

appraisals at least partially accounted for highly-identified religious individuals' inclination to endorse problem-focused coping.

Emotion-focused coping. When the mediating roles of appraisals (namely threat and centrality) in the relation between religious identification and emotion-focused coping were assessed, this relation was reduced to non-significance when appraisals were controlled. However, as seen in Table D2, the 95% confidence intervals for both threat and centrality appraisals overlapped zero, indicating that they did not account for religious high-identifiers' use of emotion-focused coping strategies.

Positive religious coping. When the role of religious appraisals in accounting for religious high-identifiers' increased use of positive religious coping was assessed, this relation remained significant when appraisals were controlled. However, as seen in Table D2, the 95% confidence interval did not overlap zero, indicating that (as in Study 1) religious appraisals at least partially accounted for highly-identified individuals' positive religious coping endorsements.

Negative religious coping. Finally, when the mediating roles of appraisals (namely threat, centrality, and religious appraisals) in the relation between identity and negative religious coping were assessed, this relation was reduced to marginal significance when appraisals were controlled. However, as seen in Table D2, the 95% confidence intervals for all three appraisal types included zero, such that appraisals did not account for the relation between religious identity strength and negative religious coping.

Overall, the relations between religious identification and coping endorsements were only partially mediated by stressor appraisals. Whereas appraisals of a religious identity threat as a challenge were particularly important in accounting for high-identifiers'

tendency to endorse problem-focused coping, religious appraisals accounted for their increased use of positive religious coping (a finding analogous to Study 1). The relations between religious identity strength and both emotion-focused and negative religious coping, however, did not appear to be accounted for through appraisal pathways.

Table D2

Multiple Mediation Estimates for Religious Identity Strength and Coping Strategies, Controlling for Appraisals of an Identity Threat in Study 2

	Coping strategy			
	Problem-focused	Emotion-focused	Positive religious	Negative religious
Total effect	.50 ^{***}	.23 [*]	.80 ^{***}	.24 ^{***}
Direct effect	.42 ^{**}	.14	.66 ^{***}	.14 [†]
Stressor appraisals				
Threat	/	.04 (-.14, .24)	/	-.01 (-.16, .12)
Challenge	.14 (.05, .30)	/	/	/
Centrality	/	.05 (-.05, .18)	/	.05 (-.01, .23)
Religious	-.07 (-.24, .14)	/	.15 (.02, .32)	.05 (-.06, .18)

[†] $p < .10$; ^{*} $p < .05$; ^{**} $p < .01$; ^{***} $p < .001$

Note. Total effect = unstandardized coefficient for the effect of religious identity strength on the coping response; Direct effect = unstandardized coefficient for the effect of religious identity strength on the coping response, controlling for appraisals. Unstandardized coefficients and 95% bias- corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

Appendix E: Measures New to Study 3

Background Information

Age _____

Sex _____

What is your country of residence? (Please check one)

____ Canada

____ Other [*Note: Individuals who indicated a country of residence other than Canada were politely thanked for their interest in the study and told that the study was restricted to Canadian residents in order to minimize cultural variables that may have influenced responses*]*What is your ethnic/racial background? (Please check one)*

____ Asian (e.g., Chinese, Japanese, Korean)

____ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)

____ South East Asian (e.g., Cambodian, Indonesian, Laotian)

____ Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)

____ Black (e.g., African, Haitian, Jamaican, Somali)

____ Latin American/Hispanic

____ Aboriginal

____ White/Euro-Caucasian

____ Other (Please specify): _____

What is your religious affiliation? (Please check one)

____ None (atheist or agnostic)

____ Protestant (e.g., United, Anglican, Baptist, Presbyterian, Lutheran, Pentecostal, Mennonite, "Christian")

____ Catholic (e.g., Roman Catholic, Ukrainian Catholic)

____ Jewish

____ Muslim

____ Buddhist

____ Hindu

____ Sikh

____ Bahá'í

____ Other (Please specify): _____

I have been affiliated with this religion since:

a) I was born (e.g. raised in a family with those beliefs)

b) I converted to that religion

____ In the past year

____ 2-5 yrs ago

____ 6-10 yrs ago

____ 10-15 yrs ago

____ more than 15 years ago

Identity Scale
(abbreviated and modified for ethnic identity²⁸; Cameron, 2004)

Using the scale below, please rate the extent to which you agree or disagree with each of the statements below on a scale of 0 (strongly disagree) to 5 (strongly agree).

0	1	2	3	4	5
Strongly Disagree					Strongly Agree
1) I have a lot in common with other members of my ethnic group.					_____
2) I often think about the fact that I am a member of my ethnic group.					_____
3) In general, I'm glad to be a member of my ethnic group.					_____
4) The fact that I am a member of my ethnic group rarely enters my mind.					_____
5) Generally, I feel good when I think about myself as a member of my ethnic group.					_____
6) I feel strong ties to other members of my ethnic group.					_____
8) Overall, being a member of my ethnic group has very little to do with how I feel about myself.					_____
9) I don't feel good about being a member of my ethnic group.					_____
12) I don't feel a sense of being "connected" with other members of my ethnic group.					_____

²⁸The sequence of item numbers for this and subsequent measures used in Study 3 correspond to those items in the full measures used in Study 2.

Identity Threat Free Recall (based on Sahdra & Ross, 2007)

We'd like you to think now about your own [religious/ethnic] group in relation to other [religious/ethnic] groups. Sometimes members of [religious/ethnic] groups commit acts of violence, hatred, or discrimination against members of other [religious/ethnic] groups. We'd like you to think of a time when *you* were the victim of a situation fuelled by hatred or attitudes of discrimination on the basis of your [religious/ethnic] group affiliation. If you cannot think of a time when you experienced this *personally*, please think of a time when you felt that other members of your [religious/ethnic] group, or your [religious/ethnic] group as a whole, experienced any kind of insult, discrimination, or threat.

[illegible]

When this event happened, were you the victim personally, were the victims other members of your [religious/ethnic] group, or your [religious/ethnic] group as a whole?

☐ me personally
☐ other members of my [religious/ethnic] group
☐ my [religious/ethnic] group as a whole

How many times did the event or attitude you described above happen?

once twice 3 times 4 times 5 times more than 5 times

When did it happen?

Most recent: _____ In the past year; _____ 2-5 yrs ago; _____ 6-10 yrs ago;
 _____ 10-15 yrs ago; _____ when you were less than 5 years old

First time (if different from above): _____ In the past year; _____ 2-5 yrs ago;
 _____ 6-10 yrs ago; _____ 10-15 yrs ago; _____ when you were less than 5

Was the source of the discrimination or threat a

stranger?	yes / no
friend or acquaintance?	yes / no
someone in your workplace/school?	yes / no
an organization/institution	yes / no
the media	yes / no

Did you experience fear, helplessness, or horror when it happened? yes / no

Action Endorsement Measure
 (abbreviated and modified for religious/ethnic free recall of identity threat;
 based on Wright et al., 1990)

Following the event you previously described, what did you do? Please rate the extent to which you took the following actions on the scale below.

1. Accepted the situation as is, and just went on with my life ignoring the problem.

Not at all 0 1 2 3 4 5 6 Extremely

3. Tried not to let others know my [religion/ethnicity] so that they didn't treat me differently.

Not at all 0 1 2 3 4 5 6 Extremely

5. Sought advice from a governmental or non-governmental organization (NGO) to find a satisfactory solution to the problem.

Not at all 0 1 2 3 4 5 6 Extremely

6. Confronted the perpetrators (or other members of their group) who threatened/discriminated against me/my [religious/ethnic] group to make sure that they didn't get away with it again.

Not at all 0 1 2 3 4 5 6 Extremely

8. Got together with other members of my [religious/ethnic] group for support.

Not at all 0 1 2 3 4 5 6 Extremely

10. Got together with other members of my [religious/ethnic] group to confront the perpetrators (or other members of their group) who threatened/discriminated against me/my [religious/ethnic] group.

Not at all 0 1 2 3 4 5 6 Extremely

Most likely, you also took other actions that are not listed above.
 Please briefly describe what you did here:

Collective Self-Esteem Scale

(abbreviated and modified for ethnic identification; Luhtanen & Crocker, 1992)

We would like you to consider your membership in the ethnic group with which you are affiliated (e.g., Asian, Black, Arab, White, etc.). Please respond to the following statements on the basis of how you feel about that group and your membership in it **at this moment**. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions as they are RIGHT NOW. Please read each statement carefully, and respond by using the following scale:

1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree

3. At this moment, my ethnic group is considered good by others.

1.....2.....3.....4.....5.....6.....7

6. At this moment, I'm glad to be a member of the ethnic group I belong to.

1.....2.....3.....4.....5.....6.....7

10. Right now, I feel that the ethnic group in which I am a member is not worthwhile.

1.....2.....3.....4.....5.....6.....7

11. Others respect the ethnic group that I am a member of.

1.....2.....3.....4.....5.....6.....7

14. I feel good about the ethnic group I belong to.

1.....2.....3.....4.....5.....6.....7

15. Others think that the ethnic group I am a member of is unworthy.

1.....2.....3.....4.....5.....6.....7

Political Consciousness (based on Verkuyten & Yildiz, 2007)

Finally, we are interested in the extent to which you believe your [religious/ethnic] group should be involved and/or represented in Canadian politics. Please read each statement carefully, and respond by using the following scale:

1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree

1. It is important for my [religious/ethnic] group that a political party is established in Canada that will represent our interests.

1.....2.....3.....4.....5.....6.....7

2. Members of my [religious/ethnic] group have to start to work together in order to gain political influence in Canada.

1.....2.....3.....4.....5.....6.....7

3. My [religious/ethnic] group must have a voice in political issues, just like other [religions/ethnicities].

1.....2.....3.....4.....5.....6.....7

4. In Canadian society, my [religious/ethnic] group has to defend their own interests.

1.....2.....3.....4.....5.....6.....7

Appendix F: Assessing the Moderating Roles of Religious Affiliation and Ethnic Group Status in Study 3

The potential moderating effects of religious affiliation (i.e., minority, Christian, atheist/agnostic) were examined on the relations between religious identity strength and the variables of interest in Study 3 (using hierarchical regression analyses). However, out of a possible twenty interactive effects, only two were significant. Specifically, significant differences existed across the religious groups in the relations between religious identity strength and participants' appraisals of an identity threat as particularly threatening, $R^2_{cha} = .030$, $F_{cha}(1, 416) = 12.97$, $p < .001$, and central, $R^2_{cha} = .010$, $F_{cha}(1, 416) = 4.39$, $p < .05$. Simple slope analyses indicated that highly-identified individuals belonging to a minority religious group appraised a previous identity threat as particularly threatening ($r = .27$, $p < .001$), whereas these variables were unrelated among Christians and atheists/agnostics ($rs = .06, -.18$, ns). In addition, both highly-identified minority religious group members and Christians appraised such threats as central to well-being ($rs = .18$, $ps < .05$). Conversely, religious (i.e., "irreligious") identity and centrality appraisals were unrelated among atheists/agnostics ($r = -.07$, ns). Given the small number of interactive effects and in an effort to facilitate more parsimonious analyses, subsequent analyses were collapsed across religious affiliation.

In addition, the potential moderating effects of ethnic group (i.e., minority vs. the Euro-Caucasian majority) were examined in the relations between ethnic identity strength and the variables of interest in Study 3. However, only three of a possible twenty interactions were significant, namely those related to appraisals of participants' recalled threat as controllable by oneself, $R^2_{cha} = .011$, $F_{cha}(1, 416) = 4.46$, $p < .05$, and the

feelings of anger, $R^2_{cha} = .017$, $F_{cha}(1, 405) = 7.30$, $p < .01$, and contempt, $R^2_{cha} = .010$, $F_{cha}(1, 405) = 4.06$, $p < .05$. Simple slope analyses revealed that highly-identified ethnic minorities perceived the threat they had experienced to be within their control ($r = .19$, $p < .05$), whereas these appraisals were unrelated to ethnic identity strength among Euro-Caucasians ($r = -.04$, *ns*). Conversely, highly-identified Euro-Caucasians reported increased anger ($r = .27$, $p < .001$), and contempt ($r = .19$, $p < .01$), whereas these emotions were unrelated to ethnic identity strength among individuals belonging to a minority group ($rs = .04, .01$, *ns*). Given these few moderating effects, however, subsequent analyses were collapsed across ethnic groups.

Appendix G: The Mediating Roles of Appraisals in the Relations between Identity Strength and Coping in Study 3

As in Studies 1 and 2, high-identifiers' appraisals of an identity threat were expected to mediate the coping strategies that they endorsed. Preacher and Hayes' (2004, 2008) procedures for examining simple and multiple mediation models were again followed, using 1,000 bootstrap samples in each analysis. An appraisal was considered as a potential mediator if it was significantly correlated with both the independent variable (i.e., religious or ethnic identity strength, in separate analyses) and the dependent variable (i.e., coping strategy).

The Mediating Roles of Appraisals in the Relations between Religious Identity Strength and Coping Strategies following a Religious Identity Threat

It will be recalled that religious identification was positively associated with both problem-focused and emotion-focused coping strategies used to deal with a religious identity threat. The role of appraisals in accounting for those relations was therefore assessed. As seen in Table G1, each of the appraisals that were related to religious identification were significantly linked to both coping strategies, with the exception that appraisals of the threat as controllable by others were only marginally related to emotion-focused coping endorsements.

Table G1

*Correlations among Appraisals and Coping Strategies related to Religious Identity
Strength following a Religious Identity Threat*

Stressor appraisal	Coping Strategy	
	Problem-focused	Emotion-focused
Threat	.45***	.68***
Challenge	.53***	.40***
Centrality	.39***	.61***
Controllable by others	.46***	.13 [†]
Uncontrollable by anyone	.17*	.31***

[†] $p < .10$; * $p < .05$; *** $p < .001$

Problem-focused coping. When the mediating roles of appraisals in the relation between religious identification and problem-focused coping were assessed, this relation remained significant when appraisals were controlled; hence the relation could only be partially mediated through consideration of stressor appraisals. However, as seen in Table G2, the 95% confidence interval for appraisals of a religious identity threat as particularly threatening, as a challenge, and as controllable by others did not overlap zero, indicating that these interpretations of the event at least partially accounted for highly-identified religious individuals' inclination to use problem-focused coping efforts.

Emotion-focused coping. The role of stressor appraisals in accounting for religious high-identifiers' endorsements of emotion-focused coping was also assessed, resulting in

that relation being reduced to non-significance when appraisals were controlled. Indeed, as seen in Table G2, appraisals of a religious identity threat as particularly threatening and as central to well-being accounted for high-identifiers' use of emotional coping strategies.

Table G2

Multiple Mediation Estimates for Religious Identity Strength and Coping, Controlling for Appraisals of a Religious Identity Threat

	Coping strategy	
	Problem-focused	Emotion-focused
Total effect	.36***	.16***
Direct effect	.15**	.02
Stressor appraisals		
Threat	.06 (.02, .12)	.09 (.04, .16)
Challenge	.08 (.03, .15)	.00 (-.03, .03)
Centrality	.00 (-.05, .04)	.03 (.01, .07)
Controllable by others	.07 (.04, .14)	/
Uncontrollable by anyone	.00 (-.01, .02)	.01 (.00, .04)

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

Note. Total effect=unstandardized coefficient for the effect of religious identity strength on the coping response; Direct effect=unstandardized coefficient for the effect of religious identity strength on the coping response, controlling for appraisals. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.

The Mediating Roles of Appraisals in the Relations between Ethnic Identity Strength and Coping Strategies following an Ethnic Identity Threat

As with responses following a religious identity threat, each of the appraisals that were significantly related to ethnic identification (namely threat, challenge, and centrality) were also positively related to both problem-focused and emotion-focused coping (see Table G3). In addition, given ethnic high-identifiers' propensity to use avoidant coping strategies, correlations between such coping efforts and the stressor appraisals were assessed. In this case, however, only appraisals of an ethnic identity threat as a challenge were associated with avoidant coping.

Table G3

Correlations among Appraisals and Coping Strategies related to Ethnic Identity Strength following an Ethnic Identity Threat

Stressor appraisal	Coping Strategy		
	Problem-focused	Emotion-focused	Avoidant
Threat	.29***	.67***	.03
Challenge	.58***	.40***	.16*
Centrality	.46***	.59***	.11

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

Problem-focused coping. When the mediating roles of appraisals in the relation between ethnic identity strength and problem-focused coping were assessed, this relation was reduced to non-significance when appraisals were controlled. Moreover, as seen in Table G4, the 95% confidence interval for appraisals of an ethnic threat as a challenge

did not overlap zero indicating that, like religious high-identifiers responding to a religious threat, ethnic high-identifiers' inclination to interpret an ethnic threat as a challenge accounted for their endorsements of problem-focused coping. Unlike the pattern concerning religious identification, however, threat appraisals did not play a role in promoting problem-focused efforts.

Emotion-focused coping. The relation between ethnic identification and emotion-focused coping was also reduced to non-significance when stressor appraisals were controlled (see Table G4). As in the case of religious identification and threat, appraisals of the situation as particularly threatening significantly accounted for ethnic high-identifiers use of emotional coping efforts. Yet, unlike religious high-identifiers, appraisals of the ethnic threat as central to well-being did not account for their use of emotion-focused coping.

Avoidant coping. When the mediating role of challenge appraisals in the relation between ethnic identification and avoidant coping was assessed, this relation was reduced to non-significance when appraisals were controlled (see Table G4). However, the 95% confidence interval overlapped zero, indicating that challenge appraisals did not account for high-identifiers' use of avoidant coping strategies.

In summary, mirroring the general pattern of findings in Study 3, although stressor appraisals and coping strategies were significantly related following both religious and ethnic threats, the role of appraisals in accounting for the coping efforts used by high-identifiers appeared to be strongest following a religious (compared with an ethnic) identity threat.

Table G4

Multiple Mediation Estimates for Ethnic Identity Strength and Coping, Controlling for Appraisals of an Ethnic Identity Threat

	Coping strategy		
	Problem-focused	Emotion-focused	Avoidant
Total effect	.16*	.12*	.11*
Direct effect	.03	.02	.09
Stressor appraisals			
Threat	-.01 (-.04, .01)	.06 (.01, .12)	/
Challenge	.10 (.04, .18)	.03 (.00, .07)	.06 (-.01, .05)
Centrality	.04 (.00, .10)	.02 (.00, .06)	/

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

Note. Total effect = unstandardized coefficient for the effect of ethnic identity strength on the coping response; Direct effect = unstandardized coefficient for the effect of ethnic identity strength on the coping response, controlling for appraisals. Unstandardized coefficients and 95% bias-corrected, accelerated confidence intervals are shown. Significant mediators are bolded.