ACCULTURATIVE STRESS, RELIGIOUS COPING AND WELLBEING AMONGST NEW ZEALAND MUSLIMS

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Abstract

Situated within a wider context of Islamophobia, this study explored the role of religious coping in influencing the relationship between acculturative stress and wellbeing amongst 167 New Zealand Muslims. A Muslim Religious Coping (MRC) scale was adapted for the purposes of this study, measuring religious coping across three domains of Cognitive, Behavioural, and Social MRC. Two specific hypotheses were posited to explore the research question. Firstly, both Acculturative Stress and Religious Coping were predicted to significantly influence wellbeing (as measured by Life Satisfaction and Psychological Symptoms). Secondly, Religious Coping was expected to moderate the relationship between Acculturative Stress and wellbeing.

Consistent with hypotheses, it was found that Acculturative Stress predicted poorer Life Satisfaction and greater Psychological Symptoms. Additionally, Cognitive, Behavioural and Social facets of Muslim Religious Coping (MRC) predicted greater Life Satisfaction, and Behavioural MRC buffered the negative effects of Acculturative Stress on Life Satisfaction. Contrary to hypotheses, however, no direct or moderational relationships were found between MRC and Psychological Symptoms of distress. Implications of these findings are discussed in terms of the importance of promoting religious maintenance for minority Muslims, and the place of an Indigenous Islamic psychology within cross-cultural research.

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CHAPTER ONE. Introduction

What happens when a person's very worldview is threatened or challenged by their environment? For Muslims living in the West in a post-9/11 world, this is a distinct reality. While cultural and religious pluralism has rapidly increased, prevailing attitudes from Western nations towards Islam have only become increasingly intolerant (Poynting & Mason, 2007; Sheridan, 2006). What does this mean for the Muslim living in the West, subscribing to a belief system that is oft misunderstood or deemed 'unacceptable' by the wider society? Is it plausible to consider that one will draw on resources from the very belief system that is under threat, to help them manage this threat?

This research will adopt an acculturative stress framework to examine the role of religious coping on the acculturative experience of Muslims in New Zealand, drawing on both Pargament's (1997) theory of religious coping, and a stress and coping model of acculturation (Berry, 1997; Ward, Bochner, & Furnham, 2001) to explore whether religion acts as a resource for Muslims in managing perceptions of cultural and religious threat.

Stress and Coping

Lazarus and Folkman (1984) define psychological stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources..." (p.19). Decades of literature has determined a robust relationship between psychological stress and wellbeing, with heightened levels of stress predicting poorer psychosocial functioning (Cohen,

Kamarck, & Mermelstein, 1983; Ensel & Lin, 1991; Holmes & Rahe, 1967; Lazarus & Folkman, 1984).

Although there is consensus in the literature on the direct impact of stress on wellbeing outcomes, studies indicate that there exist many intervening and peripheral factors that can attenuate this relationship, including coping resources. Lazarus and Folkman's (1984) further define coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person" (p.141). This definition acknowledges the potentially inexhaustive array of cognitive, behavioural and affective coping strategies that may exist and be employed simultaneously in response to a stressor. The appraisal and selection of coping resources is likely to be contextual, being inevitably embedded in an individual's culture, belief system, and socio-political context (Chun, Moos, & Cronkite, 2006). Ultimately, the selection of appropriate and effective coping strategies will influence the way an individual is able to manage the stressor and its subsequent impact on psychological, physical and sociocultural wellbeing.

Carver, Scheier and Weintraub (1989) developed a comprehensive inventory for measuring coping (the COPE scale), which has delineated a broad range of coping styles that may be adopted in response to a given stressor. Two decades of research on stress and coping have frequently used both the COPE and its abbreviated version (Brief COPE; Carver, 1997) and demonstrated the efficacy of certain coping mechanisms ('adaptive' coping) and the deleterious effects of others ('maladaptive' coping) in managing stress (Folkman & Moscowitz, 2004).

Ensel and Lin (1991) describe two possibilities for the role coping plays on the outcomes of stress: a) Coping resources as *intervening* variables, that are triggered by recent stressors and function as mediating or moderating variables between stress and adaptation; and b) coping resources as *independently* influential on adaptation, exerting a positive main effect on outcome variables independent of experienced stressors. The first model represents a buffering hypothesis that coping variables moderate the relationship between stress and wellbeing by reducing its strength under high utilisation of coping resources. The second model suggests that coping resources can be influential on wellbeing independent of external stressors, boosting or maintaining one's psychological equilibrium and potentially deterring external stressors from impacting significantly on one's psychological state.

Both of these models have received support in the literature with many studies demonstrating a direct relationship between coping methods and wellbeing (i.e., a main effect), as well as studies that point towards a moderating effect of coping mechanisms on the stress-wellbeing relationship (buffering hypothesis). Adaptive coping strategies identified as exerting either a direct effect on wellbeing outcomes or moderating the relationship between stress and wellbeing include social support, problem-solving and emotion regulation strategies, approach coping strategies, reappraisal and acceptance coping, and coping through religion (Burgess, Irvine, & Wallymahmed, 2010; Cohen, & Wills, 1985; Folkman & Moscowitz, 2004; Littleton, Horsley, John, & Nelson, 2007; Penley, Tomaka, & Wiebe, 2002; Sontag & Graber, 2010; Tix & Frazier, 1998).

Stress and Coping in the Context of Acculturation

Acculturation is the process of change that occurs through intercultural contact, or the meeting of two or more differing cultures (Berry, 1997). Berry's (1997) Stress and Coping framework of acculturation (see Figure 1) depicts the process of intercultural contact as inherently stressful, highlighting the role of both group-level and individual-level variables in determining a person's experience of acculturative stress. Key group-level variables include the socio-political and cultural context of one's society of origin, as well as their society of settlement. These contextual factors will ultimately influence the acculturative experiences of an individual. However, individual-level variables can play a moderating role in influencing the impact of acculturative stressors on adaptation outcomes. Moderators include both cultural factors (e.g. cultural distance, intercultural competency) and broader psychosocial resources recognised as important in the wider stress and coping literature (e.g. locus of control, social support). The model recognises that stress and coping in the context of acculturation is experienced and managed by individuals in much the same way as other life stressors, drawing on Lazarus and Folkman's (1984) work to explain this process.

Acculturative Stress. Acculturative stress is defined as "a stress reaction in response to life events that are rooted in the experience of acculturation" (Berry, 2006, p. 294). Scholars have differed in their approaches to measuring acculturative stress, with disagreements regarding the breadth of this construct (Rudmin, 2009), as well as its relative validity across different ethnic and religious groups (Joiner & Walker, 2002; Rippy, & Newman, 2008; Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002). Research suggests that stressors associated with acculturation

can include both generalised stressors (e.g. financial woes, family and work stress) and specific challenges associated with adjustment into a new cultural environment, including cultural transition difficulties, and ethnic/religious discrimination (Abouguendia & Noels, 2001; Joiner & Walker, 2002; Stuart, 2012; Stuart, Ward, Jose, & Narayanan, 2010).

Imbedded in a conceptualisation of acculturation as inherently stressful are implications for both the coping responses and adaptation outcomes of individuals, as depicted in Berry's (1997) model of Stress and Coping. An abundance of research has been conducted to explore the relationship between acculturative stress and wellbeing (e.g. Berry, Phinney, Sam, & Vedder, 2006; Crockett et al., 2007; Fritz, Chin, & DeMarinis, 2008; Hovey & Magaña, 2000; Mui & Kang, 2006; Ward et al., 2001; Wu & Mak, 2011). Acculturative stress has been found to predict poor psychological and physical functioning, including greater anxiety and depression (Abbott et al., 2003; Crockett et al., 2007; Hovey & Magana, 2000), suicidal ideation (Hovey, 2000; Walker, Wingate, Obasi, & Joiner, 2008), low self-esteem (Tafoya, 2011), and physical health problems (Finch, Hummer, Kol, & Vega, 2001).

Discrimination has been identified as a key stressor for acculturating individuals (Abbot, 1997); so much so that many researchers have included a measure of discrimination in their assessment of acculturative stress (Abouguendia & Noels, 2001; Joiner & Walker, 2002; Stuart, 2012). Consistent with other facets of acculturative stress, ethnic/religious discrimination has been linked to poor psychosocial functioning via a range of different wellbeing measures, including increased psychological distress, depression, anxiety and suicidality, and decreased self-esteem and life satisfaction (Gomez, Miranda, & Polanco, 2011; Lee & Ahn,

2011; see Schmitt, Branscombe, Postmes, & Garcia, 2014 for a comprehensive review). Meta-analyses have also demonstrated a link between discrimination and poorer physical health conditions (Dolezsar, McGrath, Herzig, & Miller, 2004; Pascoe & Smart Richman, 2009), likely due to both a direct effect of the bodily impact of stress, as well as indirectly through subsequently poorer health behaviours in response to perceived discrimination.

While the consistently negative relationship between acculturative stress and adaptation appears to be clear, several factors have been identified in the literature that may attenuate these negative effects. Cultural identity has been found to moderate the impact of acculturative stress and racial discrimination on adaptation, including strong ethnic (Berry et al., 2006; Oppedal, Røysamb & Heyerdahl, 2005), and religious identities (Stuart, 2012). Intercultural competency and host language proficiency have also been found to moderate the relationship between acculturative stress and wellbeing (Torres & Rollock, 2004; Torres & Rollock, 2007; Wei et al., 2010). Finally, adaptive coping strategies may mitigate the negative effects of acculturative stress on adaptation (Belizaire, & Fuertes, 2011), including active coping (Crockett et al., 2007), positive reframing and acceptance coping (Kloek, Peters, & Sijtsma, 2013; Wang et al., 2012), culturally congruent coping strategies (Wei, Liao, Heppner, Chao & Ku, 2012), and social support coping (Lee, Koeske, & Sales, 2004). The efficacy of social support coping in easing acculturative distress has received considerable attention in the literature, with the support from numerous social networks potentially enhancing wellbeing, including family support (Abbott et al., 2003), peer support (Crockett et al., 2007), support from palliative

care (Renner, Laireiter & Maier, 2012) and support from ethnic and religious community congregations (Fozdar & Torezani, 2008).

Acculturative Stress amongst Muslims. People of Muslim faith are likely to be found within every major ethnic group across the globe. However, the majority originate from Asia, the Middle East, and Africa, following the spread of early Islam to the East and West of Arabia. While Muslims residing in the West represent an extremely diverse range of people with unique needs, there are some common threads running through their acculturative experiences. Muslims in the West have been described as living on the 'crossroads of global conflict' (Sirin & Fine, 2007), thus may be experiencing unique acculturative challenges. In addition to the common difficulties associated with cultural transition, such as language barriers, financial struggle and social isolation, two particularly salient acculturative challenges currently facing Muslims include religious discrimination and barriers to practicing their religion as a consequence of Islamophobia.

The term *Islamophobia* was first coined in the late 1980's/early 1990's to represent a growing attitude of fear or mistrust towards Muslims (Poynting & Mason, 2007). Following the September 11 attacks and the subsequent 'War on Terror,' this brewing anti-Muslim sentiment is on the rise, with many Western countries adopting immigration and foreign policies that 'otherises' much of the Muslim world. A growing body of research has documented the increase in anti-Muslim attitudes in the USA, UK, Canada, Australia, New Zealand and other European countries (Abu Raiya, Pargament, Mahoney & Trevino, 2008b; Chakraborti & Zempi, 2012; El-Geledi & Bourhis, 2012; Mahmud & Swami, 2010; Pedersen, Dunn, Forrest, & McGarty, 2012; Pedersen & Hartley, 2012; Saroglou, Lamkaddem, Van

Pachterbeke, & Buxant, 2009; Sheridan, 2006) as well as the prejudice, discrimination and barriers to integration that Muslim communities and individuals residing in those countries face (Abu-Raiya, Pargament, & Mahoney, 2011; Aroian, 2012; Kunst, Tajamal, Sam, & Ulleberg, 2012; Livengood & Stodolska, 2004; Marvasti, 2005; Rodriguez Mosquera, Khan, & Selya, 2013; Sheridan, 2006; Tummala-Narra & Claudius, 2013).

Research indicates that, in many Western countries, Muslims are met with significant obstacles to successful integration, including reduced likelihood of obtaining employment (Fozdar & Torezani, 2008; King & Ahmad, 2010), less perceived interest from prospective employers (Ghumman & Jackson, 2010; Ghumman & Ryan, 2013), targeted victimisation (Chakraborti & Zempi, 2012; Sheridan, 2006), and increased accounts of subjective (perceived) discrimination (Jasperse, Ward & Jose, 2012; Sirin, & Katsiaficas, 2011). Narrative accounts of the experiences of Muslims describe many instances of discrimination, including being socially excluded (Kloek et al., 2013), harassed (Aroian, 2012) or treated suspiciously in public places such as shopping malls, public transportation and airports (Fozdar & Torezani, 2008; Marvasti, 2006).

In line with the broader literature on the relationship between acculturative stress and wellbeing (Dolezsar et al., 2014; Lee & Ahn, 2011; Schmitt et al., 2014), studies focusing on Muslim populations have identified a number of possible mitigating factors that may influence this relationship. Several studies have utilised qualitative methods to explore the coping strategies Muslims engage in response to discrimination and difficulties in cultural transition (Aroian, 2012; Carter, 2010; Droogsma, 2007; Fozdar & Torezani, 2008; Kloek et al., 2013). Fozdar and Torezani

(2008) interviewed 150 refugees of predominantly Muslim faith living in Western Australia. Despite most participants having encountered various forms of discrimination, many reported positive wellbeing. Possible resilience factors included personality factors, such as stoicism, pragmatism and "refusing to see themselves as victims," as well as the social effects of being involved in a close, supportive community. Droogsma's (2007) interviews with American Muslim women revealed that for many, wearing the *hijab* (or veil, worn by many Muslim women) represents a range of positive and empowering meanings that is not only overlooked, but often discounted, by wider impressions of Islamic dress. Positively appraising their religious practice as a strengthening of their faith and relationship with God became a source of resilience for the women in the study.

Quantitative studies have also explored the moderating role of coping variables and acculturative stress amongst Muslims, with several studies pointing to the important role of religion (Abu Raiya et al., 2011; Ahmed, Kia-Keating, & Tsai, 2011; Ai, Peterson, & Huang, 2003; Aydin, Fischer, & Frey, 2010; Gardner, Krägeloh, & Henning, 2014). Sirin and Katsiaficas (2011) found that perceived discrimination was associated with increased religiosity and community engagement in a sample of Muslim American youth, and Ghaffari and Çiftçi, (2010) found that perceived discrimination predicted an increase in religious behaviour and religious attitudes amongst Muslim immigrants in the US. Aydin et al. (2010) explored the experiences of Turkish Christians and Muslims in Germany, where they are frequently exposed to racial discrimination and segregation. Their findings indicated that social exclusion not only resulted in increased rates of self-reported religiosity, but that religious

coping emerged as a significant buffer between acculturative stress and wellbeing outcomes.

The above studies suggest a link between acculturative stress and an increase in religiosity amongst Muslims. It is possible that this strengthening of faith acts as a coping mechanism in response to significant stressors in the environment.

Religious Coping

The psychology of religion and spirituality has gained increasing momentum over the last two decades with extensive literature demonstrating a positive relationship between religiosity and better physical and mental health (George, Ellison, & Larson, 2002; Hackney & Sanders, 2003; Koenig & Larson, 2001) and enhanced quality of life (Sawatzky, Ratner, & Chiu, 2005). Research suggests that religiosity is predictive of faster recovery from illness, lower likelihood of disease development, and enhanced longevity (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000). Additionally, meta-analyses on religion and mental health indicate that increased religiousness predicts better adjustment and faster recovery from depression, anxiety and traumatic stress, as well as lower instances of suicide, aggression and substance abuse (Bonelli & Koenig, 2013; Park, Cohen, & Murch, 1996). Several authors have offered explanatory mechanisms as mediators in the relationship between religion and wellbeing. This includes the provision of a distinct worldview offering a sense of meaning and purpose in life, healthy lifestyle behaviours, increased social support, and enhancing a sense of belongingness and identity (Bonelli & Koenig, 2013; George et al., 2002; Stuart, 2012).

Religion has increasingly been recognised as an important mechanism by which people cope with life's adversities. Religious coping can be defined as the use of cognitive-behavioural techniques to manage stressful situations in light of one's spirituality or religious beliefs (Pargament, 1997; Tix & Frazier, 2005). By this definition, religious coping may take on a number of forms, including engaging in religious practices, seeking social support through religious leaders and congregations, and reframing stressful events in reference to their relationship with God (Boudreaux, Catz, Ryan, Amaral-Melendez, & Brantley, 1995; Pargament, Smith, Koenig, & Perez, 1998).

This area of research has largely been led by Pargament (1997), whose theory of religious coping expands Folkman and Lazarus's (1984) work on stress and coping to acknowledge the unique and substantial role of religion in the orienting system of many individuals. Pargament (1997) argues that central to both the experience of stress and the overcoming of it is the concept of significance. His definition of religion as "a search for significance in ways related to the sacred" (p.32) prioritises its position in one's coping repertoire when appraising and responding to stressful circumstances. In support of his theory, research reveals that higher levels of overall religiousness predicts the use of religious coping (Aydin et al., 2010; Pargament et al., 1992; Pargament, Tarakeshwar, Ellison, & Wulff, 2001). Studies on the epidemiology of religious coping reveal that high proportions of people rely on religion to cope with a range of life stresses, including work or family stress (Shin et al., 2014), chronic or life-threatening illnesses (Harrison, Koenig, Hays, Eme-Akwari, & Pargament, 2001; Koenig, Larson, & Larson, 2001), acculturative stress (Sanchez,

Dillon, Ruffin, & De La Rosa, 2012; Vasquez, 2010), and trauma (Ai et al., 2003; Bryant-Davis & Wong, 2013).

Many studies have explored the relationship between religious coping and various measures of wellbeing (e.g. Klaassen, McDonald, & James, 2006; Tix & Frazier, 1998; Williams, Jerome, White, & Fisher, 2006), with recent meta-analyses indicating a positive impact of religious coping on wellbeing (Ano & Vasconcelles, 2005; Harrison et al., 2001; Prati, & Pietrantoni, 2009)[1]. Ano and Vasconcelles (2005) reviewed 49 studies of religious coping, and found a small but significant positive relationship between religious coping and wellbeing. Harrison et al. (2001) found that religious coping predicted lower rates of depressive symptoms, and enhanced life satisfaction. Prati and Pietrantoni (2009) reviewed the efficacy of a range of personality factors and coping strategies (including optimism, social support, acceptance, and religious coping) in contributing to post-traumatic growth across 103 studies. Religious coping emerged as the largest contributor to post-traumatic growth, with greater use of religious coping predicting better outcomes following trauma.

In addition to a direct effect of religious coping on wellbeing outcomes, a smaller number of studies have found religious coping to moderate the relationship between stress and wellbeing (Aydin et al., 2010; Carpenter, Laney, & Mezulis, 2012;

[1] Research indicates that this finding is qualified by the type of religious coping that one engages in. Pargament's (1997) early work on religious coping drew a distinction between "positive" and "negative" religious coping, with the latter consistently predicting poor outcomes. Positive religious coping represents a "secure" relationship with God, where one utilises cognitive restructuring methods to interpret stressful events as a means of drawing nearer to God, or seeking strength through Him. Negative religious coping reflects an "insecure" relationship with God, typified by thoughts of abandonment or punishment by God, or beliefs that the Devil has caused the adversity to occur. While the dichotomy between "Positive" and "Negative Religious Coping" is frequently drawn within the religious coping literature, the current study does not examine negative religious coping. The literature review presented here refers only to the findings of Positive Religious Coping, hereby stated simply as "religious coping".

Tix & Frazier, 1998; Tix & Frazier, 2005). Carpenter et al.'s (2012) study of religious coping in a sample of American young adults found that religious coping buffered the negative effects of stress on wellbeing. Interestingly, a series of studies of two different Christian denominational groups found that the direction of the moderating relationship varied according to religious affiliation. Tix and Frazier (2005) found a different moderating relationship between stress and wellbeing for Protestants in comparison to Catholics. The results indicated a complex interplay between stressful life events, religious coping, and wellbeing outcomes, with both groups experiencing a buffering effect under certain conditions, and an exacerbating effect under other conditions. While the researchers struggled to understand the differences that emerged between the two groups, they suggested that different theological positions regarding controllability, fate, and God's role may have influenced the discrepancy in findings.

Traditionally, the religious coping literature has focused on Christian groups living as a majority (most frequently White Christian Americans residing in the United States). More recently, however, research has focused on ethnic minorities living as long-term residents in Western countries. What this research has indicated is that those in a lesser position of power, including minority ethnic groups, women, and the socially disadvantaged, tend to use religious coping more and derive a greater sense of efficacy from it (Harrison et al., 2001). Religious coping has been demonstrated to be utilised more heavily at times when a situation is appraised as uncontrollable or perceived as greatly exceeding one's resources (Tix & Frazier, 1998; Pargament, 1997), thus providing an outlet for those at a social disadvantage with limited access to external resources.

Religious Coping amongst Muslims. Muslims are a growing minority group across the Western world, representing diverse ethnic backgrounds. For many Muslims, Islam is considered a comprehensive way of life that permeates cognitive, affective, behavioural, and spiritual components of the self (Abu Raiya & Pargament, 2011; El Azayem, & Hedayat-Diba, 1994). It is likely, then, that when confronted with a stressor, Muslims will consider religion a resource in managing their distress. Indeed, research on religious coping amongst Muslims indicates that many Muslims engage religion as a coping mechanism in response to stress at high rates relative to other religious groups (Bhui, King, Dein, & O'Connor, 2008; Cinnirella, & Loewenthal, 1999; Williams et al., 2006). Cinerella and Lowenthal (1999) found that, in comparison to participants of other religions interviewed in the study (Christian, Jewish and Hindu), Muslim participants were more likely to engage in religious coping and believed more strongly in the efficacy of religious coping methods in managing symptoms of depression. Similarly, Bhui et al.'s (2008) study of religious coping across different ethnic groups (participants ranged in religious affiliation: Christian, Muslim, Sikh, Hindu, Buddhist, Rastafarian, or No Religion) found that Bangladeshi-British Muslims had the greatest reliance on religious coping mechanisms compared to other participants in the study, were more adherent to orthodox religious practices as a means to relieve stress, and were more accepting of life's calamities by regarding them as an opportunity for growth and closeness to God. Gardner et al. (2014) surveyed Muslim international and domestic students in New Zealand and found a significant ceiling effect amongst their responses on a measure of religious coping, indicating that this group's use of religion in response to stress far exceeded the typical mean scores yielded from religious coping studies.

Research focusing exclusively on Muslim populations have found mixed results of the efficacy of religious coping (Achour & Boerhannoeddin, 2011; Aflakseir & Coleman, 2009; Aflakseir & Coleman, 2011; Gardner et al., 2014; Hassouneh-Phillips, 2003; Khan & Watson, 2006; Khan, Sultana, & Watson, 2009; Khan, Watson & Chen, 2011). Khan and Watson's (2006) study of religious coping amongst Muslims in Pakistan failed to find a link between cognitive religious coping and psychological adjustment. However, a small negative relationship emerged between Pakistani Coping Practices (a factor made up of items pertaining to common Islamic practices performed in Pakistan) and wellbeing, indicating that engagement in these practices led to poorer outcomes. Further, Hassouneh-Phillips' (2003) investigation of the use of religious coping methods amongst Muslim women survivors of domestic violence provided evidence for religion as a source of both strength and vulnerability in this population. As a source of strength, religious practices such as prayer and Qur'anic recitation provided an important means for coping, and offered a framework of meaning to achieve healing and hope. As a vulnerability, however, religious and cultural beliefs prevented some women from seeking help by promoting an attitude of acceptance and patience with their predicament. In contrast, Aflakseir and Coleman (2009; 2011) examined religious coping amongst Muslim students and war veterans in Iran. They found that religious coping predicted enhanced psychological adjustment in the student sample and reduced levels of PTSD and psychosomatic symptoms amongst disabled war veterans. Finally, a study conducted in New Zealand compared the use of religious coping in managing perceived stress amongst Muslim international students and Muslim residents of New Zealand (Gardner et al., 2014). Their findings indicated that differences existed between the two groups,

with religious coping only predicting positive adaptation amongst the international students, who reported higher levels of religiosity overall. This is the only known study to have explored religous coping amongst Muslims in New Zealand.

Several studies focusing on Muslim minority groups living in Western countries have investigated the use of religious coping in managing acculturative stress (Abu Raiya et al., 2011; Ahmed et al., 2011; Aydin et al., 2010). Acculturative stress represented a significant source of struggle for the participants in these studies, yet emerging evidence suggests that religious coping may assist in managing the stress experienced in cultural transition. A study of the experiences of American Muslims dealing with stressful events post-9/11 found that the use of religious coping was related to increased post-traumatic growth (Abu Raiya et al., 2011). Ahmed et al. (2011) surveyed the influence of cultural resources (ethnocultural identity and religious coping) on acculturative stress amongst Arab-American Christians and Muslims. While acculturative stress predicted poor mental health outcomes, higher use of religious coping predicted less depression and anxiety. No evidence of a moderational effect of religious coping on the stress-wellbeing relationship was found in this study.

Although the existing literature in this area is limited, an emerging trend points towards religion as a protective factor amongst Muslims experiencing acculturative stress. In line with existing models of stress and coping, it is hypothesised that religious coping will both exert an independent main effect on wellbeing outcomes, as well as moderate the negative effects of acculturative stress on wellbeing.

The New Zealand Context: Religion and Multiculturalism in New Zealand

New Zealand is traditionally a bicultural nation, with the Treaty of Waitangi considered one of the country's most foundational documents. However, the last three decades have seen a dramatic increase in ethnic and cultural diversity, with New Zealand now being recognised as one of the most multicultural countries in the world (Ward & Masgoret, 2008). With a population of approximately four million, over a million New Zealanders are currently overseas born. For the first time in the country's history, Asia (at 31.6%) has overtaken the United Kingdom (at 26.5%) as the most common overseas birthplace for people living in New Zealand. Recent census data indicates that the population of Muslims in New Zealand is now 46,149, a 28% increase in the last 7 years, with approximately three quarters born overseas (Statistics New Zealand, 2013).

Ward and Masgoret's (2008) study of New Zealander's attitudes towards immigrants and multiculturalism indicated that 89% of those surveyed endorsed a multicultural ideology, and 82% agreed that it was importance to accept a wide variety of cultures into New Zealand and promote integration. However, some differences emerged regarding attitudes towards specific immigrant groups, with immigrants from Australia and the UK rated most favourably, and immigrants from Somalia rated the least favourably. A later study by Stuart and Ward (unpublished study, cited in Stuart, 2009) indicated that New Zealanders consistently rated immigrants originating from preodminantly Muslim countries (such as the Middle East, and parts of Africa and Asia) less favourably than those from other nations. These results indicate that, while Islamophobia may not be as salient in New Zealand, this small country is not immune to international attitudes. In fact, studies

that have explored discrimination amongst Muslims in New Zealand indicate that this phenomenon is far from absent (Butcher, Spoonley, & Trlin, 2006).

In spite of this, preliminary findings within the New Zealand Muslim community consistently point to a population that is adapting remarkably well (Stuart, 2012). Qualitative research has highlighted the importance of blended roles of religious, ethnic and national identification in the lives of young Muslims growing up in New Zealand (Stuart & Ward, 2011) and the promotive role of engagement in Islamic Practices on psychological wellbeing (Jasperse et al., 2012). The current study will contribute to this growing area of research by exploring the experiences of acculturative stress amongst New Zealand Muslims, their use of religion in coping with this stress, and the subsequent impact on wellbeing measures.

Research Aims and Theoretical Hypotheses

In summary, this study aims to explore the efficacy of religious coping in influencing the relationship between acculturative stress and wellbeing amongst Muslims in New Zealand. Of unique interest in this study is what happens when religion is engaged as a resource when under threat.

Two specific hypotheses are posited to explore this research question:

1. It is expected that Acculturative Stress will predict poorer wellbeing, and Muslim Religious Coping will predict enhanced wellbeing, as measured by a decrease in Psychological Symptoms and an increase in Life Satisfaction.
2. It is expected that Muslim Religious Coping will moderate the relationship between Acculturative Stress and wellbeing.

Measurement Considerations

The vast majority of studies examining religious coping has focused on a predominantly Judeo-Christian population. Less is known about the efficacy of religious coping amongst Muslims, or indeed, the generalisability of this phenomenon into other religious groups (Abu Raiya, Pargament, Mahoney, & Stein, 2008a). Only a small portion of existing studies consider the experience of Muslims living as minorities in the West, and even fewer have focused exclusively on this population. Much of the literature informing the patterns and salience of religiosity amongst Muslims has been drawn from comparative studies examining numerous religions and utilising generalisable measures of religiosity and religious coping (Bhui et al., 2008; Cinnerella & Lowenthal, 1999; Gardner et al., 2014; Loewenthal, Cinnirella, Evdoka, & Murphy, 2001; Martin, Kirkcaldy, & Siefen, 2003; Stein et al., 2009).

A number of attempts to design culturally- and religiously-specific measures targetting a Muslim population has demonstrated the construct validity of religious coping amongst Muslims (Abu Raiya et al., 2008a; Aflakseir & Coleman, 2011; Amer, Hovey, Fox, & Rezcallah, 2008; Khan & Watson, 2006); however, there is significant discrepancy over what consititutes 'religious coping' within this population. Abu Raiya et al.'s (2008a) Psychological Measure of Islamic Religiousness (PMIR) incorporates dimensions of religious coping alongside other religiosity variables; however, it remains unclear as to what this scale actually seeks to measure. The scale is comprised of six factors: Islamic Beliefs, Islamic Ethical Principle & Universality, Islamic Religious Struggle, Islamic Religious Duty, Islamic Positive Religious Coping & Identification, and Punishing Allah Reappraisal. While the latter

two dimensions reflect similar items to earlier measures of religious coping, they also include a number of items which do not necessarily parallel a coping paradigm (e.g. “I read the Holy Qur’an because I find it satisfying”). Klaassen et al. (2008) noted this as a common methodological flaw amongst psychologists of religion, with measurement tools often blurring the constructs of intrinsic and extrinsic religiousness, spirituality, and religious coping.

Two researchers have attempted to adapt the Brief Religious Coping scale (Brief RCOPE; Pargament, Feuille, & Burdzy, 2011) in order to construct a suitable measure of Islamic religious coping (Aflakseir & Coleman, 2011; Khan & Watson, 2006). Khan and Watson’s (2006) “Pakistani Religious Coping Scale” consists of three dimensions: Positive and Negative Religious Coping, as measured by the Brief RCOPE, and a third dimension generated by the authors, named “Pakistani Coping practices”. This factor represented culturally-specific, Islamically-based coping methods. Similarly, Aflakseir and Coleman (2011) designed a scale of “Iranian Religious Coping,” by adapting Pargament et al.’s (2011) work to incorporate Islamic practices relevant to an Iranian Shiite population. While these scales represent a promising step towards a religiously sensitive measure of religious coping for a Muslim population, both scales have two important limitations. Firstly, they were designed as measures of religious coping in culturally homogenous groups (Pakistani and Iranian), in countries where Islam is the majority religion. Therefore, they may overemphasise culturally-specific practices and fail to capture more universal practices seen in heterogeneous communities.

A second important limitation to these scales - and indeed, to the RCOPE (Pargament, Koenig, & Perez, 2000) and Brief RCOPE (Pargament et al., 2011) scales

more broadly - is that they fail to adequately capture an external dimension of religious coping (Boudreaux et al., 1995). Islam emphasises both the *inner* (i.e., one's internal state with God), as well as the *outer* (one's religious rituals and interactions with others) as crucial components of the faith (El Azayem & Hedayat-Diba, 1994). Both of the above scales attempt to remedy this gap by generating items pertaining to religious practice; however, both fail to capture a social dimension of religious coping. For many members of organised religion, a significant benefit they derive from their faith exists in the social support they receive from congregation, as well as in the guidance from religious peers and leaders (George et al., 2002). It is thus surprising that this factor has been neglected in many studies of religious coping. Boudreaux et al. (1995) developed the Ways of Religious Coping Scale (WORCS) to fill this gap. Their scale, though directed towards a Christian population, offers a useful alternative to Pargament's works by incorporating the more practical components of religious coping.

A Measure of Muslim Religious Coping. For the current study, a valid measure of Muslim Religious Coping was required to assess its use amongst New Zealand Muslims. A Muslim Religious Coping (MRC) scale was developed by adapting items from the Iranian Religious Coping Scale (Aflakseir & Coleman, 2011) and the Ways of Religious Coping Scale (Boudreaux et al., 1995).

The MRC scale was constructed to tap into three distinct dimensions of MRC: Cognitive, Behavioural, and Social. A Cognitive dimension reflects religious coping constructs primarily identified by Pargament (1997) and adapted by Aflakseir and Coleman (2011) to suit a Muslim population. This involves cognitively appraising one's difficulties in relation to God or a religious worldview. A Behavioural dimension

reflects religious coping constructs more specific to a Muslim population, as identified by Aflakseir and Coleman (2011). These include engagement in external religious practices as a form of coping, such as ritual prayer and reciting the Qur'an (Holy book). Finally, a Social dimension reflected religious coping constructs identified by Boudreaux et al. (1995), which captures the support sought from one's religious congregation in response to stress. It was expected that these three dimensions would emerge upon examination of the MRC scale's factor structure.

Items assessing general Islamic religiousness were included in the study as criterion measures to determine the construct validity of the MRC scale. Previous research indicates that one's overall religiousness is a strong predictor of the use of religious coping (Krägeloh, Chai, Shepherd & Billington, 2012; Pargament et al., 1992). The more religion is seen as salient and the more frequently one engages in religious duties or activities, the more likely they will call upon religion as a resource in times of distress (Pargament et al., 2001). It was therefore expected that this general measure of religiousness would positively correlate with the MRC scale.

Several subscales from the COPE (Carver et al., 1989) were also selected as criterion measures for validating the MRC scale. The full COPE scale comprises 60 items measuring 15 different coping styles, incorporating methods that have been demonstrated to both positively and negatively predict adaptation. Seven subscales that were theoretically linked with different items on the MRC scale were selected for inclusion. All of the coping subscales selected for the study have been identified as 'adaptive' in the coping literature (i.e., are linked to positive wellbeing outcomes either directly, or as moderators to the stress-wellbeing relationship; Folkman &

Moscowitz, 2004) and were expected to correlate positively with specific MRC subscales, as outlined below.

The *Turning to Religion* subscale of the COPE consists of four items that measure religious coping at a relatively non-specific level. Items assume a monotheistic stance and are thus applicable to a Muslim population, but do not delve into specific religious worldviews or practices. It was expected that this subscale would correlate at moderate-to-strong levels with all three MRC subscales.

Two subscales on the COPE, *Acceptance* and *Positive Reframing and Growth*, measure the extent that one modifies internal perspectives in order to cope with their difficulties. As these subscales are primarily internal and cognitive in nature, they were expected to have a moderate, positive correlation with Cognitive MRC.

Two subscales on the COPE, *Active* and *Planning* coping, measure the extent one attempts to approach their problems and modify their circumstances to manage their difficulties. As these subscales are characterised by an active, approach-focus, they were expected to have a moderate, positive correlation with Behavioural MRC.

Two measures of Social support taken from the COPE (*Instrumental Social Support* and *Emotional Social Support*) were expected to have a moderate, positive correlation with the Social MRC subscale.

Finally, the incremental validity of Muslim religious coping will be demonstrated by examining the unique variance of wellbeing outcomes contributed by the MRC scale, above and beyond that predicted by COPE subscales. Previous research indicates that religious coping uniquely contributes to wellbeing outcomes, not explained by other forms of coping (Pargament et al., 1990); thus, it is expected

that MRC will account for unique variance in wellbeing when controlling for other non-religious coping strategies.

Psychometric Hypotheses. In summary, for the purposes of scale validation it is expected that:

1. The MRC scale will consist of three factors: Cognitive, Behavioural, and Social.
2. Convergent validity will be demonstrated by moderate positive correlations between the Cognitive, Behavioural and Social dimensions of Muslim Religious Coping with religiosity and general religious coping.
3. Convergent validity will further be demonstrated by moderate positive correlations between MRC subscales and COPE subscales, specifically:
    a. Acceptance and Positive Reframing Coping are expected to correlate with Cognitive MRC.
    b. Active and Planning Coping are expected to correlate with Behavioural MRC.
    c. Emotional and Instrumental Social Support Coping are expected to correlate with Social MRC.
4. Incremental Validity will be demonstrated by additional variance accounted for by the MRC scale on wellbeing outcomes (Life Satisfaction and Psychological Symptoms), over and above that explained by general coping.

CHAPTER TWO: Method

Research Preparation

Before conducting this research, it was important for me to acknowledge my position as (a) a cross-cultural psychological researcher trained in a Western discipline, (b) a female, New Zealand-born, practicing Muslim of Fijian-Indian heritage, and (c) an active and relatively well-known member of the New Zealand Muslim community.

Broadly, cross-cultural psychology seeks to demonstrate the impact of cultural influences on human development and behaviour (Berry, 1997) and determine the universality of psychological phenomena across and within culturally diverse and culturally homogenous groups. As a cross-cultural researcher, I have designed my study based on the assumptions drawn through previous empirical research in related areas. In particular, I am aware that much of the research on religious coping has not employed a cross-cultural perspective; thus, I am embedding my assumptions in a largely mono-cultural research base. In doing so, I need to be careful to consider if these assumptions adequately reflect the lived experience of my participants. As a part of the research design process, I consulted with several members of the Muslim community to ensure that my questions were sensitive and relevant to the experiences of Muslims living in New Zealand.

As a New Zealand-born Muslim conducting research on acculturative stress, it is important to not be veiled by my own experiences of identifying strongly as a New Zealander and feeling safe and well-adjusted in this country. As a Fijian-Indian

female, I am aware that my access to male participants, as well as participants of other ethnicities, may be limited.

Additionally, as a practicing Muslim, I must not make assumptions about the role religion plays in the lives of participants in this study or the level of significance placed upon it. In accessing my sample, I intend to publicise my research through numerous religious organisations and social media groups across New Zealand. However, this is likely to result in a relatively religious sample that actively identify as Muslim and are thus connected to religious organisations. Results will need to be interpreted with this in mind.

Finally, my position as a reasonably well-known, active member of the Muslim community must be considered. I have established rapport networks into many multicultural Muslim communities across New Zealand. This is likely to work in my favour, as it lends legitimacy to my research and provides me with a reasonably large sampling frame. However, as with many small communities, many members of the New Zealand Muslim community know each other. I will need to ensure I retain integrity in my research design and analysis, in order to protect their anonymity.

Participants

One hundred and sixty-seven Muslims living in New Zealand participated in this study. The participants had a mean age of 31.5 (*SD* = 9.92), and 64.7% were female. The majority of participants were married (53.9%), employed (50.3%), and highly educated (67.7% had acquired a Bachelor's degree or above). A diverse range of ethnicities were represented in the sample, including Indian/South Asian (32.9%),

East Asian (17.4%), Middle Eastern (16.8%), European (including NZ Pakeha) (16.2%), African (9.0%), and Maori/Pasifika (4.8%).

The majority of participants were NZ citizens (69.5%). Only 29.9% were New Zealand-born, with 38.9% second- or later-generation New Zealanders (generational status was computed by including any participants arriving in NZ prior to age 8). The mean age of time spent in New Zealand for foreign-born participants was 15.81 years (*SD* = 11.55). Participants reported a high level of English proficiency (*M* = 4.58, *SD* = 0.68 on a 5-point scale). Respondents lived across all areas of New Zealand, with the large majority residing in either Auckland (44.3%) or Wellington (29.9%).

Only participants that indicated their religion as 'Islam' were included in the analyses. Ninety-nine percent of the sample identified as Sunni Muslim, with 19.8% having converted to Islam. Participants were recruited primarily through social media groups and local Islamic centre networks, thus the sample was highly religious (*M* = 4.55, *SD* = 0.70 on a 5-point scale). Results and inferences drawn from these data must be made in reference to a highly religious population.

Measures

A questionnaire was developed for the purposes of this study, which comprised of four sections: demographic information, acculturative stress, coping methods (general and religious coping), and wellbeing (life satisfaction and psychological symptoms). The questionnaire is included as Appendix A.

Section I. Background Information.

Demographic Variables. A section on background information gathered demographic variables relating to participant's age, gender, marital status,

citizenship, employment status, education level, residential area, ethnicity, generation status, and English proficiency.

Religiosity. Participant's religion was recorded, including denominational information (whether participant identified as Sunni or Shiite). This question screened for any participants who did not identify primarily as Muslim, who were removed from the analysis.

Religiosity was measured via five variables, the first two relating to the role Islam plays in their lives ("How important is Islam to you?", and "How strongly do you identify as a Muslim?") Participants rated their answers to these questions on a 5-point scale ranging from "Not at all" to "Very".

The three remaining religiosity variables examined common practices associated with Islam. These included "How often do you pray the five daily prayers?" (Behavioural indicator); "How often do you attend Islamic gatherings?" (Social indicator); and for women only "How often do you wear Hijab in public?" (Visible indicator). All three items were answered on a 5-point scale ranging from "never" to "always." For all items, a higher score indicated a stronger connection or engagement in their religion.

Section II. Stressful life events.

A 26-item measure of stressful life events was used for the purposes of this study. This scale included a modified version of an acculturative stress scale by Jose, Ward and Liu (2007), with added items relevant to the acculturation of Muslims adapted from Stuart (2012). Jose et al. (2007) modified the Everyday Life Events Scale for Children (Jose, Cafasso, & D'anna, 1994) in order to assess the acculturative stress levels of a sample of international students living in New Zealand. Stuart's

(2012) measures of Cultural Transition stress and Ethnic/Religious Discrimination stress were constructed and applied to a Muslim youth population in New Zealand. Both scales demonstrated good reliability and validity in cross-cultural samples living in New Zealand (Jose et al., 2007; Stuart, 2012).

For each item, participants first indicated if the event had happened to them in the previous three months. Following this, they indicated how much distress the event had caused them, on a 5-point scale ranging from "not at all distressed" to "very distressed." A higher score indicated the participant had experienced a high degree of distress in response to that item.

General Life Stress. Nine items relating to everyday stressors, including relationship difficulties, financial strain, time pressure and illness were adapted from Jose et al.'s (2007) acculturative stress measure. Example items include, "Problems in or loss of a close relationship", and "Felt time pressure from too many demands".

Cultural Transition Stress. Ten items relating to stress associated with living as a Muslim in a Western country were generated via a number of sources. Three items were adapted from Jose et al. (2007), one which captured communication difficulties ("experienced a cultural misunderstanding with someone"), and two which captured social isolation ("Had difficulty making friends with people from my Faith/ethnic group", and "Had difficulty making friends with people outside my Faith/ethnic group"). Four items were adapted from Stuart (2012)'s measure of Cultural Transition stress that captured unique stressors associated with being Muslim in New Zealand (e.g. "felt discomfort with how close/friendly unmarried men and women are"). Three items were generated by the current author, which captured additional stressors associated with being Muslim in New Zealand

("Experienced difficulty practicing my religion", "Had difficulty dressing modestly in public", and "Felt different to the people around me").

Perceived Discrimination Stress

In order to measure Stress associated with Perceived Ethnic and Religious Discrimination, Noh and Kaspar's (2003) 7-item scale of Perceived Discrimination was used. An included question which differed from Noh and Kaspar's (2003) original scale was "People acted as though they were afraid or suspicious of you". Research indicated this as a particularly salient area of discrimination towards Muslims following 9/11 (Sheridan, 2006). Stuart (2012) applied a similarly adapted measure of Perceived Discrimination to a sample of Muslim youth in New Zealand, demonstrating good reliability and validity.

An additional prompt was included in the questionnaire for these items, to ensure that participants responded according to what they perceived as ethnic or religious-based discrimination ("Please indicate if the following has happened to you in the last three months **because of your religion or ethnicity**, and how it made you feel"). As for other stress items, participants indicated first if the event had occurred in the past three months, and then the associated level of distress experienced.

Section III. Measuring Coping.

Two coping measures were administered to examine how participants have responded to the specific stressors identified above. The following prompt was given for both scales: "*On the previous page, you indicated some events and experiences that have recently caused distress in your life. This section asks you what you have been doing to help you deal with these difficulties. Read each statement and indicate whether you have been engaging in these behaviours or thoughts in the last three*

months to deal with your feelings of distress. Don't answer on the basis of what worked or not, just whether or not you did it or are doing it, and how often."

Both scales were responded to on a 5-point Likert scale ranging from "Not at all" to "A lot". A higher score indicated greater utilisation of a given coping method.

COPE Scale. Twenty-eight items pertaining to seven factors from the Full COPE scale (Carver et al., 1989) were included in the questionnaire. Factors were selected to (a) reflect both passive and active coping methods that have demonstrated efficacy in stress management in previous literature, and (b) represent theoretically similar concepts to the newly-constructed Muslim Religious Coping measure for validity purposes.

The following seven factors (each containing 4 items) were included: *Active* coping (e.g. "I've been concentrating my efforts on doing something about my problems"); *Planning* (e.g. "I've been making a plan of action"); *Emotional Social Support* (e.g. "I've been discussing my feelings with someone"); *Instrumental Social Support* (e.g. "I've been talking to someone to find out more about my situation"); *Positive Reinterpretation and Growth* (e.g. "I've been trying to grow as a person as a result of these experiences"); *Acceptance* (e.g. "I'm accepting that these things have happened and that they can't be changed"); and *Turning to Religion* (e.g. "I've been seeking God's help"). Items in the COPE's *Turning to Religion* subscale assume a monotheistic stance and are thus applicable to a Muslim population, but do not delve into specific religious worldviews or practices.

In Carver et al.'s (1989) original scale development, sufficient internal reliability of subscales was demonstrated, with Cronbach's Alpha scores ranging from $\alpha = 0.62$ (Active Coping) to $\alpha = 0.92$ (Turning to Religion). This scale, along with

its Brief version (Carver, 1997) has consistently demonstrated good reliability and validity across a broad range of populations worldwide, including in New Zealand (Chan & Consedine, 2014; Gardner & Fletcher, 2009) as well as with Muslim samples in Australia (Khawaja, 2007; Khawaja, 2008).

Muslim Religious Coping. A measure of Muslim Religious Coping (MRC) was developed for the purposes of this study, which aimed to examine cognitive, behavioural and social facets of religious coping in response to recent stressors. The scale was designed to be a culturally applicable religious coping measure for a heterogeneous minority Muslim population, developed by adapting the works of Aflakseir and Coleman (2011) and Boudreaux et al. (1995).

Items theorised to make up the cognitive and behavioural dimensions of religious coping were primarily adopted from Aflakseir and Coleman's (2011) Iranian Religious Coping scale. Items theorised to make up the social religious coping dimension were adapted from Boudreaux et al.'s (1995) Ways of Religious Coping Scale.

Cognitive items included in the study examined the ways in which participants interpreted God's role in their stressful circumstances (e.g. "I've been viewing my situation as a trial from Allah"; "I've been seeing my situation as Allah's will"), and their relationship with God as a reaction to stress (e.g. "I've been seeking patience because Allah is with those who are patient").

Behavioural items examined the ways in which respondents participated in religious rituals as a means of coping with stress. These items were specifically selected to reflect common Islamic religious practices (e.g. "I've been reading certain dua (supplications)"; "I've been seeking guidance by reading the Qur'an").

Social items examined the ways participants sought help, advice and solace from fellow members of the Muslim community (e.g. “I’ve been attending events at the Mosque/Islamic centre”; “I’ve been volunteering for a religious cause/event”).

As this is a newly developed scale, the overall factor structure of the items will be determined via factor analysis, and validated through examining its correlates with items of general religiousness and Carver et al.’s (1989) COPE subscales.

Section IV. Psychological Wellbeing.

Positive and negative measures of psychological wellbeing were examined via two scales which have demonstrated good validity and reliability with immigrant populations across a variety of cultural contexts, including New Zealand (Berry et al., 2006; Jasperse et al., 2012; Oishi, Diener, Lucas & Suh, 1999).

Life Satisfaction. Life satisfaction was measured using Diener, Emmons, Larsen and Griffin’s (1985) five-item scale. The scale asked participants to “Please indicate how much you agree with the following statements when you think about yourself and your life.” Participants then responded to items (e.g. “In most ways, my life is close to my ideal”) on a 5-point scale ranging from “strongly disagree” to “strongly agree”. A higher score indicated a greater sense of satisfaction with one’s life.

Psychological Distress. Psychological distress was measured using a 15-item scale of psychological symptoms, which was initially developed for the International Comparative Study for Ethnocultural Youth (Berry et al., 2006). This scale listed a range of symptoms, preceded by the prompt, “How often have you experienced the following in the past month?” Symptoms included depressive symptomatology (e.g. “I feel unhappy and sad”), anxiety (e.g. “I feel nervous”), and psychosomatic

symptoms (e.g. “I feel dizzy and faint”). Responses were made on a 5-point scale ranging from “never” to “very often”, with a higher score indicating higher levels of psychological symptoms (i.e., poorer psychological wellbeing).

Procedure

The questionnaire was administered via online survey tool “Qualtrics”, which allowed the anonymous participation of Muslims across New Zealand. Information and Debrief sheets outlining the purpose of the study were also provided to participants, and are included as Appendix B and C, respectively. Participants were recruited primarily through social media groups representing Muslims in New Zealand. Additionally, members of local Islamic centres and students’ associations were recruited via email networks. Data were entered into SPSS for further analyses.

CHAPTER THREE: Results

The results section is divided into two parts. The first part reports the psychometric analyses of the measurement scales included in the study. The second part will address the research question regarding the interrelationships between acculturative stress, religious coping, and wellbeing.

Psychometric Analyses of Scales

Data Imputation. Initial descriptive analyses indicated several missing data points across each of the measurement scales. Data for the COPE, Muslim Religious Coping, Life Satisfaction and Psychological Symptoms scales were imputed via Expectation Minimisation. Little's MCAR test indicated that missing data did not deviate from randomness ($X^2(3565) = 3471.745$, $p = 0.87$). Imputations did not significantly alter the structure of the data or any of the scale means.

The Factor Structure of Muslim Religious Coping. The 24 items included in the Muslim Religious Coping scale were entered into a Principle components analysis with direct oblimin rotation (delta = 0), due to the assumption that the resulting factors would pertain to an underlying factor of religious coping. The resulting three factor solution is presented in Table 1, which explained 65.8% of the variance. A 0.91 Kaiser-Meyer-Olkin value exceeded the recommended requirement of 0.60, and Bartlett's Test of Sphericity was significant ($X^2(190) = 2310.10$, $p<0.001$). As predicted, the three factors loaded according to the hypothesised dimensions of 'Cognitive Religious Coping', 'Behavioural Religious Coping' and 'Social Religious Coping'. Factor loadings above 0.5 for the item's converging factor and below 0.3 on

divergent factors were taken as minimum criteria. Based on these criteria, items 14, 17, 19 and 24 (also shown in Table 1) were removed due to high cross-loadings.

Intercorrelations between Subscales. All three subscales of Muslim Religious Coping (MRC) were significantly positively correlated, suggesting that they represent an underlying construct of religious coping. Social MRC was moderately correlated with the other two subscales (Social and Cognitive MRC $r = 0.335$, $p < 0.01$; Social and Behavioural MRC $r = 0.366$, $p < 0.01$), suggesting that this factor represents a distinct component of Muslim religious coping. Cognitive and Behavioural MRC factors, however, were strongly inter-correlated ($r = 0.728$, $p < 0.01$). Although the Principle Components Analysis indicated these to be distinct dimensions of religious coping, there is clearly a strong connection between them. Subsequent analyses investigating the relationships between MRC and other variables have been conducted separately in order to avoid problems of multicollinearity that may arise from the significant overlap between these two factors.

A Latent Variable of Acculturative Stress. The Stressful Life Events scale assessed perceived acculturative stress across three domains: General Stress, Cultural Transition Stress, and Discrimination Stress. An analysis was performed using computer software programme AMOS, to explore whether these three stress measures fit together on a single latent variable. The results indicate that all three stress factors load significantly on a single latent variable, named “Acculturative Stress” (General Stress $\beta = 0.714$, $p < 0.01$; Cultural Transition Stress $\beta = 0.740$, $p < 0.01$; Discrimination Stress $\beta = 0.753$, $p < 0.01$), suggesting that all items in the Stressful Life Events scale capture the same underlying construct. Further analyses

will be performed using this single measure of Acculturative Stress to examine its relationships with coping and wellbeing variables.

Internal Reliability. To measure internal consistency, Cronbach's alphas were computed on each of the overall measurement scales and their corresponding subscales (presented in Table 2). All subscales exceeded the recommended Cronbach's Alpha of 0.7 (Kline, 2000), demonstrating good reliability of measurement scales. This analysis yielded strong internal reliability for the overall measure of Muslim Religious Coping ($\alpha = 0.94$), as well as for each MRC subscale (Cognitive $\alpha = 0.92$; Behavioural $\alpha = 0.92$; Social $\alpha = 0.85$).

Descriptive Statistics. Means and standard deviations are reported for the composite scores of each individual scale. An individual's mean subscale score for Muslim Religious Coping, COPE subscales, Life Satisfaction and Psychological Symptoms ranged from 0 to 5. A score of 5 indicated high use of coping, high life satisfaction, and high presence of psychological symptoms, respectively.

Each individual's Acculturative Stress score was a sum of the unique combination of stressors they had experienced. As indicated in the table, this resulted in large variation between individual scores, which ranged from a minimum of 0, and a maximum of 130, where an individual had indicated the maximum endorsement of distress (5) for all 26 items. However, no participants endorsed all stressors as having occurred to them, thus the true maximum acculturative stress score in the data was 104. Missing stress items were scored as zero (therefore not affecting their overall sum score), as it was assumed the participant had not experienced this stressor. Descriptive statistics are provided in Table 2.

Construct Validity. The construct validity of the newly developed measure of Muslim religious coping was investigated by examining its correlates to theoretically related and unrelated measures. Correlates of Muslim Religious Coping, Religiosity, and COPE subscales are presented in Table 3.

Convergent and Discriminant Validity.

Religious Measures. As expected, all three Muslim Religious Coping (MRC) subscales moderately correlated with Religiosity, as measured by degree of identification with Islam, perceived importance of Islam, and involvement in regular devotional practices (Cognitive $r = 0.403$, $p < 0.01$; Behavioural $r = 0.515$, $p < 0.01$; Social $r = 0.458$, $p < 0.01$), indicating that religious coping strategies will be utilised more by religious individuals. Moderate correlations of 0.4 - 0.5 indicate that these variables demonstrate sufficient discriminant validity from a standard measure of Religiosity (Watson et al., 1995).

Additionally, as expected, all three MRC subscales were positively correlated at moderate-to-strong levels with Carver et al.'s (1989) "Turning to Religion" subscale. Some interesting differences emerged, however, with the Cognitive and Behavioural MRC subscales correlating strongly with Carver et al.'s (1989) scale (Cognitive $r = 0.712$, $p < 0.001$; Behavioural $r = 0.793$, $p < 0.001$), suggesting strong convergent validity. In contrast, the Social MRC scale had a weak-moderate correlation with Carver et al.'s (1989) scale ($r = 0.245$, $p < 0.01$), suggesting that the Social MRC scale taps a slightly different construct that may not be captured in many existing studies of religious coping.

Due to the high correlations between the Cognitive and Behavioural MRC subscales and Carver et al.'s (1989) "Turning to Religion" subscale, it is pertinent to

ascertain the discriminant validity of these constructs. Clearly, these items are tapping into very similar constructs, however previous studies have found that conceptually separate, but related, constructs can have correlations of 0.7 and above (Watson et al., 1995). An analysis of incremental validity is presented in the next section, which explored the predictive value of the Muslim Religious Coping scale on wellbeing measures, providing further evidence to differentiate this scale from pre-existing measures of Religious Coping.

***Coping measures*.** The hypotheses that various COPE subscales included in the study would positive correlate with our Muslim Religious Coping scale were generally supported. Table 3 demonstrates the relationships between MRC and COPE subscales.

Specifically, it was expected that Behavioural MRC would have moderate, positive correlations with Active and Planning coping. This hypothesis was partially supported, with weak-to-moderate correlations existing between variables (Active Coping and Behavioural MRC: $r = 0.267$, $p < 0.001$; Planning Coping and Behavioural MRC: $r = 0.283$, $p < 0.001$). Interestingly, similar correlations were found between these COPE subscales and Cognitive MRC (Cognitive MRC and Active Coping: $r = 0.342$, $p < 0.001$; Cognitive MRC and Planning: $r = 0.301$, $p < 0.01$). This indicates there is some overlap between approach coping strategies and religious coping amongst Muslims.

It was further hypothesised that Acceptance coping, and Positive Reframing and Growth, would moderately correlate with Cognitive MRC. This hypothesis was supported (Acceptance Coping and Cognitive MRC: $r = 0.333$, $p < 0.01$; Positive Reframing and Growth coping and Cognitive MRC: $r = 0.479$, $p < 0.01$). This

relationship was strongest for Cognitive MRC and Positive Reframing and Growth, suggesting that positive reframing in times of distress is moderately linked to the application of religious meaning and the opportunity for spiritual growth for religious Muslims.

Finally, it was hypothesised that Social MRC would be positively correlated with Carver et al.'s (1989) measures of Emotional and Instrumental Social Support at moderate levels. This was partially supported, with weak-moderate correlations between variables (Emotional Social support coping $r = 0.225$, $p < 0.01$; Instrumental Social Support $r = 0.281$, $p < 0.01$), suggesting this scale is related to traditional measures of social support, but is examining something conceptually distinct.

Incremental Validity. The incremental validity of the Muslim Religious Coping measure on wellbeing outcomes was determined via hierarchical regression. Separate analyses were conducted for Life Satisfaction and Psychological Symptoms. For both analyses, the same following procedure was conducted.

A Full COPE scale[2] was generated by taking the mean of six COPE subscales: Active, Planning, Positive Reframing and Growth, Acceptance, Emotional Social Support, and Instrumental Social Support (for psychometric properties of the Full COPE scale, see Table 2), and entered at the first step of the analysis. At the second step, Carver et al.'s (1989) "Turning to Religion" subscale was entered. Finally, a Full MRC scale was generated by taking the mean of all MRC items[3] (see Table 2), and

[2] None of the individual COPE subscales were significantly correlated with either wellbeing measure. Individual correlation coefficients ranged from ($r = 0.087$ to $r = -0.050$).

[3] When each MRC subscale was entered into a separate model at Step 3, Behavioural MRC ($\beta = 0.269$, $p < 0.05$; $\Delta R^2 = 0.027$, $F(1,163) = 4.583$, $p < 0.05$) and Social MRC ($\beta = 0.204$, $p < 0.05$; $\Delta R^2 = 0.039$, $F(1,163) = 6.742$, $p < 0.05$) predicted greater Life Satisfaction above COPE scales. However, when MRC

entered in the third step of the hierarchical regression. Combination scales were used in order to manage the high covariance between various coping subscales, in particular the Cognitive and Behavioural MRC scales.

The regression was conducted in order to determine whether Muslim Religious Coping predicted variance on wellbeing measures above and beyond regular coping methods, thus demonstrating the unique efficacy of religious coping. Carver et al.'s (1989) Turning to Religion subscale was included in the analysis to provide support for the discriminant validity between this scale and the newly constructed scale of Muslim Religious Coping, by determining whether the latter influenced wellbeing in a unique way. This was of interest due to the strong bivariate correlation between Carver's Turning to Religion scale, and Cognitive and Behavioural MRC.

The results of the hierarchical regression of coping subscales on Life Satisfaction are presented in Table 4. At the first step of the analysis, non-religious coping strategies failed to significantly predict Life Satisfaction. At step 2, Carver's Coping through Religion scale was marginally significant (β = 0.151; t = 1.732, p = 0.085), trending towards an increase in Life Satisfaction when engaging in greater use of religious coping. In support of our hypothesis, Muslim Religious Coping predicted unique variance on Life Satisfaction at step 3 of the analysis (β = 0.304; t = 2.631, $p < 0.01$), predicting a total of 5.8% of the variance in Life Satisfaction (ΔR^2 = 0.040, $F(1,163) = 6.923$, $p < 0.01$). Greater engagement in Muslim Religious Coping methods predicted increased Life Satisfaction. This indicates that, not only is religious coping efficacious in a religious Muslim population, but that the current

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subscales were entered simultaneously in the model, this effect was suppressed due to high collinearity.

scale captures this relationship in a way that Carver's 4-item Turning to Religion scale does not.

The results of the hierarchical regression of coping subscales on Psychological Symptoms are presented in Table 5. Contrary to hypotheses, no coping measure significantly predicted psychological symptoms at any step of the analysis. Both non-religious coping and religious coping strategies failed to influence the degree of psychological symptoms experienced by participants in this study.

Theory-testing: Acculturative Stress, Religious Coping and Wellbeing

Correlates of stress and coping. In order to examine the association between acculturative stress, religious coping and wellbeing, bivariate correlations were examined (see Table 6). Acculturative stress was associated with poor wellbeing outcomes, correlating positively with psychological symptoms ($r = 0.375$, $p < 0.01$), and negatively with Life Satisfaction ($r = -0.171$, $p < 0.05$) indicating that the greater the stressors, the more psychological symptoms were experienced, and the lower one's life satisfaction.

Only Cognitive MRC was positively associated with Stress ($r = 0.243$, $p < 0.01$), indicating that the more acculturative stress experienced, the more one is likely to engage in cognitive religious coping strategies. There was no direct relationship between Stress and either Social or Behavioural MRC, suggesting that these religious coping methods are either not contingent on the degree of perceived stress, or are explained by a more complex relationship than can be determined via zero-order correlation. This is explored in more detail in the following section via hierarchical regression.

Muslim Religious Coping was associated with greater wellbeing, with all three MRC subscales significantly and positively related to Life Satisfaction (Cognitive r = 0.158, $p < 0.05$; Behavioural r = 0.200, $p < 0.01$; Social r = 0.218, $p < 0.01$). However, no MRC subscales were associated with psychological symptoms (Cognitive r = 0.078, *ns*; Behavioural r = 0.029, *ns*; Social r = -0.032, *ns*).

Predicting Psychological Wellbeing. Hierarchical regression analyses were conducted to examine the ability of Acculturative Stress and Muslim Religious Coping to predict wellbeing outcomes (Life Satisfaction and Psychological Symptoms), after controlling for age, education level, English proficiency and generational status. To avoid problems of multicollinearity between MRC subscales, separate regression analyses were performed for each individual dimension of Muslim Religious Coping.

***Acculturative Stress and Muslim Religious Coping as Predictors of Life Satisfaction*.** Table 7 depicts the hierarchical regression of Acculturative Stress with each of the three dimensions of Muslim Religious Coping on Life Satisfaction.

For each analysis, the demographic variables of age, education, English proficiency and generation status were entered at Step 1 to control for their possible influence at later stages of the analysis. None of these variables emerged as significant predictors of Life Satisfaction at the first two levels of analysis. Age emerged as a significant predictor of Life Satisfaction when Social MRC was added into the model, with increased age associated with increased Life Satisfaction (β = 0.174, t = 2.084, $p < 0.05$).

At Step 2, Acculturative Stress was entered into the analysis, emerging as a significant predictor (β = -0.217, t = -2.542, $p < 0.05$), and explaining a total of 7.8%

of the variance (ΔR^2 = 0.042, F(1,141) = 6.464, p < 0.05) in Life Satisfaction. Experiencing greater Acculturative Stress predicted lower Life Satisfaction.

Cognitive MRC, Acculturative Stress and Life Satisfaction. Cognitive MRC was added at Step 3 of the first regression analysis, explaining a total of 11.1% the variance on Life Satisfaction (ΔR^2 = 0.034, F(1,140) = 5.287, p < 0.05). Greater engagement in Cognitive Religious coping methods (β = 0.203, t = 2.299, p < 0.05) predicted greater Life Satisfaction.

At Step 4, an interaction variable of Acculturative Stress and Cognitive MRC was entered into the analysis, however this failed to predict unique variance on Life Satisfaction (ΔR^2 = 0.003, F(1,139) = 0.393, *ns*).

This model indicates that both Acculturative Stress and Cognitive MRC independently predict Life Satisfaction, supporting our main effect hypothesis. The greater Acculturative Stress experienced by an individual, the poorer their life satisfaction. Conversely, the more one engages in Cognitive Muslim Religious Coping, the greater their satisfaction with life.

Behavioural MRC, Acculturative Stress and Life Satisfaction. Behavioural MRC (β = 0.189, t = 2.188, p < 0.05) was added at Step 3 of the second regression analysis, explaining a total of 10.8% of the variance in Life Satisfaction (ΔR^2 = 0.031, F(1,140) = 4.788, p < 0.05). Greater engagement in Behavioural Religious coping methods predicted greater Life Satisfaction.

At Step 4 of the analysis, a significant interaction emerged between Acculturative Stress and Behavioural MRC (β=0.789, t=2.302, p<0.05), explaining a total of 14.1% of the variance in Life Satisfaction (ΔR^2 = 0.033, F(1,139) = 5.301, p < 0.05).

This significant interaction was graphed with Modgraph (Jose, 2013), a computer software programme designed to aid the interpretation of significant interactions in regression analyses. This programme provides an interaction plot, as well as computing the simple slopes to determine if they differ from 0. The Modgraph plot of Acculturative Stress x Behavioural MRC (see Figure 2) revealed no association between Stress and Life Satisfaction under conditions of high Behavioural MRC (High slope = -0.003, $t(144) = -0.839$, *ns*). Participants who engaged in medium or low levels of Behavioural MRC, however, experienced diminished Life Satisfaction under higher levels of Acculturative stress (Medium slope = -0.010, $t(144) = -3.842$, $p < 0.01$; Low slope = -0.018, $t(144) = -3.802$, $p < 0.01$). These results indicate that engaging in Behavioural Muslim Religious Coping methods (e.g. praying, reading the Qur'an, supplicating to God) at high levels buffers the negative effects of Acculturative Stress on Life Satisfaction. This finding provides support for the Buffering Hypothesis of religious coping on the stress-wellbeing relationship.

Social MRC, Acculturative Stress and Life Satisfaction. Social Muslim Religious Coping was added at Step 3 of the third regression analysis, explaining a total of 15.6% of the variance in Life Satisfaction ($\Delta R^2 = 0.078$, $F(1,140) = 12.982$, $p < 0.01$). Greater engagement in Social Religious coping methods ($\beta = 0.298$, $t = 3.60$, $p < 0.01$) predicted greater Life Satisfaction.

At Step 4, an interaction variable of Acculturative Stress and Social MRC was entered into the analysis, however this failed to predict unique variance on Life Satisfaction ($\Delta R^2 = 0.019$, $F(1,139) = 3.207$, *ns*).

This model indicates that both Acculturative Stress and Social MRC independently predict Life Satisfaction. The greater Acculturative Stress experienced

by an individual, the poorer their life satisfaction. Conversely, the more one engages in Social Muslim Religious Coping, the greater their satisfaction with life, supporting the main effect hypothesis that religious coping and acculturative stress will independently influence Life Satisfaction.

Acculturative Stress and Muslim Religious Coping as Predictors of Psychological Symptoms. Table 8 depicts the hierarchical regression of Acculturative Stress with each of the three dimensions of Muslim Religious Coping on Psychological Symptoms.

Demographic variables of age, generation status, English proficiency and education level were included at Step 1 of the analysis, but failed to predict Psychological symptoms ($\Delta R^2 = 0.044$, $F(4,142) = 1.636$, *ns*).

At Step 2, Acculturative Stress significantly predicted increased Psychological Symptoms ($\beta = 0.372$, $t = -4.583$, $p < 0.001$), accounting for 16.8% of the variance ($\Delta R^2 = 0.124$, $F(1,141) = 21.00$, $p < 0.001$). Consistent with our hypothesis, higher rates of Acculturative Stress predicted increased Psychological Symptoms of distress.

Cognitive, Behavioural and Social MRC were entered into separate regression analyses at Step 3, but all three subscales failed to independently predict Psychological Symptoms when controlling for demographic variables and Acculturative Stress (Cognitive MRC $\beta = -0.053$, $t = -0.619$, *ns*; Behavioural MRC $\beta = -0.049$, $t = -0.583$, *ns*; Social MRC $\beta = -0.130$, $t = -1.595$, *ns*).

At Step 4 of the regression analysis, interaction variables were computed to examine whether dimensions of Muslim Religious Coping moderated the negative effect of Acculturative Stress on Psychological Symptoms. Contrary to our hypothesis, all MRC subscales failed to moderate this relationship (Cognitive MRC x

Acculturative Stress *β* = -0.114, *t* = 0.262, *ns*; Behavioural MRC x Acculturative Stress *β* = -0.116, *t* = -0.344, *ns*; Social MRC x Acculturative Stress *β*=-0.421, *t*=-1.949, *ns*).

These findings indicate that Acculturative Stress is a significant predictor of increased psychological symptoms, yet no dimension of Muslim Religious Coping exerts an independent influence on psychological symptoms, nor do they function as moderators.

CHAPTER FOUR: Discussion

This study aimed to investigate the interrelationships between acculturative stress, religious coping and wellbeing amongst New Zealand Muslims. Muslims living as minorities in the West are experiencing unique stressors associated with acculturation, including religious discrimination and barriers to integration. Very few studies have examined the nature of religious coping amongst a Muslim population, with even less exploring its use and effectiveness within the context of acculturation. The results of this research will be important in understanding the role of religion as a resource for Muslims facing adversity.

Psychometric hypotheses pertaining to the construct and incremental validity of a newly-developed measure of Muslim Religious Coping (MRC) were mostly supported. The scale comprised of three dimensions, labelled Cognitive, Behavioural and Social MRC. Subscales demonstrated positive correlations with other measures or religiosity and general measures of coping. Incremental validity was demonstrated fin the prediction of Life Satisfaction above general coping measures. However, no measure of coping (neither religious nor non-religious) predicted Psychological Symptoms.

Theoretical hypotheses regarding the interrelationships between acculturative stress, religious coping, and wellbeing were partially supported. As predicted, Acculturative Stress predicted lower Life Satisfaction and greater Psychological Symptoms. Muslim Religious Coping predicted greater Life Satisfaction; however, it failed to predict Psychological Symptoms. Additionally, Behavioural MRC emerged as a significant moderator of the relationship between Acculturative Stress

and Life Satisfaction, acting as a buffer on the negative impact of stress on this wellbeing measure. Contrary to hypotheses, no dimension of Muslim Religious Coping moderated the relationship between Acculturative Stress and Psychological Symptoms.

The Nature of Muslim Religious Coping

The current measure of Muslim Religious Coping was comprised of three distinct dimensions: Cognitive, Behavioural and Social Religious Coping. Cognitive Religious Coping reflected both a reappraisal of difficulties in the context of Divine Will, as well as an internal response such as asking for God's forgiveness, expressing gratitude for God's blessings, and seeking patience. This dimension reflects the theological position in Islam of Muslims as active agents in their relationship with God, formulating a necessary internal response to their current state. Similarly, Islam emphasises an external contribution to faith by way of religious practices, which is captured in a second dimension of Behavioural Religious Coping. This dimension reflected physical acts of worship as a means of managing stress, including recitation of the Quran and engagement in the three forms of prayer common to Muslim worshippers: *Salat*, ritualised prayer; *dua*, supplications to God; and *dhikr*, a mantra of God's remembrance. Throughout the Quran, many passages describe the qualities obtained through the engagement of religious practices, including *taqwa* (Awareness of God and Divine protection), and *Sabr* (patience), therefore these acts are likely to be considered valid and important responses to stress for the religious Muslim (Gade, 2010). The final dimension, Social Religious Coping, related to engagement from religious congregation for the purposes of social and emotional support,

religious education, and volunteering. Again, the social aspects of Islam are heavily emphasised, taken from the tradition of Prophet Muhammad as an establisher of a cohesive community who placed great emphasis on the necessity of *suhba* (companionship) in strengthening faith and mental stability (Keller, 2011).

A strong interrelationship between cognitive and behavioural dimensions of religious coping here suggests a strong connection between internal and external religiosity. The use of cognitive coping strategies, such as seeking patience or reframing events as a test from God, was strongly predictive of engaging in religious practices as a means of coping. This is likely to reflect the emphasis in Islamic theology on balancing and perfecting both the inner and outer self, as both are deemed necessary on the path to God (Al-Haddad, 2003).

Further, both dimensions were only moderately related to Social religious coping. This difference may point to a distinction between the intrapersonal – in this case, one's private relationship with God – and the interpersonal – one's relationship with fellow Muslims. While both cognitive and behavioural religious coping operate via an individual's internal connection to the Divine, seeking support from other people may be a more complex process. A different skillset is required in order to participate in community life, including some measure of social aptitude, mobility, and a willingness to engage. Additionally, some may not see the community as a source of safety or comfort, or are met with barriers to accessing their religious community. Tix and Frazier (1998) found a difference in the way religious coping was used by participants, depending on whether the stressor was perceived as controllable or uncontrollable. Similarly, it may be that seeking support from fellow Muslims is more appropriate for certain types of stressors, such as controllable or

shared distress. Cognitive and behavioural methods, on the other hand, may be more readily available to the individual in response to private distress, or stressors perceived as uncontrollable. Further research is needed to clarify the nature of these differences.

The validity of the MRC scale was determined by examining its relationships with existing measures of religiosity and coping. Increased religiosity was associated with greater use of religious coping, reflecting previous findings that demonstrate a link between perceived importance of religion, engagement in religion, and the turning to religion in times of distress (Krägeloh et al., 2012; Pargament et al., 2001).

Moderate positive interrelationships between Cognitive and Behavioural MRC and approach coping strategies indicated that religious coping methods were regarded by participants as influential in active problem solving. Religious coping may be seen as a way of influencing one's source of stress through seeking divine intervention, or trusting that a solution will present itself when imploring God's guidance. Additionally, moderate-strong relationships between internal/reappraisal coping strategies and Cognitive MRC suggested that for religious Muslims, healthy cognitive reappraisal techniques may often incorporate a religious perspective.

Social MRC was positively correlated with both Instrumental and Emotional Social Support; however, the weak-moderate correlations were lower than expected. The strong inter-correlation between Instrumental and Emotional Social Support, as measured by the COPE (Carver et al., 1989) suggests that these subscales adequately capture a construct of generalised social support-seeking. Accessing religious social support, through seeking love and concern from other community members and participating in community activities, is demonstrated here as

conceptually distinct. It is likely that overlap exists between the people who are sought out in times of crisis (e.g. family and close friends, who may also be Muslims), yet deliberately accessing one's religious community as a means of coping appears to be distinct from conventional social support seeking.

Measures of religious coping have not previously explored coping strategies along these dimensions. Pargament's (1997) scales draw a dichotomy between "Positive" and "Negative" religious coping, focusing on the nature of one's portrayal of God as either Benevolent (Positive Religious Coping) or Punishing (Negative Religious Coping). The current measure steers away from this exclusively cognitive paradigm, by recognising that one's internal relationship with God is but one facet of the role of religion in a Muslim's life (Al-Haddad, 2003).

Boudreaux et al.'s (1995) Ways of Religious Coping Scale (WORCS), on the other hand, recognised inner and outer dimensions of religious coping by dividing items along two factors: Internal/Private, and External/Social. This scale focuses less on the appraisal of events, and more on internal and external responses to stressors. Their Internal dimension captures a private relationship with God, achieved through prayer, confession, and forgiveness-seeking. Alternatively, the External dimension is primarily social in nature, capturing active help-seeking through interpersonal engagement. The structure of the Internal/Private dimension is similar to our findings of a conceptual overlap between Cognitive and Behavioural MRC; however, these two dimensions emerged as distinct amongst a Muslim population.

The presence of a third factor distinguishing Islamic behaviours as separate from external/social religious coping and internal/cognitive coping may indicate a differing approach to religiousness and religious practice in Islam that is not captured

in models based on Christianity (Abu Raiya et al., 2008a; Dover, Miner, & Dawson, 2007). This difference is reflected in the construction of the Pakistani Religious Coping scale (Khan & Watson, 2006), where the addition of a 'Pakistani Coping Practices' subscale was required to capture the totality of a religious coping construct amongst a Muslim population. The current research supports earlier explorations into an Islamic paradigm as distinct from Western-based models.

Predicting Psychological Wellbeing

In addition to exploring the nature of Muslim Religious Coping amongst a diverse minority population, its ability to influence wellbeing outcomes was of primary interest in this study.

Muslim Religious Coping was found to predict enhanced Life Satisfaction above and beyond conventional coping strategies, however, failed to predict Psychological Symptoms. Interestingly, and in contrast to previous literature, the study did not find a relationship between conventional coping strategies and wellbeing outcomes. Previous studies point towards a main effect of adaptive coping strategies (Ensel & Lin, 1991; Folkman & Moscowitz, 2004); however, this finding was not replicated here. In the case of predicting the presence of Psychological Symptoms, both religious and non-religious coping strategies failing to significantly predict this outcome variable suggests that negative indicators of distress are not attenuated by the engagement of coping strategies measured in this study.

In contrast, the finding that no other measure of coping apart from our Muslim Religious Coping scale significantly predicted Life Satisfaction suggests that religious coping was the *key* strategy in enhancing positive indicators of wellbeing.

This is consistent with the findings of Pargament et al. (1990), who demonstrated the effectiveness of religious coping across a large Christian American sample, with religious coping predicting positive outcomes above and beyond traditional coping strategies. Koenig, George, and Siegler (1988) surveyed a cross-section of older adults to elicit all the coping strategies they had utilised in response to their life's most stressful experiences. Only those coping strategies spontaneously supplied by participants were coded, and of these, religious coping behaviours emerged as the most frequently cited method of coping. These findings suggest that, for religious individuals, religion is not only recognised as a key strategy in managing life's adversity, but that it can be a uniquely powerful contributor towards wellbeing.

Complementing these findings, it was also found that Muslim Religious Coping independently predicted Life Satisfaction, when controlling for demographic variables (age, generation status, English proficiency and education level) and Acculturative Stress. In line with hypotheses, Acculturative Stress also exerted a negative influence on Life Satisfaction. Further, one significant moderation was found between Behavioural MRC and Acculturative Stress in predicting Life Satisfaction. Behavioural MRC was found to buffer the negative effects of stress on Life Satisfaction, rendering the relationship insignificant at high levels of Religious Coping.

Similar analyses revealed that, while Acculturative Stress significantly predicted an increase in Psychological Symptoms of Distress, Muslim Religious Coping did not predict Psychological Symptoms when controlling for demographic variables, nor did it moderate the relationship between Acculturative Stress and Psychological Symptoms.

The finding that Acculturative Stress directly predicts poorer Life Satisfaction and increased Psychological Symptoms of distress is consistent with previous research (Abbott et al., 2003; Ahmed et al., 2011; Crockett et al., 2007; Schmitt et al., 2014). These findings suggest that the acculturative experiences of Muslims in New Zealand mirrors the patterns of other ethnic minorities around the world. While different communities may be experiencing unique stressors, the link between appraised distress and poor wellbeing remains robust amongst this population.

The finding that religious coping both independently enhances Life Satisfaction, as well as moderates the stress-wellbeing relationship, provide some support for both the main effect hypothesis and the buffering hypothesis described by Ensel and Lin (1991).

Both Cognitive and Social Muslim Religious Coping independently predicted Life Satisfaction, regardless of stress. This independent effect points towards the role of religion as a protective factor in the lives of Muslims. Rather than being contingent on stress in activating religious coping, these results suggest that reflecting on religious meaning and engaging with one's community are ongoing practices that can support the wellbeing of an individual. Ensel and Lin (1991) describe such psychosocial resources as *distress-deterring*, hypothesising that their effectiveness lies in strengthening and reinforcing a person's base psychological state.

Cognitive Religious Coping may provide the believer with a religious framework they can draw upon to apply sacred meaning to their lives, which is likely to provide a sense of coherence in times of blessing as well as times of distress (Aflakseir, 2012; Pargament, 1997). While the mechanisms by which cognitive

religious coping influence wellbeing are far from understood, a number of theories have been posited. Belief systems may influence the way a specific life event is viewed and interpreted, as well as influencing the sense of control one feels over life events, or the ability to persevere and achieve solutions (Park, Cohen, & Herb, 1990). The findings here suggest that these appraisals are not contingent on stressors, suggesting that a Believer is interpreting events in the context of their religious worldview in times of blessing as well as adversity.

The finding that Social Religious Coping directly predicts Life Satisfaction is consistent with previous research, which has demonstrated public religious participation as a reliable predictor of wellbeing (Baetz, Griffin, Bowen, Koenig & Marcoux, 2004; Koenig & Larson, 2001; Reyes-Ortiz et al., 2008). Several hypotheses relating to the role of religious social involvement in wellbeing have been suggested. These include greater access to, and satisfaction in social support networks, a reinforcing of the sense of coherence derived from a religious worldview through attendance of religious services and classes, cultivating a sense of religious identity, and a shared sense of meaning and purpose (Ai, Huang, Bjorck, & Appel, 2013; Krause, 2003; Stuart, 2012). Where certain stressors are shared amongst community members, such as those associated with differences between Islamic practices and normative New Zealand lifestyles, they may elicit less distress in the individual. It may be that the presence of a community that bears a shared worldview is reinforcing for individuals experiencing a sense of alienation from the wider society. Additionally, volunteering towards humanitarian or altruistic goals, whether through a religious organisation or otherwise, has been causally linked to positive health and psychological outcomes (Piliavin & Siegl, 2007). Finally, it may also be that

instrumental support may be offered from religious congregation, through charity or counselling services (Ai et al., 2013; Cohen & Wills, 1985).

Research on the efficacious nature of general social support in influencing wellbeing supports these findings. Cohen and Wills (1985) reviewed a number of studies examining the relationship between stress, social support and wellbeing, and found evidence for both a main effect and buffering effect of social support. Buffering models tended to reflect instrumental social support, where interpersonal resources are available to an individual in responding to the needs associated with their stressful circumstances. In contrast, a main effect relationship was more attributed to one's level of integration in a supportive community network. Items relating to our Social MRC factor primarily reflected the degree that individuals were embedded within their social network; thus, the findings here reflect the broader pattern of social embeddedness directly enhancing wellbeing.

In support of the Buffering Hypothesis, it was found that Behavioural MRC moderated the relationship between Acculturative Stress and Wellbeing, such that engagement in outward religious practices buffered the negative impact of Acculturative Stress on Life Satisfaction. This finding is both intuitive and surprising. The Acculturative Stress scale developed for this research focused on three facets of stress associated with acculturation: generalised stress, cultural transition stress, and discrimination stress. Stressors relate to common challenges associated with acculturation, including family stress and ethnic/religious discrimination, as well as specific challenges associated with being Muslim in New Zealand. These include differences between normative New Zealand practices and common Islamic

practices, such as difficulty finding halal food, difficulty with New Zealand's norms of dress and gender interaction, and barriers to practising religion.

One might expect that an individual experiencing multiple barriers to maintaining their Islamic identity may be motivated to assimilate with normative New Zealand culture in order to alleviate their distress. However, it appears that the opposite is in fact adaptive for New Zealand Muslims, in that actively maintaining religious behaviours despite the challenges protects against the detrimental effect of those challenges. It may be that an increase in religious behaviours would alleviate the dissonance experienced by those who are struggling to maintain their Islamic practices in a non-Muslim country (Yousaf & Gobet, 2013).

The role of Behavioural MRC as a buffer on Life Satisfaction is also interesting when considering that experiences of ethnic and religious discrimination (as measured in the Acculturative Stress scale) may in part be due to the overtly religious aspects of an individual. Religious discrimination towards Muslims has been associated with the wearing of Muslim attire (Aroian, 2012; Ghumman & Jackson, 2010; Ghumman & Ryan, 2013; King & Ahmad, 2010; Saroglou et al., 2009), as well as other markers of religious identity such as having a 'Muslim-sounding' name, associating with Islamic organisations and engaging in religious practices (Rodriguez Mosquera et al., 2013; Sheridan, 2006). It may be intuitive to suggest that attempts to 'blend in' would result in lower incidences of discrimination and subsequent distress. While this may be true in regards to discrimination frequency (Jasperse et al., 2012), the results here suggest that an increase in Islamic practices in response to discrimination stress can be a protective factor. Jasperse et al.'s (2012) study of Muslim women in New Zealand also revealed a protective effect of Behavioural

Islamic Identity, as measured by the extent one routinely engaged in Islamic practices, in buffering the negative effects of discrimination stress on Life Satisfaction. These findings are consistent with the Islamic concept of *Taqwa* (Divine protection and awareness of God), which is understood to be attained through the engagement of religious practices and may serve as spiritual protection in times of difficulty (Al-Haddad, 2003; Jasperse, 2009).

Turning to the broader literature on acculturation, a buffering effect of Behavioural MRC in the context of acculturative stress is consistent with evidence that points towards Integration as the acculturative strategy of choice amongst minority groups in multicultural societies. This involves maintenance of one's culture of origin, alongside adoption of one's host culture, and has been linked to the best psychological and sociocultural adaptation outcomes for acculturating groups (Ward et al., 2001). In contrast to an assimilative model which may suggest that discarding one's religious markers will ease their acculturative experience, the findings here indicate the importance of religious maintenance amongst minority Muslims in enhancing their wellbeing and buffering against stress.

In contrast to the above findings, no dimension of Muslim Religious Coping emerged as predictive of Psychological Symptoms. This suggests that engaging in religious coping does not increase or alleviate symptoms of depression and anxiety. Our hypotheses regarding the relationship between religious coping and psychological symptoms were not supported.

The reason behind this finding is unclear. Previous research on the role of religion on wellbeing outcomes amongst Muslims have used various measures of subjective wellbeing, with mixed results. Abdel-Khalek (2010; 2011; Abdel-Khalek &

Eid, 2011; Abdel-Khalek & Naceur, 2007) explored the relationship between subjective wellbeing and religiosity within a broad cross-section of Muslims in the Middle East. Using primarily positive indicators of wellbeing, they found that religiosity was significantly related to a variety of wellbeing measures included in their studies; however, the strongest relationship was found between religiosity and Life Satisfaction. Moving to studies on religious coping, Gardner et al. (2011) found consistent positive relationships between religious coping and quality of life indicators amongst Muslim International Students in New Zealand. Interestingly, Aflakseir and Coleman (2011) found that the practice of religious coping (i.e., engagement in religious practices) was associated with a reduction in psychological symptoms of distress, but benevolent reappraisal (i.e., cognitive religious coping methods) bore no relationship to psychological symptoms. While these results were not replicated in this study, it does suggest that differing dimensions of Religious Coping may influence wellbeing indicators in different ways.

Evidence from previous literature has demonstrated the independence of positive and negative outcomes, with many recognised predictors of psychological wellbeing differentially predicting outcomes according to differing dimensions of subjective wellbeing (Diener, Suh, Lucas, & Smith, 1999). These findings suggest that 'wellbeing' is in fact a multi-dimensional construct (e.g. Headey, Kelley & Wearing, 1993). Consistent with this, the wellbeing measures in the current study were only modestly correlated, indicating that these positive and negative indicators of wellbeing do not exist along a bipolar continuum.

Subjective wellbeing research draws a distinction between cognitive and affective measures of wellbeing, with Life Satisfaction being regarded primarily as a

cognitive indicator, and psychological symptoms of distress capturing an affective and physiological component of wellbeing (Diener, 2000). Religious coping may primarily influence cognitive components of wellbeing, in line with the Islamic principle of *Qadr*, or Divine Will. Muslims are encouraged to seek *Ridaa* (contentment) with their *Qadr*, and frequently use the phrase "*Alhamdolillah* (Praise be to God)" to capture this sense of contentment with their current circumstances (Abdel-Khalek, 2011). The findings in this study suggest that a turning towards religion may be effective by facilitating a process of deriving *Ridaa* amongst Muslims facing adversity.

The results suggest there is no guarantee that contentment at a cognitive level will result in an immediate alleviating of affective and physical symptoms of distress. However, Diener (2000) points out that, while symptomatic measures are more sensitive to situational factors, these tend to be short-term and subject to constant fluctuation. A measure of Satisfaction with Life, however, tends to remain fairly consistent over time and is less malleable by daily hassles and mood fluctuations. Indeed, our results show a weak relationship between Acculturative Stress and Life Satisfaction, but a moderate relationship between Acculturative Stress and Psychological Symptoms. It may be that religious coping operates more as a resilience mechanism, by enhancing more stable, positive measures of wellbeing, and bolstering the psychological equilibrium of an individual. Although the short-term effects of stress are still apparent in symptoms of anxiety and somatic symptoms, the use of Religious coping appears to enhance an overall sense of satisfaction with one's life, thus potentially protecting against the long term effects of distress (Heisel & Flett, 2004).

The field of Positive Psychology argues for a need to shift from a deficit model of health, where wellbeing is primarily determined by the absence of illness, to an additive model where wellness is the focus in its own right, through the promotion of positive wellbeing (Becker & Rhynders, 2013). There is a growing recognition that simply working towards the alleviation of negative symptomatology does not constitute wellbeing, whereas individuals who rate themselves highly on measures of happiness and life satisfaction are not necessarily free from physical illness. Thus the agenda of Positive Psychologists is focused on the identification and promotion of robust predictors of positive health and wellbeing, of which religion may be a possible contributor. Sniders (2006) outlines 11 positive traits and qualities identified by Positive Psychologists as integral in achieving enhanced subjective wellbeing. Of these qualities, many are embedded in the worldview and teachings of Islam, including hope, optimism, resilience, forgiveness, and gratitude. These traits are expected to contribute towards a more developed sense of coherence and personal meaning in life, two central aspects offered by religion (Aflakseir, 2012). The results here indicate that, while Muslim Religious Coping may not be efficacious in reducing physical symptoms of distress in the short term, it may hold a pivotal role in the enhancement of quality of life.

Research Limitations and Future Directions

The research has a number of important limitations that need to be considered. Due to its exploratory nature, two scales were adapted for the purposes of measuring these relatively new concepts amongst a specific population. While religious coping scales have been around for some time, research into specifically

Muslim populations, and the development of culturally-appropriate measures required to do so, have only just begun to emerge. Similarly, the acculturative stress measure used in the current research was specifically designed for the purposes of capturing acculturative stressors unique to a Muslim population of diverse age, gender, and country of origin. A limitation to the current research is therefore the previously ?un-tested properties of an adequate measure of Muslim Religious Coping, as well as a valid measure of Acculturative Stress for Muslims in New Zealand. While this research attempted to perform some preliminary validation analyses on these scales, further research into the validity of these measures would be beneficial.

A second limitation is the nature of the sample population, which self-reported a high degree of religiosity. A New Zealand-based study indicated that degree of religiosity predicted different levels of efficacy in religious coping (Krägeloh et al., 2012), with religious coping predicting better outcomes among the more religious. The current study had a highly religious sample, therefore this may account for the efficacious nature of religious coping found in this study. Future research would need to explore a broader cross-section of the Muslim community in New Zealand, to determine the conditions under which religious coping is effective.

The cross-sectional nature of the data in the current study is a common limitation in the stress and coping literature, limiting our ability to attribute causality between stressful events, coping mechanisms and outcome variables. The current study demonstrated a clear link between the three variables of interest, providing support for the role of religious coping in promoting resilience. Longitudinal data would be valuable in documenting the nature of this relationship over time,

particularly in relation to ongoing cultural transition, or as a response to local and global incidences of Islamophobia.

Additionally, future research could look more closely at the appraisal processes involved in an acculturative stress and religious coping framework for Muslims. While this research focused on the role of religious coping as influential on wellbeing outcomes - both directly, and by intervening in the stress-wellbeing relationship – more investigation is required to explore the role of religion at times of primary and secondary appraisal of acculturative stress (Park et al., 1990). At the point of primary appraisal, future research could explore whether religiousness interacts with stressful acculturative experiences to increase stress appraisals. This would suggest that, for religious Muslims, experiences of religious and cultural threat are perceived as particularly distressing. Future research could also explore the predictors of religious coping, to determine what circumstances religion is perceived as an appropriate coping resource. More specifically, research could seek to explore whether different stressors are managed in different ways, and what processes occur in the selection and engagement of coping strategies.

In exploring the nature of the coping variables themselves, more research is needed to determine the ways in which both religious and non-religious coping strategies interact to influence wellbeing. It may be that within an Islamic paradigm, the concept of 'religious' and 'non-religious' coping may in fact be a flawed concept (Hodge & Nadir, 2008), as the holistic perspective of religion as a way of life would suggest these processes to be inseparable, with all encompassing an element of religiousness.

Theoretical Implications and Applications of the Research

The results of this study bear important implications for cross-cultural psychologists, mental health practitioners, and policy-makers alike. In predicting wellbeing, the current findings point towards religion as a valuable resource in the lives of Muslims, both on an individual as well as a collective level. Individual work with Muslims experiencing acculturative stress would benefit from the incorporation of a religious worldview in their therapeutic practice. Additionally, at a group level, the finding that religious practice enhances wellbeing bears implication for the encouragement of religious maintenance in multicultural societies. Finally, explorations into the nature and structure of Muslim Religious Coping indicate that conceptual distinctions may exist between Western and Islamic approaches, calling into question the position of Islamic research within cross-cultural psychology.

The notion that an Islamic paradigm of religious coping may not mirror previous patterns within Western literature reflects a broader argument of the need for an indigenous Islamic psychology (Abu Raiya & Pargament, 2011; Skinner, 2014). In line with previous psychological research on Islam, this study highlights the experience of Muslims as fundamentally different from common paradigms of Western Christian psychology (e.g. Abu Raiya et al., 2008a; Dover et al., 2007).

Abu Raiya and Pargament (2011) categorised 101 existing studies on Islam and mental health into four subgroups, each representing different pathways towards the development of an Islamic psychology. The more rudimentary studies used single-item measures of religiosity, or conducted comparative analyses utilising Christian-based measures. At a higher level of sophistication, researchers have attempted to develop 'bottom-up' measures of Islamic concepts in an attempt to

indigenise the research base. This has led to the identification of a number of Islamic constructs that may not be paralleled in a Judeo-Christian model, raising questions about the applicability of Western psychology for a broader Muslim population.

This represents a common tension being drawn in cross-cultural psychology between etic and emic approaches to cultural research. An etic approach focuses on the universals underlying cultural variability, whereas an emic approach views reality as embedded within culture, adopting a position of relativism in understanding cultural differences (Helfrich, 1999). Indigenous psychology advocates for a bottom-up approach that emerges from within a specific cultural context. While the merits of an emic approach lie in its ability to capture a culture's subjective reality free of Western perspectives, indigenous psychology has been criticised for its lack of scientific rigor, calling into question its place within the broader discipline. The development of an indigenous Islamic psychology will undoubtedly be faced with similar challenges, striking a balance between the wisdom derived from existing empirical research, while recognising the unique worldview offered by an Islamic paradigm.

Studies reviewed by Abu Raiya and Pargament (2011) all followed a methodology of empirical research defined by contemporary Western psychology. It has been argued, however, that even this approach is still 'translating' Western definitions of empirical research into an indigenous reality, which will necessarily maintain an artefact of colonisation (Hwang, 2005). Other scholars suggest that a truly indigenous Islamic psychology must return to the core concepts of human nature as defined by the *Qur'an* and *Sunnah*, the two foundational sources of Islamic belief (Badri, 2014; Skinner, 2014). Drawing on the works of early Islamic scholars

such as Imam Al-Ghazzali, Badri (2014) and Skinner (2014) argue that there are fundamental differences between an Islamic worldview and that of contemporary Christianity, after which much of modern Western psychology is based. Cited examples include the nature of *fitrah* as the Islamic belief that a human being is born free of sin and inclining towards good. This is in direct contrast to the notion of Original Sin, which Skinner (2014) argues underlies several Freudian principles of human nature, or the idea of humans as 'blank slates', a core understanding of Behaviourism.

Perhaps a middle ground between emic and etic approaches to the psychological study of Islam can be established. The current research offers a contribution to this establishment, taking into account accepted scientific methodology and incorporating an indigenous perspective on acculturation and religious coping amongst Muslims. What can be concluded from the results yielded here, and discussions offered by contemporary Muslim researchers, is that an indigenous Islamic psychology is not only necessary, but long overdue. The wisdoms embedded in this major world religion contributed to significant scientific advancements in Islam's early history, therefore there is every reason to expect that research derived from these principles will be a source of advancement for modern psychology.

In considering the findings that Muslim Religious Coping enhances positive wellbeing outcomes, mental health research has increasingly recognised religion and spirituality as important variables to consider in therapeutic practice (Hodge & Bushfield, 2007; Pargament, 1997; Pargament, 2011). The incorporation of spiritual and religious beliefs into a client's case conceptualisation and treatment protocol is

likely to increase engagement and enhance outcomes among religious clients accessing mental health services (Hodge, 2006; McCullough, 1999), with studies showing that many clients prefer to include their spiritual beliefs and resources into therapy (Tisdale, 2003). The movement towards 'spiritually-integrated therapy' advocates for a more holistic paradigm, acknowledging mind, body, and spirit as components of mental health. In particular, traditional cognitive therapy has been identified as a good fit for many spiritual traditions, with spiritually-modified cognitive therapy programs demonstrating efficacy with diverse religious groups and mental health presentations (Armento, 2011; Azhar, Varma, & Dharap, 1994; Hodge, 2006; McCullough, 1999).

In line with the broader literature, a review of the research on Muslim mental health has advocated for the importance of religiously integrated psychotherapy when working with Muslim clients (Abu Raiya & Pargament, 2010; Hodge & Nadir, 2008; Thomas & Ashraf, 2011). Many minority groups access mental healthcare at disproportionately low rates, yet Muslims are recognised as under-represented even relative to other ethnic and religious minorities (Cinnirella & Loewenthal, 1999; Kelly, Aridi & Bakhtiar, 1996). This may be due to a myriad of factors, including community stigma associated with mental illness, or a preference for personal/private coping strategies. However, it has been argued that a key barrier for Muslims may be in a lack of perceived 'fit' between their needs and the current services offered by healthcare providers (Abu Raiya & Pargament, 2010; Kelly et al., 1996). Contrary to this perception, Thomas and Ashraf (2011) argue that Western-based cognitive therapy is in fact a good fit for traditional Islamic thought, drawing many parallels between Islamic teachings and core concepts of cognitive therapy. Other authors

have similarly advocated for the development of an Islamically-integrated approach to cognitive therapy, in order to remedy this lack of fit and achieve culturally competent practice that will meet the needs of growing Muslim populations around the globe (Azhar et al., 1994; Hamdan, 2008; Hodge & Nadir, 2008; Wahass & Kent, 1997).

The current research supports the notion of an Islamically-based cognitive therapy as a valuable contribution to psychological practice. Previous attempts to develop Islamically-integrated interventions have focused primarily on cognitive restructuring techniques that incorporate a religious worldview (Hodge & Nadir, 2008; Thomas & Ashraf, 2011). However, the present findings suggest that the strength of an Islamic model of therapy exists more broadly than within cognitive models alone, indicating the importance of the inward, outward, and collective aspects of the faith in coping with adversity. While cognitive religious coping techniques were indeed demonstrated as efficacious in enhancing wellbeing, similar effects were also apparent for the behavioural and social components of religious coping. Thus a Cognitive-Behavioural model that integrates the mind, body, and social environment of a client with their religious paradigm is likely to enhance effectiveness of treatment. Indeed, similar health models incorporating a holistic approach to treatment have demonstrated a good fit for their target client groups, such as the *Te Whare Tapa Wha* model of Maori Mental Health (Durie, 1985), which similarly emphasises the four components of mind, body, spirit and social/family circles.

Further, the finding that religion is a valuable resource in the lives of Muslims is important not only at the individual level of psychosocial intervention, but also at a

socio-political level. In the context of an Islamophobic climate, this research provides support for a growing voice arguing for the promotion of religious maintenance and freedom of practice for members of this faith group (e.g. Jasperse et al., 2012). The results provide further evidence to the ramifications of policy changes that restrict the rights of Muslims to practice their religion. Several European countries have established legislation to ban religious attire in public places, which has focused heavily on Islamic dress in its implementation. While most Western nations that emphasise integration and multiculturalism have not yet followed suit, the detrimental effects of Anti-Terror and surveillance laws on Muslim populations across the West are beginning to emerge. While this shift in policy purports the idea that Islam is a threat, our results suggest that the healthy practice of this religion is in fact associated with positive outcomes. This study contributes to a growing body of research that points towards Islam as a source of benefit and positivity amongst its members, even where they live as minorities and amidst religious intolerance. This carries an important message towards individuals and policy makers alike, that there is still a place for the open practice of Islam in modern societies.

Conclusion

Despite the rapidly increasing Muslim population in New Zealand (Statistics New Zealand, 2013), and the increased focus on Islam worldwide, this is the first study that has looked at the interaction between acculturative stress and religious coping amongst New Zealand Muslims. Internationally, this study is important for understanding the experience of a diverse Muslim population living as a minority in the West, and for recognising the unique and influential role of religion in their lives.

In general, the findings support hypotheses that religion will serve as a resource for Muslims facing the distress associated with cultural transition and discrimination. Importantly, the three facets of religious coping measured in this study were found to play varying roles in their impact on stress and wellbeing, indicating the strength of integrating inward, outward, and collective aspects of the faith.

These results suggest that increased involvement in religion is beneficial for acculturating Muslims, despite the external threats to their religious maintenance. These findings bear implication for cross-cultural psychologists, mental health practitioners, and policy-makers alike. An argument for the need to develop a recognised Indigenous Islamic Psychology is highlighted, both for the benefit of future research as well as for the development of culturally-competent practice in clinical application. Finally, the importance of encouraging religious maintenance amongst acculturating Muslims is emphasised.

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Tables and Figures

Table 1.

The Factor Structure of Muslim Religious Coping

	1	2	3
Cognitive Religious Coping			
RC2 seeing my situation as Allah's will	**0.90**	0.17	0.04
RC4 seeking patience because Allah is with those who are patient	**0.83**	0.08	0.12
RC5 telling myself that suffering may bring me closer to Allah	**0.77**	0.08	0.02
RC13 looking for a lesson from Allah in the situation	**0.76**	0.04	0.02
RC3 seeing my suffering as purification of my sins	**0.74**	0.00	0.18
RC1 viewing my situation as a trial from Allah	**0.71**	0.05	0.10
RC15 trying to make up for my mistakes	**0.71**	0.01	0.04
RC6 trying to remember my blessings and thank Allah	**0.61**	0.17	0.16
RC16 asking for Allah's forgiveness	**0.59**	0.23	0.08
Behavioural Religious Coping			
RC8 reading certain dua	0.12	**0.91**	0.01
RC11 seeking guidance by reading Quran	0.02	**0.84**	0.07
RC7 seeking help with prayer	0.06	**0.79**	0.01
RC18 reading the Quran	0.00	**0.77**	0.08
RC12 increasing prayers to Allah	0.09	**0.75**	0.08
RC9 praying for Allah's love and mercy	0.17	**0.73**	0.08
RC10 seeking tranquillity through remembrance of Allah	0.21	**0.64**	0.05
Social Religious Coping			
RC22 attending events at the Mosque	0.02	0.05	**0.88**
RC20 attending religious classes	0.09	0.01	**0.85**
RC23 volunteering for a religious cause	0.05	0.07	**0.79**
RC21 looking for love and concern from members of Mosque	0.04	0.11	**0.74**
Deleted Items			
RC17 giving charity in the name of Allah	0.31	0.39	0.00
RC19 getting help from religious leaders	0.17	0.37	0.53
RC24 asking others to pray for me	0.08	0.45	0.41
RC14 using religious stories to seek understanding and comfort	0.30	0.45	0.18

Table 2.

Descriptives and Psychometric Properties of Subscales

		no. Items	M	SD	α
Religiosity		5	4.55	0.70	0.78
Acculturative Stress		26	33.43	21.27	0.94
Muslim Religious Coping					
	Full Scale	20	3.39	0.87	0.94
	Cognitive Religious Coping	9	3.88	0.94	0.92
	Behavioural Religious Coping	7	3.60	1.08	0.92
	Social Religious Coping	4	2.35	1.16	0.85
COPE	Full Scale (excl Religion)	24	3.15	0.82	0.94
	Active Coping	4	3.21	0.99	0.83
	Planning	4	3.30	1.00	0.83
	Emotional Social Support	4	2.75	1.09	0.87
	Instrumental Social Support	4	2.46	1.06	0.84
	Positive Reframing and Growth	4	3.63	1.01	0.83
	Acceptance Coping	4	3.52	0.92	0.72
	Coping through Religion	4	4.09	0.91	0.82
Wellbeing					
	Psychological Symptoms	15	2.66	0.85	0.93
	Life Satisfaction	5	3.52	0.86	0.84

Table 3.

Correlates of Muslim Religious Coping

	2	3	4	5	6	7	8	9	10	11
1. Cognitive MRC	.728**	.335**	.403**	.342**	.301**	.126	.271**	.479**	.333**	.712**
2. Behavioural MRC	1	.366**	.515**	.267**	.283**	.205**	.328**	.286**	.230**	.793**
3. Social MRC		1	.458**	.066	.078	.225**	.281**	.100	.025	.245**
4. Religiosity			1	-.018	.003	.008	.000	.000	-.074	.442**
5. COPE Active				1	.838**	.531**	.655**	.689**	.572**	.400**
6. COPE Planning					1	.560**	.622**	.708**	.625**	.395**
7. COPE Emotional Social Support						1	.749**	.404**	.351**	.302**
8. COPE Instrumental Social Support							1	.470**	.419**	.377**
9. COPE Growth								1	.621**	.423**
10. COPE Acceptance									1	.331**
11. COPE Religion										1

* $p < 0.05$; ** $p < 0.01$

Table 4.

Incremental Validity of Muslim Religious Coping on Life Satisfaction

	1	2	3
1. Full COPE	0.01	-0.058	-0.078
2. COPE Religion		0.151‡	-0.069
3. Muslim Religious Coping			0.304**
R^2	0.000	0.018	0.058**
R^2 change	0.000	0.018	0.040**

‡ $p < .09$; * $p < 0.05$; ** $p < 0.01$

Table 5.

Incremental Validity of Muslim Religious Coping on Psychological Symptoms

	1	2	3
1. Full COPE	0.014	-0.031	-0.028
2. COPE Religion		0.100	0.136
3. Muslim Religious Coping			-0.050
R^2	0.000	0.008	0.009
R^2 change	0.000	0.008	0.001

* $p < 0.05$; ** $p < 0.01$

Table 6.

Bivariate Correlations between Subscales

	2	3	4	5	6
1. Cognitive MRC	0.728**	0.335**	.078	.158*	.243**
2. Behavioural MRC	1	0.366**	.029	0.200*	.132
3. Social MRC	-	1	-.032	.218**	.133
4. Psychological Symptoms	-	-	1	-.383**	.375**
5. Life Satisfaction	-	-	-	1	-.171*
6. Acculturative Stress					1

* $p < 0.05$; ** $p < 0.01$

Table 7.

Hierarchical Regression Model: Acculturative Stress and Muslim Religious Coping on Life Satisfaction

			Cognitive MRC		Behavioural MRC		Social MRC	
	1	2	3	4	3	4	3	4
1. Demographics								
Age	0.142	0.155	0.162	0.158	0.140	0.115	0.174*	0.184*
Generation Status	-0.031	-0.087	-0.039	-0.044	-0.039	-0.039	-0.082	-0.084
Education Level	0.067	0.027	0.029	0.027	0.048	0.029	-0.018	-0.027
English Proficiency	0.070	0.042	0.079	0.079	0.079	0.082	0.123	0.128
2. Stress								
Acculturative Stress		-0.217**	-0.260**	-0.508	-0.228**	-0.890**	-0.249**	-0.528**
3. Muslim Religious Coping								
Cognitive MRC			0.203*	0.130				
Behavioural MRC					0.189*	-0.096		
Social MRC							0.298**	0.091
4. Interaction								
Stress x Cognitive MRC				0.282				
Stress x Behavioural MRC						0.789*		
Stress x Social MRC								0.394
R^2	0.035	0.078*	0.111*	0.114	0.108*	0.141*	0.156**	0.175
R^2 change	0.035	0.042*	0.034*	0.003	0.031*	0.033*	0.078**	0.019

* $p < 0.05$; ** $p < 0.01$

Table 8.

Hierarchical Regression Model: Acculturative Stress and Muslim Religious Coping on Psychological Symptoms

			Cognitive MRC		Behavioural MRC		Social MRC	
	1	2	3	4	3	4	3	4
1. Demographics								
Age	-0.099	-0.122	-0.124	-0.126	-0.118	-0.115	-0.130	-0.141
Generation Status	-0.118	-0.022	-0.034	-0.036	-0.034	-0.034	-0.024	-0.022
Education Level	-0.062	0.006	0.006	0.005	0.001	0.004	0.026	0.035
English Proficiency	-0.144	-0.096	-0.106	-0.106	-0.106	-0.106	-0.132	-0.137
2. Stress								
Acculturative Stress		0.372**	0.383**	0.282	0.375**	0.472	0.386**	0.684**
3. Muslim Religious Coping								
Cognitive MRC			-0.053	-0.082				
Behavioural MRC					-0.049	0.007		
Social MRC							-0.130	0.087
4. Interaction								
Stress x Cognitive MRC				0.114				
Stress x Behavioural MRC						-0.116		
Stress x Social MRC								-0.421
R^2	0.044	0.168**	0.170	0.171	0.170	0.171	0.183	0.205
R^2 change	0.044	0.124**	0.002	0.000	0.002	0.001	0.015	0.022

* $p < 0.05$; ** $p < 0.01$

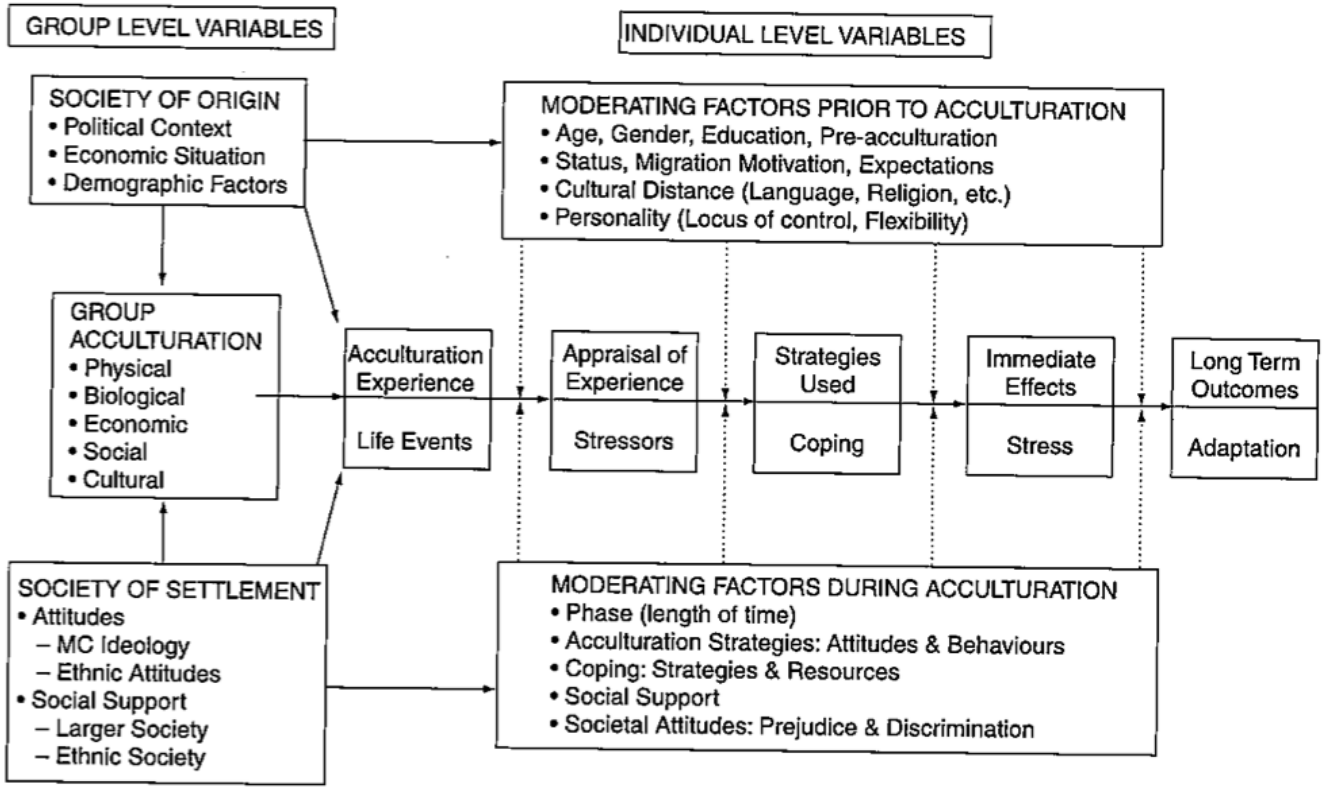

Figure 1. Stress and Coping Model of Acculturation (Berry, 1997).

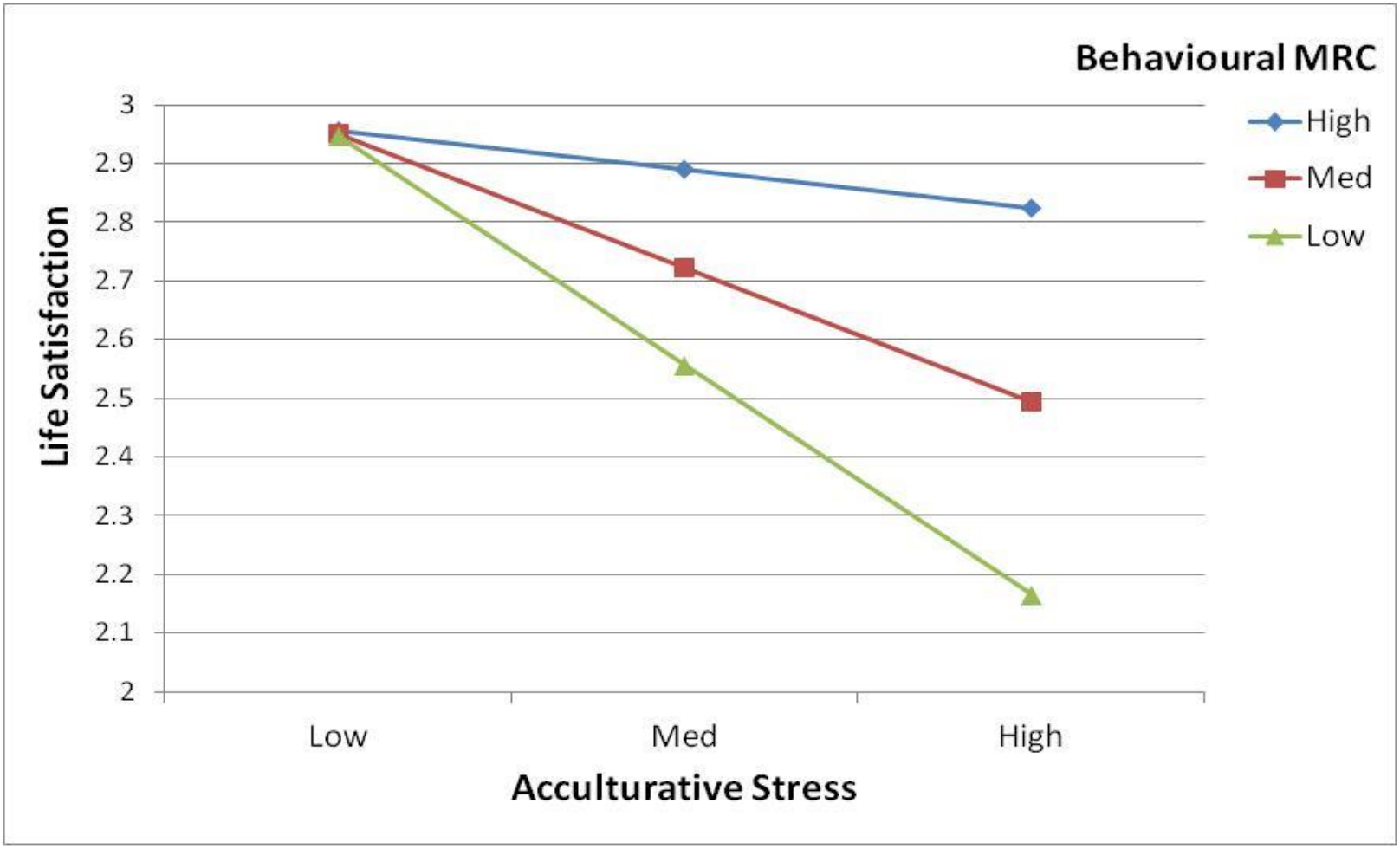

Figure 2. Acculturative Stress x Behavioural Muslim Religious Coping on Life Satisfaction

Appendix A: Questionnaire

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

SECTION I.

This section asks you about your background. Remember, this survey is ANONYMOUS, so please do not write your name anywhere.

1. **Age:** _____ years

2. **Gender**
   - ❒ Male
   - ❒ Female

3. **Are you a NZ citizen?**
   - ❒ Yes
   - ❒ No
   - ❒ Don´t know

4. **Marital status**
   - ❒ Never married
   - ❒ Married
   - ❒ Previously married

5. **Employment**
   - ❒ Employed (Full Time/Part Time) – current occupation: _____
   - ❒ Student
   - ❒ Unemployed
   - ❒ Other _____

6. **What is your highest level of education?**
   - ❒ High School
   - ❒ Certificate
   - ❒ Diploma
   - ❒ Bachelor's Degree
   - ❒ Postgraduate Diploma or Certificate
   - ❒ Master's or Doctorate
   - ❒ Other _____

7. In what country were you born?

- ❒ New Zealand
- ❒ Other country? _____

8. If born in another country, how long have you lived in NZ? __ years, __ months

9. What city in NZ do you live in? _____

10. What is your ethnic background? _____

11. How would you rate your English Proficiency?	Very Poor	Poor	Average	Good	Very Good
	1	2	3	4	5

12. What is your religion?

- ❒ Islam
  - ❒ Sunni
  - ❒ Shia
  - ❒ Other _____
- ❒ No religion
- ❒ Other (please specify): _____

13. Did you convert to Islam?

- ❒ Yes
- ❒ No

14. If yes, how many years have you been Muslim? _____

	Not at all	A little	Somewhat	Quite	Very
15. How important is Islam to you?	1	2	3	4	5
16. How strongly do you identify as a Muslim?	1	2	3	4	5

	Never	Not very often	Sometimes	Often	Very Often
17. How often do you attend Islamic gatherings? (This means gatherings for a religious purpose, do not include social gatherings with Muslim friends and family)	1	2	3	4	5

		Never	Not very often	Sometimes	Most of the time	Always
18. How often do you pray the *fard* (obligatory) prayers?		1	2	3	4	5
19. How often do you wear Hijab in public?	N/A ❒	1	2	3	4	5

SECTION II.

Below is a list of different things that can happen to anyone. If one of these things has happened to you **in the last three months**, tick the "happened to me" box next to the item. Go through all of the items marking whether they happened to you or not. Then go back, and for each event that you marked "happened to me", indicate how much distress it has caused you by circling a number from 1-5 beside the item.

		How did it make you feel?				
	Happened to me	**Not at all distressed**	**A little distressed**	**Somewhat distressed**	**Quite distressed**	**Very distressed**
1. Problems in or loss of a close relationship.	❒	1	2	3	4	5
2. Worried about a close friend or family member.	❒	1	2	3	4	5
3. Been separated from friends and family.	❒	1	2	3	4	5
4. Experienced conflict with family members.	❒	1	2	3	4	5
5. Performed below expectations at work or school.	❒	1	2	3	4	5
6. Felt time pressure from too many demands.	❒	1	2	3	4	5
7. Was in a situation where I did not know what to do.	❒	1	2	3	4	5
8. Did not have enough money to meet my expenses.	❒	1	2	3	4	5
9. Experienced accident or illness.	❒	1	2	3	4	5

		How did it make you feel?				
	Happened to me	Not at all distressed	A little distressed	Somewhat distressed	Quite distressed	Very distressed
10. Experienced a cultural misunderstanding with someone.	❒	1	2	3	4	5
11. Had difficulty finding Halal food.	❒	1	2	3	4	5
12. Felt discomfort with the type of clothes worn in NZ.	❒	1	2	3	4	5
13. Felt discomfort with how close/friendly unmarried men and women are.	❒	1	2	3	4	5
14. Felt discomfort participating in social activities with New Zealanders.	❒	1	2	3	4	5
15. Had difficulty making friends with people from my Faith/Ethnic group.	❒	1	2	3	4	5
16. Had difficulty making friends with people outside my Faith/Ethnic group.	❒	1	2	3	4	5
17. Experienced difficulty practicing my religion.	❒	1	2	3	4	5
18. Had difficulty dressing modestly in public.	❒	1	2	3	4	5
19. Felt different to the people around me.	❒	1	2	3	4	5

Please indicate if the following has happened to you in the last three months **because of your religion or ethnicity**, and how it made you feel.

		How did it make you feel?				
	Happened to me	**Not at all distressed**	**A little distressed**	**Somewhat distressed**	**Quite distressed**	**Very distressed**
20. I was treated rudely or with disrespect.	❒	1	2	3	4	5
21. I received poorer service than other people at a restaurant or store.	❒	1	2	3	4	5
22. People acted as though they were afraid or suspicious of me.	❒	1	2	3	4	5
23. I was treated unfairly.	❒	1	2	3	4	5
24. I was called names or insulted.	❒	1	2	3	4	5
25. I was threatened or harassed.	❒	1	2	3	4	5
26. I was excluded or ignored.	❒	1	2	3	4	5

SECTION III.

On the previous page, you indicated some events and experiences that have recently caused distress in your life. This section asks you **what you have been doing** to help you deal with these difficulties.

Read each statement and indicate whether you have been engaging in these behaviours or thoughts in the last three months ***to deal with your feelings of distress***.

Don't answer on the basis of what worked or not, just whether or not you have been doing it, and how often.

	Not at all	A little bit	Some-what	Quite a bit	A lot
1. I've been trying to grow as a person as a result of these experiences.	1	2	3	4	5
2. I've been trying to get advice from someone about what to do.	1	2	3	4	5
3. I've been concentrating my efforts on doing something about my problems.	1	2	3	4	5
4. I've been putting my trust in God.	1	2	3	4	5
5. I've been discussing my feelings with someone.	1	2	3	4	5
6. I've been getting used to the idea that these things have happened.	1	2	3	4	5
7. I've been talking to someone to find out more about my situation.	1	2	3	4	5
8. I've been seeking God's help.	1	2	3	4	5
9. I've been making a plan of action.	1	2	3	4	5
10. I'm accepting that these things have happened and that they can't be changed.	1	2	3	4	5

	Not at all	A little bit	Some-what	Quite a bit	A lot
11. I've been trying to get emotional support from friends or relatives.	1	2	3	4	5
12. I've been taking additional action to try to get rid of my problems.	1	2	3	4	5
13. I've been trying to see things in a different light, to make them seem more positive.	1	2	3	4	5
14. I've been talking to someone who could do something concrete about my problems.	1	2	3	4	5
15. I've been trying to come up with strategies about what to do.	1	2	3	4	5
16. I've been getting sympathy and understanding from someone.	1	2	3	4	5
17. I've been looking for something good in what is happening.	1	2	3	4	5
18. I've been thinking about how I might best handle these problems.	1	2	3	4	5
19. I'm accepting the reality of the fact that these things have happened.	1	2	3	4	5
20. I've been asking people who have had similar experiences what they did.	1	2	3	4	5
21. I've been taking direct action to get around the problems.	1	2	3	4	5
22. I've been trying to find comfort in my religion.	1	2	3	4	5
23. I've been talking to someone about how I feel.	1	2	3	4	5
24. I've been learning to live with my problems.	1	2	3	4	5

	Not at all	A little bit	Some-what	Quite a bit	A lot
25. I've been thinking hard about what steps to take.	1	2	3	4	5
26. I've been doing what has to be done, one step at a time.	1	2	3	4	5
27. I've been learning something from these experiences.	1	2	3	4	5
28. I've been praying more than usual.	1	2	3	4	5

Read each statement and indicate whether you have been engaging in these behaviours or thoughts in the last three months ***to deal with your feelings of distress***.

Don't answer on the basis of what worked or not, just whether or not you have been doing it, and how often.

	Not at all	A little bit	Some-what	Quite a bit	A lot
1. I've been viewing my situation as a trial from Allah.	1	2	3	4	5
2. I've been seeing my situation as Allah's will.	1	2	3	4	5
3. I've been seeing my suffering as purification of my sins.	1	2	3	4	5
4. I've been seeking patience because Allah is with those who are patient.	1	2	3	4	5
5. I've been telling myself that suffering may bring me closer to Allah.	1	2	3	4	5
6. I've been trying to remember my blessings and thank Allah.	1	2	3	4	5
7. I've been seeking help with prayer.	1	2	3	4	5
8. I've been reading certain dua (supplications).	1	2	3	4	5
9. I've been praying for Allah's love and mercy.	1	2	3	4	5
10. I've been seeking tranquillity (peace) through dhikr (remembrance of Allah).	1	2	3	4	5

	Not at all	A little bit	Some-what	Quite a bit	A lot
11. I've been seeking guidance by reading the Qur'an.	1	2	3	4	5
12. I've been increasing prayers to Allah.	1	2	3	4	5
13. I've been looking for a lesson from Allah in the situation.	1	2	3	4	5
14. I've been using religious stories to seek understanding and comfort.	1	2	3	4	5
15. I've been trying to make up for my mistakes.	1	2	3	4	5
16. I've been asking for Allah's forgiveness.	1	2	3	4	5
17. I've been giving sadaqah (charity) in the name of Allah.	1	2	3	4	5
18. I've been reading the Qur'an.	1	2	3	4	5
19. I've been getting help from religious leaders.	1	2	3	4	5
20. I've been attending religious classes (e.g. Islamic Halaqa).	1	2	3	4	5
21. I've been looking for love and concern from the members of my Mosque or Muslim community.	1	2	3	4	5
22. I've been attending events at the Mosque/Islamic Centre.	1	2	3	4	5
23. I've been volunteering for a religious cause/event.	1	2	3	4	5

	Not at all	A little bit	Some-what	Quite a bit	A lot
24. I've been asking others to pray for me.	1	2	3	4	5

SECTION IV.

Please indicate how much you agree with the following statements when you think about yourself and your life:

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.	**In most ways, my life is close to my ideal.**	1	2	3	4	5
2.	**The conditions of my life are excellent.**	1	2	3	4	5
3.	**I am satisfied with my life.**	1	2	3	4	5
4.	**So far I have got the important things I want in life.**	1	2	3	4	5
5.	**If I could live my life over, I would change almost nothing.**	1	2	3	4	5

How often have you experienced the following in the past month?

		Never	Almost Never	Some-times	Fairly Often	Very Often
1.	**I feel tired.**	1	2	3	4	5
2.	**I feel sick in the stomach.**	1	2	3	4	5
3.	**I feel dizzy and faint.**	1	2	3	4	5
4.	**I feel short of breath even when not exerting myself.**	1	2	3	4	5
5.	**I feel weak all over.**	1	2	3	4	5

		Never	Almost Never	Some-times	Fairly Often	Very Often
6.	**I feel tense.**	1	2	3	4	5
7.	**I feel nervous.**	1	2	3	4	5
8.	**I feel restless.**	1	2	3	4	5
9.	**I feel annoyed or irritated.**	1	2	3	4	5
10.	**I am worried about something bad happening to me.**	1	2	3	4	5
11.	**I feel unhappy and sad.**	1	2	3	4	5
12.	**I often feel confused.**	1	2	3	4	5
13.	**I worry a lot of the time.**	1	2	3	4	5
14.	**I feel lonely even with other people.**	1	2	3	4	5
15.	**I lose interest and pleasure in things I usually enjoy.**	1	2	3	4	5

Thank You

Appendix B: Information Sheet

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Participant Information Sheet

Researchers:

Zeenah Adam MSc Candidate Cross Cultural Psychology School of Psychology Victoria University of Wellington Zeenah.adam@vuw.ac.nz 022 088 4711	Colleen Ward Professor School of Psychology Victoria University of Wellington Colleen.ward@vuw.ac.nz 04 463 6037

You are invited to participate in a study that aims to explore the experiences of Muslims in New Zealand.

What is the purpose of this research?
This research will allow us to examine the experiences of Muslims in New Zealand, and how they cope with stress in their lives. It will also allow us to see how the experience of stress relates to faith and wellbeing.

Who is conducting this research?
This research is being conducted by Ms. Zeenah Adam, and supervised by Professor Colleen Ward of the School of Psychology, Victoria University of Wellington.

This research (application # 0000020963) has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee.

What is involved if I agree to participate?

- Your participation in the project will involve completing the attached questionnaire. This will involve answering questions about how often you experience certain feelings (e.g. "I feel tense") or have done certain things (e.g. "I read the Qur'an"). This will take approximately 20-30 minutes.
- During the research you are free to withdraw at any point before your survey has been completed.
- If you complete the survey, it is understood that you have given your informed consent to participate in the research, and have consented to the publication of the results, provided your participation remains anonymous.

Privacy and Confidentiality
All responses are ANONYMOUS. This means that there will be no way to link your responses back to you, or to determine whether you participated in the study.

Please DO NOT put your name anywhere on the survey.

Administration

- Hard copies of the survey will be scanned and then destroyed, with scanned copies retained indefinitely in a password protected file. Electronic versions of the survey drawn from the online data collection procedure will be kept indefinitely by the members of the research team.
- In accordance with the requirement of some scientific journals and organizations, your coded survey data may be shared with other competent researchers.
- Your coded responses may be used in other, related studies.

What happens to the information you provide?

- The information you provide will be presented in a Master's Thesis, and may be submitted for publication in a scientific journal or presented at scientific conferences.

When you complete the survey, you will be given a debriefing statement. If you would like the results of this study, they will be available in approximately June 2015, at: www.victoria.ac.nz/cacr.

Thank you for considering this invitation.

Zeenah Adam and Colleen Ward

Appendix C: Debrief Sheet

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Participant Debriefing form (application # 0000020963)

Thank you for participating in this research.

The current study aimed to explore the experiences of Muslims in New Zealand.

Research has shown that the use of religious coping methods may promote positive mental health and/or buffer the negative influences of stress on wellbeing.

In this study, we examined how faith-based coping strategies are utilised by Muslims to reinterpret stressful experiences and seek solutions to their problems. We also looked at the capacity of these coping strategies in buffering the negative influence of stress on wellbeing.

This research is important as it will highlight the role of faith-based coping methods in the lives of Muslims, and the ways that they navigate through experiences of daily stress. To date, no published studies have examined the role of faith-based coping and wellbeing amongst Muslims in New Zealand, and only a small number of studies have examined this relationship internationally.

It is hoped that this research can advise health practitioners working with Muslim clients of the importance of considering religious beliefs in treatment. The results of the study will be posted at www.victoria.ac.nz/cacr by approximately March 2015.

The questions in the survey were not designed to be upsetting. However, if you are feeling upset, then it may be helpful for you to talk to your family doctor or to contact an organisation listed below.

Helpline Contact Details:

Youthline: 0800 37 66 33

Lifeline: 0800 543 354

Depression Helpline: 0800 111 757

Thank you again for participating in this research.

Zeenah Adam and Colleen Ward