TERROR MANAGEMENT AND ACCULTURATION: DO THOUGHTS OF DEATH
AFFECT ACCULTURATION ATTITUDES OF RECEIVING SOCIETY MEMBERS?

A Thesis

Presented to

The Faculty of Graduate Studies

of

The University of Guelph

by

DARCY R. DUPUIS

In partial fulfillment of requirements

for the degree of

Master of Arts

June, 2008

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Your file Votre référence

ISBN: 978-0-494-42772-9

Our file Notre référence

ISBN: 978-0-494-42772-9

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ABSTRACT

TERROR MANAGEMENT AND ACCULTURATION: DO THOUGHTS OF DEATH AFFECT ACCULTURATION ATTITUDES OF RECEIVING SOCIETY MEMBERS?

Darcy R. Dupuis
University of Guelph, 2008

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This thesis examines the effects of mortality salience (MS) on acculturation attitudes of Anglo-Canadians toward culturally close (British) and culturally distant (Arab-Muslim) immigrants. In study 1, the effects of MS on attitudes of Anglo-Canadians were measured using the Host Community Acculturation Scale, based on the Interactive Acculturation Model. MS was hypothesized to result in more welcoming attitudes toward the British and less welcoming attitudes toward Arab-Muslims. However, no support for the hypotheses was found. In study 2, the effects of MS on attitudes of Anglo-Canadians were measured using the receiving society scale accompanying the Relative Acculturation Extended Model. MS was hypothesized to lead to higher separation and lower assimilation held toward British immigrants and higher assimilation and lower separation toward Arab-Muslim immigrants. The hypotheses were supported. The influence of terror management processes on acculturation attitudes is discussed within the context of Canadian society, with additional implications for other societal settings.

Acknowledgements

I would like to thank my advisor, Dr. Saba Safdar, whose unwavering support, guidance, and feedback have been invaluable to me during the completion of this project.

I would like to thank my committee member, Dr. J. Rees Lewis, for providing his wonderful insight and advice throughout the research and writing process. I would also like to thank my chair, Dr. Ian Newby-Clark, particularly for his assistance with statistical matters.

I also owe a special thanks to the Social Sciences and Humanities Research Council of Canada for funding this project.

Finally, I would like to express gratitude to my parents, my sister, and Lianne for always being amazing.

Table of Contents

LIST OF TABLES.....	v
LIST OF FIGURES.....	vii
INTRODUCTION.....	1
Immigration and Acculturation.....	2
<i>The Psychological Study of Immigration</i>	2
<i>Acculturation</i>	3
<i>Acculturation Attitudes of the Receiving Society</i>	5
Terror Management Theory.....	11
<i>TMT and its Origins</i>	11
<i>The Dual-component cultural anxiety buffer</i>	13
<i>Worldview Defence</i>	15
Terror Management Theory and Acculturation Attitudes.....	19
<i>Threat and Immigration</i>	19
<i>Attitudes and Culturally Distance of Immigrant Groups</i>	21
<i>Applying TMT to Acculturation Attitudes</i>	22
<i>Target Immigrant Groups</i>	23
<i>Caveats</i>	24
STUDY 1.....	25
METHOD.....	29
Participants.....	29
Design.....	30
Materials.....	30
Procedure.....	35
RESULTS.....	38
Manipulation Check.....	38
Reliability.....	38
Preliminary Data Analysis.....	39

Mortality Salience Effects on Affect.....	45
Order Effects for Acculturation Attitudes.....	45
Mortality Salience Effects on Acculturation Attitudes.....	46
Moderating Effects of Personal Need for Structure.....	48
DISCUSSION.....	54
Overview.....	54
Acculturation Attitudes.....	55
Mortality Salience and Acculturation Attitudes.....	57
The Moderating Role of Personal Need for Structure.....	59
Limitations.....	63
Conclusions.....	67
STUDY 2.....	68
METHOD.....	74
Participants.....	74
Design.....	75
Materials.....	75
Procedure.....	78
RESULTS.....	80
Reliability.....	80
Preliminary Analyses.....	81
Mortality Salience Effects on Affect.....	86
Mortality Salience Effects on General Acculturation Attitudes.....	87
Mortality Salience Effects on Specific Domains of Acculturation.....	92
DISCUSSION.....	98
Overview.....	98
Acculturation Attitudes.....	99
Mortality Salience and Acculturation Attitudes.....	101
Limitations.....	108
GENERAL DISCUSSION.....	110

Implications and Future Directions.....	113
Conclusions.....	119
REFERENCES.....	122
APPENDICES.....	161
Appendix A: Demographics.....	161
Appendix B: Religious Fundamentalism Scale.....	162
Appendix C: Social Axioms Survey.....	164
Appendix D: Personal Need for Structure Scale.....	167
Appendix E: Mortality Salience Prime.....	168
Appendix F: Pain Salience Prime.....	169
Appendix G: Positive and Negative Affect Schedule-Expanded Form.....	170
Appendix H: Photographs for Arab-Muslim Prime.....	171
Appendix I: Photographs for British Prime.....	174
Appendix J: HCAS for Arab-Muslim Immigrants.....	177
Appendix K: HCAS for British Immigrants.....	179
Appendix L: Consent Form 1.....	181
Appendix M: Consent Form 2 (Debriefing).....	184
Appendix N: Exam Failure Salience Prime.....	187
Appendix O: Word Search Puzzle.....	188
Appendix P: RAEM for Arab-Muslim Immigrants.....	189
Appendix Q: RAEM for British Immigrants	192
Appendix R: Instructions for Study 2.....	195

List of Tables

TABLE 1: Cronbach's Alpha, Means, and Standard Deviations for HCAS and PNS Scales in Study 1.....	136
TABLE 2: Skewness and Kurtosis Statistics with Standard Errors for HCAS Scales in Study 1.....	137
TABLE 3: Intercorrelations for Affect Subscales in Study 1.....	138
TABLE 4: Intercorrelations for Acculturation Attitudes Held toward Arab-Muslim and British Immigrants in Study 1.....	139
TABLE 5: Testing Moderator Effects of PNS on the Relationship between MS and Individualism toward Arab-Muslim and British Immigrants in Study 1.....	141
TABLE 6: Testing Moderator Effects of PNS on the Relationship between MS and Integrationism toward Arab-Muslim and British Immigrants in Study 1.....	143
TABLE 7: Testing Moderator Effects of PNS on the Relationship between MS and Integrationism-Transformation toward Arab-Muslim and British Immigrants in study 1.....	144
TABLE 8: Testing Moderator Effects of PNS on the Relationship between MS and Assimilationism toward Arab-Muslim and British Immigrants in study 1.....	145

TABLE 9: Testing Moderator Effects of PNS on the Relationship between MS and Segregationism toward Arab-Muslim and British Immigrants in Study 1.....	147
TABLE 10: Testing Moderator Effects of PNS on the Relationship between MS and Exclusionism toward Arab-Muslim and British Immigrants in Study 1.....	148
TABLE 11: Cronbach's Alpha, Means, and Standard Deviations of Aggregate RAEM Dimensions for Study.....	150
TABLE 12: Correlations for Affect Subscales in Study 2.....	151
TABLE 13: Skewness and Kurtosis Statistics for Aggregate Acculturation Scales for Study 2.....	154
TABLE 14: Means and Standard Deviations for Ideal Acculturation Domains for Study 2.....	155
TABLE 15: Means and Standard Deviations for Euclidean Distances from Maximal Acculturation Attitudes for Study 2.....	156

List of Figures

FIGURE 1: Mean Individualism as a Function of Mortality Salience and Target Immigrant Group.....	140
FIGURE 2a: The Effect of Mortality Salience on Individualism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.....	142
FIGURE 2b: The Effect of Mortality Salience on Individualism held toward British Immigrants as Moderated by Personal Need for Structure.....	142
FIGURE 3a: The effect of Mortality Salience on Assimilationism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.....	146
FIGURE 3b: The Effect of Mortality Salience on Assimilationism held toward British Immigrants as Moderated by Personal Need for Structure.....	146
FIGURE 4a: The Effect of Mortality Salience on Exclusionism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.....	149
FIGURE 4b: The Effect of Mortality Salience on Exclusionism held toward British Immigrants as Moderated by Personal Need for Structure.....	149
FIGURE 5: Acculturation Attitudes toward Arab-Muslim Immigrants.....	152

FIGURE 6: Acculturation Attitudes toward British Immigrants.....	153
FIGURE 7a: Mean Euclidean Distance from Maximal Assimilation to Obtained Aggregate Scores on Ideal Acculturation as a Function of Mortality Salience and Target Immigrant Group.....	157
FIGURE 7b: Mean Euclidean Distance from Maximal Separation to Obtained Aggregate Scores on Ideal Acculturation as a Function of Mortality Salience and Target Immigrant Group.	157
FIGURE 8: Ideal Heritage Culture Maintenance as a Function of Mortality Salience and Target Immigrant Group.....	158
FIGURE 9: Mean Euclidean Distance from Maximal Separation to Obtained Scores on Ideal Situation Social Relationships as a Function of Mortality Salience and Target Immigrant Group.....	159
FIGURE 10a: Mean Euclidean Distance from Maximal Assimilation to Obtained Scores on Ideal Situation Family Relationships as a Function of Mortality Salience and Target Immigrant Group.....	160
FIGURE 10b: Mean Euclidean Distance from Maximal Separation to Obtained Scores on Ideal Situation Family Relationships as a Function of Mortality Salience and Target Immigrant Group.....	160

TERROR MANAGEMENT AND ACCULTURATION: DO THOUGHTS OF DEATH AFFECT ACCULTURATION ATTITUDES OF RECEIVING SOCIETY MEMBERS?

Psychological research within the area of immigration is conducted with the intention of developing a practical understanding of what happens psychologically to immigrants during their transition from the cultural context associated with their country of origin to the new cultural context of a receiving society (Berry 1997). Successful acculturation depends, not only on immigrants' own acculturation attitudes and strategies adopted upon arrival, but also on how they and their cultural habits are welcomed by the receiving society (Berry, 2006; Bourhis, Moïse, Perreault, & Senecal, 1997; Esses, Wagner, Wolf, Preiser, & Wilbur, 2006; Navas et al., 2005; Piontkowski, Florack, Hoelker, & Obdrzalek, 2000). With this in mind, researchers have begun to explore the nature of receiving society's acculturation attitudes toward specific immigrant groups (Van-Oudenhoven, Ward, Masgoret, 2006). Recent research confirms that even in multicultural receiving societies there are often discrepancies between expectations for the ideal acculturation of distinct immigrant groups (e.g., Montreuil & Bourhis, 2004; Navas, Rojas, Garcia, Pumares, 2007; Piontkowski, Rohmann, & Florack, 2002; Safdar, Dupuis, Lewis, El-Geledi, & Bourhis, in press). Given the recurrence of this finding across diverse receiving societies, researchers must increasingly attend to the underlying reasons for these discrepancies.

That said, "we must recognize the power of culture in constructing our realities, and the reluctance we have as human beings to tolerate challenges to these realities because they introduce unacceptable levels of uncertainty and doubt" (Marsella, 2005, p.

651). The potential for uncertainty and doubt, in the context of the above quotation, stems from the awareness of a divergence between one's own culturally derived worldview and the culturally derived worldviews held by salient others in one's environment. Research with Terror Management Theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986) demonstrates that cognitive processes, related to individuals' awareness of their own mortality, can often exacerbate negative reactions to the presence, or mere existence, of individuals who hold worldviews that diverge from their own (e.g., Greenberg et al., 1990; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Therefore, with theory grounded in the terror management literature, I will endeavour, herein, to explore the effects of implicit existential concerns on the acculturation attitudes held toward specific immigrant groups.

Specifically, the purpose of this research was to compare the effects of mortality salience (MS) on the acculturation attitudes held by Anglo-Canadian receiving society members toward a culturally close immigrant group (British) and a culturally distant immigrant group (Arab-Muslims). I will begin by briefly reviewing the relevant literature on acculturation attitudes followed by a review of TMT. I will then discuss the relevance of TMT to research on acculturation attitudes of receiving society members prior to describing the present studies.

Immigration and Acculturation

The Psychological Study of Immigration. Berry (2001) suggests that psychology can have important contributions to the study of immigration in two general areas. The first area is that of acculturation. Researchers who study acculturation are interested in psychological processes leading to, and resulting from, the extent of immigrants'

maintenance of heritage culture and contact with the receiving society (Berry, 2005). The second area is the study of intergroup relations. Attitudes toward others, including the stereotypes and prejudice that accompany ethnic relations are at the centre of attention in this area (Berry, 2005). Berry (2006) maintains that although these two areas have been studied separately in the past, “they are actually reciprocal, mutual sets of phenomena” (p. 720). The cultural conflict and acculturative stress that accompany immigration are products of the complex interactive nature of the acculturation process and the associated intergroup relations.

Acculturation. The definition of acculturation proposed by Redfield, Linton, and Herskovits (1936) is frequently referred to in the literature (e.g., Berry, 2003; Kang, 2006; Rudmin, 2003) and is considered to be the source from which many of the more recent definitions have been adapted. Redfield and colleagues state that “Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups.” (p. 149). Although this classical definition focuses on acculturation as a group-level process, it is similarly applicable at the individual level. Whereas acculturation at the group level involves structural changes at social, political, and economic levels, psychological acculturation involves changes in the individual, which may include adjustments in values, beliefs, attitudes, identity, and behaviour (Sam, 2006). Research now clearly supports the view that immigration involves a “complex pattern of continuity and change” (Berry, 1997, p. 6) rather than a complete maintenance of behaviours and cognitions associated with an immigrants’

heritage culture or a complete shift from the heritage culture to the culture of the new societal setting.

Berry and colleagues' formulation of, and subsequent work with, the Acculturation Model (Berry, Kim, Power, Young, & Bujaki, 1989) has had, and continues to have, an enormous impact on theory and research in the area of acculturation (e.g., Bourhis, et al., 1997; Florack, Piontkowski, Rohmann, Balzer, & Perzig, 2003; Navas, et al., 2005). Berry (2001) presents two basic dimensions important to the understanding of the process of acculturation. The first dimension involves the degree to which immigrants maintain aspects of their heritage culture. The second dimension involves the extent to which it is desirable to develop contacts with members of the receiving society.

As Berry's (e.g., 1989) original two dimensions measure different types of attitudes, Bourhis et al. (1997) have proposed a change to the nature of the second dimension in order to enhance consistency between the two dimensions. Bourhis and colleagues place the emphasis of the second dimension on the degree to which it is desirable for immigrants to adopt the receiving society's culture, rather than the degree to which it is desirable for immigrants to pursue contact with receiving society members. The refined model recognizes that both degree of maintenance of the immigrant's heritage culture and degree of adoption of a receiving society's culture should be considered for an adequate understanding the process of acculturation.

The two dimensions form a bidimensional view of acculturation, which makes possible the formation of four separate acculturation strategies for immigrant groups (Berry, 2003). These acculturation strategies are integration, assimilation, separation, and

marginalization. Integration takes place when immigrants are oriented toward maintenance of aspects of their heritage culture in addition to the adoption of aspects of the receiving society's culture. The assimilation strategy occurs when immigrants are oriented toward adoption of the culture of the receiving society and rejection of their heritage culture. Separation occurs when immigrants desire maintenance of their heritage culture while avoiding adoption the culture of the receiving society. Marginalization occurs when immigrants wish neither to retain their heritage culture nor to adopt the culture of the receiving society.

Acculturation Attitudes of the Receiving Society. The receiving society has an important role in the acculturation process experienced by immigrants. Until recently, the majority of research conducted in the area of acculturation has focused primarily on the acculturation strategies of immigrants (Bourhis et al., 1997; Montreuil & Bourhis, 2004; Piontkowski, et al., 2000). However, as immigrant groups and the receiving societies do not operate in isolation from one another, there must be concern with the acculturation expectations held by receiving society members (Berry, 2003; Horenczyk, 1996).

The majority status of receiving society individuals means that they, as a group, are in a position of power relative to immigrant minorities (Piontkowski et al., 2000). The attitudes they hold may often determine the degree to which immigrants are allowed to maintain aspects of their heritage culture or adopt aspects of the receiving society's culture. Thus, a contrast between the preferred acculturation strategies of an immigrant group and the acculturation attitudes receiving society members hold toward the immigrant group can potentially create problematic or conflictual relationships (Bourhis et al, 1997).

Receiving society members can have an impact on the adaptation of immigrants by exerting an influence on a nation's adoption of immigration and integration policies (Bourhis et al., 1997; Bourhis & Dayan, 2004) and through both subtle and overt expressions of views held toward immigrants via the various forms of intergroup contact (Bourhis et al., 1997; Piontkowski et al., 2000). First, members of the receiving society can play a crucial role in affecting immigration and integration policies. Immigration policies involve decisions regarding the amount of tolerable immigration, the type of immigrants desired, and the nationalities of immigrants (Bourhis et al., 1997). Integration policies, on the other hand, involve the approach a nation adopts for helping immigrants adjust within the receiving society. Burns and Gimpel (2000) suggest that as immigration becomes progressively associated with minority groups that are negatively stereotyped, immigration policy will increasingly be affected by the majority's prejudices. Furthermore, recognizing the dynamic nature of the relationship between citizens' views and policy, Bourhis and colleagues (1997) suggest that, while attitudes of receiving societies can affect integration policies, policies adopted by a nation can, in turn, act to influence the ideologies adopted by the nation's citizens.

Second, attitudes toward immigrants can have direct effects on immigrants *via* the process of intergroup contact. For example, Jasinskaja-Lahti, Liebkind, Horenczyk, and Schmitz (2003) indicate that discrepancies between immigrants' acculturation preferences and the expectations of the receiving society are associated with higher perceived discrimination and greater stress among immigrants. Safdar and colleagues (e.g., Safdar, Lay & Struthers, 2003; Safdar & Lewis, 2007; Safdar, Rasmi, Dupuis, & Lewis, in press) have found that discrimination and other acculturation-specific hassles

can have an impact on psychological and physical health outcomes. Further anecdotal support can be drawn from writings in the aftermath of the large-scale terrorist attacks taking place in the U.S. on September 11, 2001, which heavily affected immigrants and entire ethnic groups. For example, the catastrophic events and the subsequent measures taken by the U.S. were noted to have had a major impact on a large population of Arab individuals in Dearborn, Michigan—a city well-known for having a large concentration of Arab immigrants:

As the Bush administration's "War on Terror" expands...Arab Detroit's rich history of domestic integration and transnational connection is being truncated, questioned, re-politicized, Americanized, and selectively erased. This radical transformation is rooted in anxiety about boundaries: Arabs and Muslims are clearly "in Detroit." with "us," but their hearts might still be "over there," with "them." (Howell & Shryock, 2003, p. 444)

Two different conceptualizations of receiving societies' acculturation attitudes and accompanying measures are of relevance to the present research. The first, developed by Bourhis and colleagues (1997), is the receiving society component of the Interactive Acculturation Model (IAM), which is accompanied by the Host Community Acculturation Scale (HCAS). The second is the receiving society component of the Relative Acculturation Extended Model (RAEM) developed by Navas and colleagues (2005). Although both models are based on Berry's et al.'s (1989) bidimensional structure of acculturation attitudes, they approach the measurement of acculturation attitudes in different ways. Thus, it was considered to be ideal to incorporate both

methods in the present research for the sake of a more complete view of whether MS affects acculturation attitudes. Each will be discussed in turn.

Bourhis and colleagues' (1997) IAM was developed to address, within a single framework, (1) the preferred acculturation strategies of immigrants, (2) the acculturation attitudes of receiving society members, and (3) the intergroup and interpersonal outcomes that develop from the combination of immigrants' preferred strategies and the attitudes held by receiving society members. For the component of the model that addresses the receiving society, Bourhis and Montreuil (2005) have proposed six acculturation attitudes that are applied to receiving society members' preferences for the acculturation strategies of immigrants. These attitudes are *individualism*, *integrationism*, *integrationism-transformation*, *assimilationism*, *segregationism*, and *exclusionism*. Note that Bourhis and Montreuil suggest two additional attitudes (individualism and integrationism-transformation), in addition to the four original attitudes measured within the traditional bidimensional structure of acculturation.

Individualism, integrationism, and integrationism-transformation are generally considered to be positive or welcoming acculturation attitudes as they involve acceptance that the immigrant group may wish to maintain their heritage culture and also involve acceptance of the immigrants as participating members in the receiving society (Montreuil, Bourhis, & Vanbeselaere 2004). Individualists do not view adoption of the receiving society's culture or maintenance of the immigrant's heritage culture as particularly important aspects of acculturation. According to individualists, it should be left to the immigrant to decide whether they maintain their heritage culture or adopt the culture of the receiving society. Those who adopt an integrationist perspective believe

that it is ideal for immigrants to maintain aspects of their heritage culture while also adopting aspects of the receiving society's culture. Individuals who endorse an integrationist-transformation attitude similarly value a stable biculturalism of immigrants. However, those who adopt this attitude also acknowledge that changes to certain aspects of the receiving society, including cultural tendencies and institutional processes, are essential in order to accommodate the immigrant group.

The assimilationist, segregationist, and exclusionist attitudes are considered unwelcoming attitudes as they express an intolerance or rejection of the immigrant group and/or the immigrant group's cultural heritage (Montreuil et al., 2004). Those who endorse an assimilationist attitude expect that the immigrant group abandon their heritage culture for the sake of taking on aspects of the receiving society's culture. Those who endorse a segregationist attitude are not opposed to the immigrant group's maintenance of their heritage culture; however, they do desire that the immigrant group's culture remain distant from that of the receiving society. Those who adopt the exclusionist attitude are intolerant of immigrants' maintenance of their heritage culture and also feel that the immigrant group should not adopt the culture of the receiving society.

Using the HCAS to measure acculturation attitudes of the receiving society, Bourhis and colleagues have made it possible to assess individuals' endorsements of each acculturation attitude separately. In other words, six statements are used to achieve a score on each of the six respective acculturation attitudes. The HCAS has been validated in various cultural settings such as Canada, Israel, and France (Bourhis & Barrette, 2004). Based on these studies (e.g., Bourhis and Dayan, 2004; Montreuil et al., 2004) it has been confirmed that the HCAS scale can be used for observations of acculturation attitudes of

various receiving societies and can be adapted to measure acculturation attitudes held toward diverse immigrant groups.

However, there have been criticisms of this measure. As certain items within the HCAS simultaneously tap into attitudes held toward the maintenance of one culture and the adoption of another culture, many items are double-barrelled (Arends-Toth & Van de Vijver, 2007). The double-barrelled nature of the items makes answering the questions cognitively complex. For example, items for exclusionism ask participants whether they desire immigrants to reject maintenance of heritage culture while simultaneously asking whether they desire immigrants to reject adoption of the receiving society's culture. Items like this can lead individuals to answer only parts of the items or to have multiple interpretations of the items.

Navas et al. (2005) have recently developed the RAEM. This model uses Berry and colleagues' (e.g., 2003) original four acculturation attitudes (integration, assimilation, separation, and marginalization) for both immigrants and receiving society members. However, differing from the HCAS, separate scores are attained for the dimensions of heritage culture maintenance and adoption of the receiving society's culture. The scores on the two dimensions are combined to obtain an acculturation attitude score in two-dimensional space. Distance from the obtained score to the maximal scores for integration, assimilation, separation, and marginalization can be measured to indicate the degree to which each acculturation attitude is endorsed. The scale also includes separate sets of items measuring the individual's perception of the *real situation*, or the degree to which strategies are perceived to be adopted by immigrants in actuality, and the *ideal situation*, which measures attitudes toward the acculturation of immigrants.

In accord with the research of Arends-Toth and Van de Vijver (2006, 2007), Navas and colleagues acknowledge that the acculturation process is complex in that acculturation attitudes may differ by life domain. The RAEM outlines seven specific domains of acculturation. Three domains fall within the public sphere of culture: (1) political and government system, (2) labour or work, (3) economy and consumer habits. Two domains fall within the private sphere of culture: (4) religious beliefs and customs and (5) ways of thinking: principles and values. Additionally, two domains are intermediate between public and private spheres: (6) social relations and (7) family relations.

As indicated in Arends-Toth and Van de Vijver (2007) Bourhis and colleagues' (1997) and Navas and colleagues' (2005) respective measures for receiving society acculturation attitudes are representative of the two dominant ways of measuring acculturation attitudes within the bidimensional model of acculturation. Once more, Bourhis and colleagues use six statements to measure each acculturation attitude independently, whereas Navas and colleagues use the two-statement method to attain an acculturation score in bidimensional space. As the two operationalizations are very different, attention is given to both in the present research in order to make a strong case for the influence of terror management processes on acculturation attitudes.

Terror Management Theory

TMT and its Origins. Drawing extensively from the work of Ernest Becker (e.g., Becker, 1971, 1973, 1975), TMT was developed in the early 1980's and was first conceptualized in the psychological literature by Greenberg et al. (1986). The theory maintains that "cultural conceptions of reality serve the vital function of buffering the

anxiety that results from awareness of human vulnerability and mortality” (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989, p. 681). At its core, TMT provides a basis for understanding the motivational forces that are central to the maintenance and defence of our culturally derived conceptions (Rosenblatt et al., 1989).

The works of Ernest Becker provide the basis from which the central tenets of TMT were formulated. In his writings, particularly *The Birth and Death of Meaning* (1971), *The Denial of Death* (1973), and *Escape from Evil* (1975), Becker endeavored to formulate a coherent understanding of human motivation and behaviour by attending broadly to a range of social science disciplines (Rosenblatt et al., 1989). Central to Becker’s thought is the argument that the capacity to understand our own vulnerability and inevitable mortality has created within us the potential for overwhelming anxiety. Although sharing with other earthly creatures a drive for self-preservation, as humans we are unique in that we have developed as a highly intelligent species capable of cognitively complex thought processes, such as the ability to consider possibilities and contemplate the future (Solomon et al., 1998; Webb, 1998). This unique intellect, however, has the consequence that we are inescapably aware of the fact that, one day in the future, we will succumb to death. Thus, our desire for self-preservation, coupled with the unique knowledge that we will inevitably fail to achieve this intense desire, could leave us in a potentially terrifying state if suitable psychological defences did not exist.

Becker argued that culture developed, in part, to manage the potential for anxiety-laden responses to our unique awareness of mortality (Liechty, 1998; Solomon, Greenberg & Pyszczynski, 1998). In *Escape from Evil* (1975), he states that “Man [sic] erected cultural symbols which do not age or decay to quiet his fear of his ultimate end—

and of more immediate concern, to provide the promise of indefinite duration” (p. 3). As culture developed, cultural worldviews emerged simultaneously, imbuing meaning in an otherwise uncertain reality (Koltko-Rivera, 2004).

The Dual-component cultural anxiety buffer. Culturally derived worldviews provide individuals with systems of meaning and standards to uphold. Living up to such standards enables individuals to perceive themselves as valuable beings in a meaningful world (Pyszczynski, et al., 2003; Solomon et al, 1998). Thus, an essential component of TMT is the dual-component cultural anxiety buffer, which is composed of one’s culturally derived worldview and self-esteem (Pyszczynski, Greenberg, & Solomon, 1999). These two components are posited to quell the potential for anxiety associated with thoughts of mortality. The first component, the maintenance of a culturally derived worldview, provides individuals with a set of standards from which a sense of personal value and significance can be achieved (Rosenblatt et al., 1989). Each individual’s culturally derived worldview encompasses a set of “beliefs and assumptions that describe reality” (Koltko-Rivera, 2004, p. 3). Faith in one’s worldview “imbues reality with order, stability, meaning, and permanence” (Pyszczynski, Solomon, & Greenberg, 2003, p. 16).

In addition to maintaining a cultural worldview, the individual must actively participate in their culture in ways that will allow for a self-perception as a significantly valued member of society (Pyszczynski et al., 2003). In the terror management literature, self-esteem is conceptualized as the perception of the degree to which one is achieving the objectives set forth by the standards and values held within one’s culturally derived worldview (Harmon-Jones, Simon, Greenberg, & Pyszczynski, 1997; Rosenblatt et al.,

1989). When these objectives are met, individuals are often able to attain a sense of literal and/or symbolic immortality (Pyszczynski et al., 1999).

A sense of literal immortality is often achieved by following the expectations set forth by worldviews derived from religious or spiritual beliefs (Rosenblatt et al., 1989). In fact, every society on Earth maintains a belief in supernatural agents (Atran & Norenzayan, 2004). Not only does a belief in supernatural agents help many individuals to cope with distressing life processes; these beliefs allow for the possibility of life after death.

A sense of symbolic immortality can be achieved through various contributions to society including achieving value through participation as a member of the collective, through the passing of values to one's children, and through lasting intellectual or artistic contributions to one's culture or to humanity as a whole (Pyszczynski et al., 2003).

As the maintenance of a cultural worldview helps to guard against the potential anxiety associated with death, it follows that, when thoughts of mortality are salient, there should be an increased tendency to defend and bolster aspects of one's worldview (Greenberg et al., 1990; Pyszczynski et al., 2003). A great deal of support for the mortality salience hypothesis can be found in the TMT literature (e.g., Florian & Mikulincer, 1997; Hirschberger, Ein-Dor, & Almakias, 2008; McGregor et al., 1998; Pyszczynski et al., 2006; Simon et al., 1997; Walsh & Smith, 2007; Rosenblatt et al., 1989). For example, Rosenblatt et al. (1989) hypothesized that municipal court judges, for whom the law was assumed to be an essential worldview component, would uphold the law more severely when mortality was salient by making more severe judgements against a lawbreaker. Those judges who received a MS prime set a higher average bond

for alleged prostitution (\$455) than judges in a control group (\$50). This finding was replicated and extended independently by Florian and Mikulincer (1997). In an Israeli sample, they found that individuals who received a MS prime, versus those who received a control prime, punished moral transgressors more harshly.

In addition to defending aspects of one's cultural worldview against those who behave in opposition to it, individuals have also been found to become more likely to respond in accord with their own worldview when mortality is salient. For example, Routledge, Arndt, and Goldenberg (2004) found that when mortality was salient outside of conscious awareness, those American women who associated a tanned appearance with higher self-esteem became less interested in a protective sunscreen product, presumably as it would inhibit the achievement of a tan.

Furthermore, Arndt, Greenberg, and Cook (2002) found that thoughts of mortality can lead to heightened activation of personally significant aspects of one's worldview. They examined whether specific aspects of individuals' worldviews would become more accessible when mortality was made salient. MS was found to cause nationalistic worldview constructs to become more accessible for men and, under specific social circumstances, for women (e.g., when the concept of America was made salient). They also found that when individuals were primed with thoughts of death, there was increased activation of cognitions related to romantic relationships for women but not for men.

Worldview defence. As culturally derived worldviews develop uniquely within each individual through social-psychological processes, they are inherently fragile symbolic constructs (Greenberg et al, 1999; Pyszczynski, Abdollahi, Solomon, Greenberg, Cohen, & Weise, 2006). Thus, continual validation of one's worldview is

necessarily undertaken in order to maintain confidence in one's conception of reality and hence, to buffer the potential for anxiety associated with awareness of death. Validation is often accomplished by seeking consensus between one's own worldview and the worldviews of similar others in one's social environment (Pyszczynski, et al., 2006). That said, other individuals who hold opposing worldviews inevitably pose a threat to one's own cultural anxiety buffer (Pyszczynski, et al., 2003).

Encountering the divergent worldviews of others can serve as a reminder that our own notions about the workings of the world may not be without error (Solomon, et al., 1998). The idea that there may be some validity to a cultural worldview that contrasts conceptually with one's own can potentially weaken the confidence with which one's cultural worldview is held. If we have no means with which to cope with the discrepancy between our own and others' worldviews, we might easily succumb to the dread associated with loss of meaning. Thus, worldview defence mechanisms are often triggered to protect us from constantly yielding to worldview-shattering information retained within the worldviews of others. Individuals often exhibit a tendency to actively bolster the legitimacy of their own worldview by derogating or reacting otherwise defensively toward a salient individual who holds an opposing worldview (Greenberg et al., 1990; McGregor et al., 1998; Rosenblatt et al., 1989, Solomon, et al., 1998).

For example, Greenberg et al. (1990) found that Christian college students who experienced a MS induction tended to have more positive reactions toward another Christian person and negative reactions toward a Jewish person, compared to when MS was not induced. Similarly, Tam, Chiu, and Lau (2007) found that, in comparison with a control group, Hong Kong Chinese individuals who were given a MS prime displayed

more bias and allocated more resources toward members of their ingroup than toward members of an outgroup. In another study, McGregor et al. (1998) found that MS can lead individuals to respond aggressively toward worldview-threatening others. When mortality was salient, individuals allocated more hot sauce as a punishment to those who ridiculed their political orientation than to those who exhibited a political ideology in agreement with their own. Differences in hot sauce allocation were not observed when mortality was not salient. Furthermore, Strachman and Schimel (2006) found that thinking about worldview differences between oneself and one's romantic partner lead to less commitment when mortality was primed. Effects of MS were not observed when participants were asked to think about worldview similarities.

Some additional explanatory notes about MS and worldview defence are necessary. First, worldview defence takes some time to become activated (Solomon et al., 1998). If death-related thoughts are being consciously attended to, worldview defence does not occur. In response to death-related thoughts, a two-stage process of defence occurs in the temporal order of *proximal defences* followed by *distal defences*. When death-related thoughts are consciously attended to, proximal defences are enabled (Pyszczynski et al., 1999). These defences are focused on the threat and suppress the thoughts through deliberate, rational processes. Distal defences are activated when death-related thoughts are present outside of conscious awareness. Distal defences are indirect and symbolic. Cultural worldview defence occurs at this stage to maintain perceived value and help individuals to feel as though they are meaningful people in a world of significance (see Pyszczynski et al.).

For example, Routledge, Arndt, and Goldenberg (2004) found that when MS was present but outside of conscious awareness, those American women who maintained the importance of a tanned appearance became less interested in a protective sunscreen product. This is considered an irrational distal defence as it attempts to solve the problem of death by maintaining a cultural derived conception of beauty (i.e., a tanned appearance). However, when MS remained in conscious awareness, these women expressed greater interest in purchasing a protective sunscreen. This is considered a proximal defence because it involves an attempt to avoid the problem of death in a rational manner by protecting oneself from dangerous solar radiation.

Second, and as an extension of the previous point, worldview defences are irrational (Solomon et al., 1998). This is to say that thinking about one's eventual death has no logical connection with defending one's worldview. If individuals are asked to think rationally, they do not tend to respond with worldview defence; thus, individuals must be in an experiential mode of thought to engage in worldview defence (Simon et al., 1997). For example, Simon and colleagues found that a formal experimental setting led participants to answer open-ended questions in a more rational, intellectual manner in comparison with a more relaxed experimental setting. Participants in the formal setting did not display worldview defence when mortality was salient.

Third, it is the potential for anxiety and not the actual experience of anxiety that activates worldview defence (Greenberg, Martens, Jonas, Eisenstadt, Pyszczynski, & Solomon 2003). Generally, no increases in self-reported negative affect are found to occur when mortality is made salient (Pyszczynski et al., 2003). Additionally, supporting evidence was found when Greenberg and colleagues had participants take a placebo that

was said to either block anxiety or enhance memory. For individuals who received the memory-enhancing placebo, MS resulted in worldview defence as expected. However, for those who took the supposed anxiety-blocking drug, no worldview defence occurred when mortality was salient. Thus, when the potential for anxiety is removed, worldview defence became unnecessary.

Fourth, individual differences in specific traits have been found to be associated with differences in responses to thoughts of death. For example, those individuals who are high in personal need for structure (PNS) have been found to exhibit greater reliance on cultural worldviews as a defence when mortality is made salient (Koole & Van den Berg, 2004). As individuals are generally uncertain about what death entails, and because the notion of *post-death* is indefinable and bewildering to contemplate, thoughts of death present a great deal of ambiguity for individuals. Thus, when thoughts of death are salient, the structure and meaning provided by worldviews (Marsella, 2005) should be especially important for those individuals who are high in PNS (Ladd, 2007).

Terror Management Theory and Acculturation Attitudes of the Receiving Society

Threat and Immigration. Though threats specifically related to mortality concerns and worldview defence have not received research attention in the acculturation literature, the effects of other types of threat on attitudes toward immigrants have been studied to some extent. Findings have indicated that perceived threat negatively predicts receiving society members' positive attitudes toward immigrants. Florack et al. (2003) found that level of non-specific threat perceived by members of a receiving society was an important determinant of acculturation attitudes. Specifically, individuals who perceived less threat from immigrants tended to be more supportive of their integration.

Among receiving society members, realistic threats, such as competition for economic resources, have been shown to affect attitudes toward immigrants (Esses, Dovidio, & Hodson, 2002; Esses, Jackson, & Armstrong, 1998; Zagefka, Brown, Broquard, & Martin, 2007). Esses et al. (1998) report that attitudes toward immigrants tend to be most negative when a nation's economic conditions are poor and there is high unemployment. In addition, Esses and colleagues suggest that those outgroups who desire the same resources as one's ingroup are more likely to be perceived as a threat if they are prominent and distinctive from one's ingroup. Zagefka et al. (2007) found that perceiving immigrants as economic competition led to lower support for their integration.

In addition to effects of realistic threats, Esses et al. (2002) suggest that symbolic threats can affect attitudes toward immigrant groups; however, their argument is speculative and largely based on anecdotal references. They suggest that, in the wake of 9/11, the news media have portrayed the tragic events as an attack on the symbols and values that are central to Western lifestyle and ideology. They note that this coverage holds a potential for increasing the symbolic threat felt by members of, not just American society, but all Western societies. Utilizing Social Identity Theory (Tajfel & Turner, 1979), Esses and colleagues (2002) suggest that the attacks on America were likely to have led to members of Western society attempting to "limit the opportunities of other groups in an attempt to achieve or maintain positive group esteem and value" (p. 76). Most prominently among those 'other groups' are those of Middle Eastern background, particularly Muslims. Although they overlook the potential role of terror management processes, they come surprisingly close to a TMT account of symbolic threat. A TMT reading might indicate that the defensive reaction toward the perceived attack on Western

values and beliefs may partially be due to a deep seated need for individuals to protect their culturally derived worldviews as a defence in the face of the then ubiquitous presence of mortality cues. Thus, TMT may potentially be applicable to an examination of the symbolic threat posed by certain immigrant groups, as experienced by receiving society members.

Attitudes and Cultural Distance of Immigrant Groups. Research has recurrently found that receiving society members accept different immigrant groups to varying degrees based on their country of origin (e.g., Montreuil & Bourhis, 2001; Montreuil & Bourhis, 2004; Safdar et al., in press). For example, Montreuil and Bourhis (2004) found that Francophones in Quebec hold more positive and less negative attitudes toward immigrants from France as compared with immigrants from Haiti. They also found that Quebec Anglophones expressed more welcoming and less unwelcoming acculturation attitudes toward British immigrants than toward Indo-Pakistani Sikh immigrants. Similarly, Safdar and colleagues (in press) found that Anglo-Canadian receiving society members in Ontario expressed more welcoming acculturation attitudes toward culturally close British immigrants and more negative attitudes toward culturally distant Arab-Muslim immigrants.

To date, discussion of why these effects are observed has largely been speculative. Research has not tended to focus empirical investigation on the underlying reasons why immigrants who originate in certain countries are recipients of more negative attitudes than others. Examination of terror management processes may reveal an important route through which culturally distinct immigrant groups are differentially accepted or rejected.

Applying TMT to Acculturation Attitudes. Past terror management studies have found that when individuals are primed with MS, there is an increased tendency to react negatively toward those others who hold worldviews that are different from their own (e.g., Florian & Mikulincer, 1998; Greenberg, et al., 1990; McGregor et al., 1998; Pyszczynski et al., 2003; Strachman & Schimel, 2006). As stated earlier, when mortality is made salient, there is an increased need to maintain the cultural anxiety buffer in order to guard against the potential for anxiety induced by thoughts of death (Pyszczynski et al., 2003). Individuals and groups who hold divergent worldviews from one's own can pose a threat to one's worldview; thus, the negative reactions toward dissimilar others is believed to assist in the removal of the perception, or sense, of threat posed by a worldview that is a challenge to one's own (Greenberg, Simon, Pyszczynski, Solomon & Chatel, 1992).

Therefore, for culturally distant immigrants, attitudes that are characterized by acceptance of the immigrant group's culture in the receiving society should generally be expressed to a lesser degree when mortality is salient. Additionally, attitudes that exemplify a rejection of the culturally distant immigrant group's culture should be heightened when mortality is salient.

Conversely, TMT studies have also revealed that, when mortality is salient, there is an increased tendency for individuals to react positively toward those individuals who hold worldviews that are similar to their own (e.g., Florian & Mikulincer, 1998; Greenberg et al., 1990). That is, MS tends to cause more welcoming attitudes toward those who hold a similar worldview to one's own. This is supposedly because those

whose views are similar to one's own provide affirmation for one's own cultural worldview and, therefore, increase its validity.

Therefore, with respect to culturally close immigrants, attitudes that are characterized by acceptance of the immigrant's culture are generally expected to be heightened when mortality is salient. Additionally, attitudes that exemplify a rejection of the similar immigrant group's culture should be reduced when mortality is salient.

Target Immigrant Groups. To explore differences in MS effects, the present research necessitated the study of culturally close and culturally distant target immigrant groups. Differences in religious ideology, language, cultural symbols, and shared history served as core criteria for cultural distance. In addition, cross-cultural differences on Hofstede's (2001) value dimensions were considered as a measured indication of cultural distance. It has been suggested by researchers that these dimensions may be useful for understanding intercultural encounters (Hofstede, 2001; Lewis, in press, Redmond, 2000).

Based on these criteria, it was decided that British immigrants would exemplify a group that is culturally close to Anglo-Canadian receiving society members. The Canadian way of life was initially shaped by the institutions and culture of the early British settlers (Winter, 2007). The influence of the British is still observable in many Canadian symbols such as provincial flags and Canadian coinage (Hiller, 2006). This shared history has clearly yielded many comparable features of the Canadian and British cultures. Arab-Muslim immigrants were deemed to be of a culture of significant distance from that of Anglo-Canadians. Although various groups may have been selected to represent a culturally distant group, current tensions between the West and the Middle

East and the resultant animosity, in the West, held toward Arab-Muslims in particular (e.g., Gerges, 2003; Moore, 2002; Park, Felix, & Lee, 2007; Rowatt, Franklin, & Cotton, 2005) makes attitudes toward Arab-Muslim immigrants an especially important research concern. This is particularly the case in increasingly multi-cultural Western societies such as Canada, the U.K., Australia, and the U.S., where Muslims have felt insecure and threatened post-9/11 (Inayat, 2002).

Caveats. With respect to the general expectations for attitudes toward culturally close and culturally distant immigrant groups, some caveats need to be addressed. First, because of the complex nature of acculturation attitudes (i.e., their bidimensional structure), and the uncertainty and disagreement in the literature about how to measure these attitudes, this work necessitated more than one study. Reliance on a single method would have yielded unconvincing results; so, two studies were conducted and are described below, with similar experimental designs but using different measures of acculturation attitudes.

Second, it should be acknowledged that, because Canadian University student samples are being used in the present studies, a liberal/multicultural ideology might hinder the hypothesized MS effects (Guimond & Palmer, 1996). In other words, when mortality is made salient, a competing ideology valuing tolerance may be bolstered, in addition to or instead of the hypothesized route of cultural worldview bolstering. If a multicultural ideology is a central aspect of the individual's worldview, then it may be inappropriate for the individual to reject a dissimilar other in order to maintain or bolster the strength of their worldview. Support for this notion comes from a study by Greenberg et al (1992) in which it was found that, whereas MS caused conservatives to react

negatively toward a worldview-threatening other, the effect did not hold for liberal participants. In fact, liberals became more tolerant when mortality was salient. Thus, because of the complexity of cultural worldviews, some degree of openness to alternative outcomes must be maintained.

STUDY 1

Study 1 is, as far as I am aware, the first test of whether MS has an effect on acculturation attitudes among receiving society members. Anglo-Canadian receiving society members were induced to think about either death or a control topic and were subsequently asked questions pertaining to their acculturation attitudes toward British (culturally close) and Arab-Muslim (culturally distant) immigrant groups.

Hypotheses

Hypotheses were derived from previous findings in TMT studies and from discussion within the TMT literature about how individuals might respond to encounters with others who hold similar and dissimilar worldviews (e.g., Pyszczynski et al., 2003). The hypotheses are based on the view in the TMT literature that individuals with contrary cultural worldviews present a threat that must be dispelled when mortality is salient; whereas, those individuals with similar worldviews provide reinforcement for one's own worldview, and this support becomes especially valuable when mortality is salient.

A review of TMT research related to worldview defense (e.g., Pyszczynski et al., 2003) would suggest that when mortality is salient, permitting British immigrants their cultural freedom in Canada should be worldview bolstering for Anglo-Canadian receiving society members. Therefore, Anglo-Canadians should be more likely to endorse the welcoming acculturation attitudes of individualism and integrationism toward British

immigrants. Conversely, Anglo-Canadians should become less likely to consent to individualism or integrationism for Arab-Muslims when mortality is salient, as this would promote the potential to give free rein to a competing cultural ideology.

For the attitudes of assimilationism and exclusionism, a floor effect is likely to be observed for British immigrant target group (see Safdar et al., in press). In other words, means for these attitudes should already be so low toward British immigrants that an otherwise expected downward shift may be unlikely. However, endorsement of assimilation and exclusionism held toward Arab-Muslim immigrants are expected to shift upward for two different reasons. Assimilationism can be considered one way of removing the threat of another culture. What would be better for the reinforcement of one's worldview than to have culturally distant others abandon their own cultural ideology in order to accept the cultural ideology of one's own cultural group (Pyszczynski et al., 2003)? Endorsement of exclusionism, in other words, denying the threatening group the right to exist in the receiving society, is an alternative way of removing the threat of the culturally distant other.

Because of its ambivalence toward the culture of immigrants, segregationism presents some difficulty in terms of hypotheses. Endorsement of segregationism involves tolerance of the existence of the immigrant group's culture, as long as it is kept at a distance from the culture of the receiving society (Montreuil & Bourhis, 2001). At first glance, MS may be thought to lead to an enhancement of segregationism held toward Arab-Muslims, as this attitude embraces the distancing of the target immigrant group's culture. However, it is suggested here that, because this attitude would permit a

threatening culture to flourish in society, there should be a reduction in segregationism held toward Arab-Muslim immigrants when mortality is salient.

In contrast, British immigrants' maintenance of their heritage culture is expected to be worldview enhancing; however, because segregationism also includes an approval of the notion that British culture should be kept separately from Canadian culture, shifts in this attitude should not serve a terror management function. Therefore, no shift is expected for segregationism toward British immigrants.

As this research is intended to explore a new and complex area of social psychology, it must be acknowledged that there exists the potential for alternative findings. Given that, in addition to efforts to remove the threat of alternative worldviews, TMT also posits that individuals exhibit an increased tendency to live up to their own worldview when mortality is salient (Greenberg et al., 1992), vastly different effects may be observed in the possible instance that a tolerant multicultural ideology is enhanced. Canada officially became a multicultural society in 1971, under Prime Minister Trudeau (Bibby, 1990). Multicultural policy was further supported by the Multicultural Act of 1988, which stands for the preservation and enhancement of cultural heritage amongst Canadian citizens (James, 2005). Because of multiculturalism's importance in Canada, it is likely that a multicultural ideology has, to some extent, become entrenched within the worldviews of individual Canadians. In fact, Bourhis and colleagues (1997), state that pluralist integration policies, such as Canada's Multiculturalism Act of 1988, can have an influence on the acculturation attitudes held by receiving society members. If multiculturalism is a sufficiently important part of worldviews amongst Canadians, it

may potentially mitigate, or even prevail over, a need to protect oneself from competing worldviews.

Therefore, in order to investigate more thoroughly whether effects are consistent with hypotheses or are more consistent with the bolstering of a multicultural ideology, a measure of personal need for structure (PNS) was taken. As individuals who are high in PNS (Landau, Greenberg, Solomon, Pyszczynski, & Martens, 2006; Koole & Van den Berg, 2004) have been shown to be affected by MS to a greater degree than those who report less need for structure, any effects on acculturation attitudes may be more pronounced for those individuals who desire a high degree of structure in their lives.

The hypotheses for the current study are:

Hypothesis 1. When mortality is salient, members of the receiving society will exhibit more pronounced endorsement of welcoming acculturation attitudes (individualism, integrationism, integrationism-transformation) toward British immigrants (Hypothesis 1a) and lower endorsement of welcoming acculturation attitudes toward Arab-Muslim immigrants (Hypothesis 1b) than when mortality is not salient.

Hypothesis 2. When mortality is salient, members of the receiving society will exhibit more pronounced endorsement of assimilationism and exclusionism toward Arab-Muslim immigrants.

Hypothesis 3. When mortality is salient, members of the receiving society will exhibit lower endorsement of segregationism toward Arab-Muslim immigrants.

Hypothesis 4. Those individuals who are high in PNS will be more likely to exhibit shifts in acculturation attitudes.

Method

Participants

A total of 162 undergraduate students at the University of Guelph participated in this study, of whom 73.5% were female and 26.5% were male. The mean age of participants was 18.68 ($SD = 1.64$). Participants were recruited using an undergraduate participant pool at the University of Guelph. In return for participation, individuals received one extra credit in their undergraduate psychology course. Participants were selected based on the inclusion criteria that their status could not be characterized as either a first or second-generation immigrant (i.e., participants and both of their parents must have been born in Canada). These selection criteria are consistent with Montreuil and Bourhis (2004) in their examination of acculturation attitudes of Anglophone and Francophone receiving society groups in Montreal.

Two participants were removed from all analyses, as they did not meet the inclusion criteria. Six participants were removed from the control group because mortality was found to be salient among these individuals. Two additional participants were removed due to extreme outliers in their data. This resulted in a sample size of 152 participants. Participant removal will be discussed in the results section. With the remaining participants, experimental group similarity (MS vs. control) was assessed in terms of sex, age, family income, religion, and ethnicity. The similarity of the two groups was deemed to be satisfactory. Although both groups had significantly more numerous females than males, the MS group, comprised 18 males and 60 females, did not differ substantially from the control group, which comprised 20 males and 54 females. Participants in the MS group ($M = 18.67$) were the same age as those in the control group

($M = 18.74$), $t(150) = -.28$, $p = .78$. The majority of participants in the MS and control groups indicated that they were from middle or upper middle income families (94.9% and 86.4% respectively). The majority of participants in the MS and control groups were Christian (57.7% and 55.4% respectively). Thirty-seven percent of the MS group and 41.9% of the control group indicated that they were either atheist, agnostic, or not religious. Of specific importance to this study, no participants indicated that they were of Muslim background. In terms of ethnicity, 98.7% of participants indicated that they were Canadian and/or of European descent. The other 1.3% simply indicated multicultural heritage.

Design

The main analysis was in the form of a 2×2 mixed factorial design with salience as the between-subjects factor (MS vs. control topic) and target immigrant group as the within-subjects factor (Arab-Muslim immigrants vs. British immigrants). Participants were randomly assigned to either a MS condition or a control condition. All participants completed both immigrant group questionnaires. Because the immigrant group question sets required counterbalancing, four different variations of the questionnaire package were administered: (1) MS with Arab-Muslim questions first and British questions second, (2) MS with British questions first and Arab-Muslim questions second, (3) control prime with Arab-Muslim questions first and British questions second, and (4) control prime with British questions first and Arab-Muslim questions second.

Materials

Demographics Form. This 11-item form was administered in order to collect some demographic information about participants. Most importantly, the form contains

items that ask whether the participant, their mother, and their father were each born in Canada (see Appendix A).

Filler Questionnaires. The 20-item Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992; see Appendix B), and the 65-item Social Axioms Survey (Leung et al., 2002; see Appendix C), were used as filler questionnaires to disguise the MS prime and the true purpose of the study. These questionnaires were not used in the analyses.

Personal Need for Structure. The 12-item Personal Need for Structure Scale (PNS, Thompson, Naccarato, & Parker, 1989; cited in Neuberg & Newsom, 1993; see Appendix E) was used to test for moderating effects of need for structure on the relationship between MS and acculturation attitudes. The PNS scale is acknowledged to be the best available measure of individual differences in need for simple structure, and has been found to have acceptable reliability and validity (Neuberg & Newsom, 1993). Examples of items include “I enjoy having a clear and structured mode of life” and “I don’t like situations that are uncertain”. The PNS scale was found to have acceptable reliability (see Table 1).

Mortality Salience Manipulation. Following the methods established by TMT researchers, mortality was made salient using two open-ended questions concerning thoughts regarding death (e.g., Arndt et al., 2002; Greenberg et al., 1990; Simon et al., 1997). In order to disguise the prime, participants were informed that the two open-ended questions were to be completed as part of a new measure to assess personality (Rosenblatt et al., 1989). The questions are: “Please briefly describe the emotions that the thought of your own death arouses in you,” and “Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically

dead.” (Landau, et al., 2006; see Appendix E). Directly underneath each of these two questions, a box was presented in which participants were to type their responses.

Participants in the control group were to answer a parallel set of two questions about intense pain, as in Landau et al. (2004). This control was used in order to make certain that it is not simply the potential aversive nature of MS that accounts for differences between groups on dependent measures. The questions are: “Please briefly describe the emotions that the thought of intense pain arouses in you” and “Jot down, as specifically as you can, what you think will happen to you as you physically experience intense pain and once you have physically experienced intense pain.” (see Appendix F). Other studies have confirmed that asking questions about pain does not induce MS (e.g., Landau et al. 2004).

Distraction Task. Following the procedures outlined in past terror management studies (e.g., Landau et al., 2006; Maxfield et al., 2007; Simon et al., 1997), the 60-item Positive and Negative Affective Schedule-Expanded Form (PANAS-X; Watson & Clark, 1991; see Appendix G) was used as a delay and distraction following the MS manipulation. The PANAS-X comprises 60 words and phrases describing different emotions. Participants are to read each word or phrase and indicate, on a 5-point Likert scale, the degree to which each describes their emotional state at present. The PANAS-X contains a general negative affect scale (10-items) and a general positive affect scale (10-items). There are four basic negative emotion scales: fear (6-items), hostility (6-items), guilt (6-items), and sadness (5-items). There are three basic positive emotion scales: joviality (8-items), self assurance (6-items), attentiveness (4-items). There are also four scales measuring other affective states (shyness, fatigue, serenity, surprise).

As previously discussed, a delay is required because effects of distal defences following MS are activated once thoughts of death are outside of focal awareness (Pyszczynski et al., 1999). As in past studies incorporating the PANAS-X, it is also used here to assess whether MS is accompanied by an affective response (e.g., Jonas & Fischer, 2006; Landau et al., 2006). This is done to confirm that shifts in self reported affective state are not responsible for the effects of MS.

Photograph Primes. Prior to the dependent measure relevant to the Arab-Muslim immigrant group, participants were presented with a series of photographs depicting individuals and symbols from Arab-Muslim culture (see Appendix H). Correspondingly, a set of photographs depicting individuals and symbols from British culture were presented prior to the dependent measure targeting British immigrants (see Appendix I). Across the target groups, the photographs were matched for content. They include culturally representative images of: (1) a group of individuals, (2) a family, (3) a group engaging in religious activity, (4) a woman, and (5) a man. The sixth image for the two target groups depicts either a portion of the Palace of Westminster and a double-decker bus (British), or the Grand Mosque of Mecca (Arab-Muslim). For each image, shown one at a time, participants were to briefly describe what they observed. Responses were to be typed in a small box below each image prior to proceeding to the next image. This procedure served to focus participants' attention on, and increase their awareness of, the immigrant group targeted in the subsequent dependent measures.

Host Community Acculturation Scale. The dependent measure used to measure acculturation attitudes of the receiving society was the Host Community Acculturation Scale (HCAS; Bourhis et al., 1997). The HCAS asks participants to indicate, on a 7-point

Likert scale, to what extent they agree or disagree with statements targeting each of the six acculturation attitudes (i.e., individualism, integrationism, integrationism-transformation, assimilationism, segregationism, and exclusionism). Two versions of the HCAS, one targeting Arab-Muslim immigrants and one targeting British immigrants, were administered to each participant (see Appendix J and K).

Each of the six acculturation attitudes was measured using 3-item subscales. Each item measures one of three specified domains of acculturation, giving a total of 18 questions directed toward Arab-Muslim immigrants and 18 questions directed toward British immigrants. The six subscales of the HCAS were found to have acceptable reliability (see Table 1). The three domains of acculturation measured were: culture, values, and customs of the target immigrant group. The questions asking about culture assess acculturation attitudes toward the immigrant group's culture in general. The questions related to values and customs fit within Navas and colleagues' (2005) ideological domain of acculturation, which is subdivided into *religious beliefs and customs* and *ways of thinking, principles, and values*. These domains are considered to be core aspects of the individual's culture that are strongly internalized and difficult to change.

For the Arab-Muslim specific HCAS, an example of an item for the integration subscale within the customs domain is "Arab-Muslim immigrants should maintain their own customs while also adopting Canadian customs". An example of an item for the assimilation subscale within the customs domain is "Arab-Muslim immigrants should give up their own customs for the sake of adopting Canadian customs". The questions for the British specific HCAS correspond to those of the Arab-Muslim scale. An example of an

item for the individualism subscale within the customs domain is “Whether British immigrants maintain their own customs or adopt Canadian customs makes no difference because each person is free to adopt the customs of their choice”.

Procedure

Pilot Study. As the current study involved an experimental design conducted in a new computer format, a pilot test was conducted prior to running the main study. This pilot testing was administered to work out any difficulties with the research protocol and to make certain that no measures or tasks presented unanticipated problems for participants. Six persons volunteered to participate in the pilot testing. Participants in the pilot test were asked to note any problematic aspects of the tasks as they completed the questionnaire package. Upon completion, the experimenter asked participants to comment on difficulty completing the tasks and any anticipated problems. No participants indicated that there were problems with the administration of the experiment; thus, it was decided that the study would be pursued without modification.

Main Study. The study was run in the Centre for Cross-Cultural Research at the University of Guelph on LG Flatron computer screens. Sessions were administered in groups of two to six. On arrival at the laboratory, participants were asked to sit at a computer screen where one of four different formats of the questionnaire package was randomly assigned in advance of the session (participants were blind to the different conditions).

A consent form was placed in front of each computer screen (see Appendix L). Prior to beginning the questionnaire package, participants were asked to read the consent form and sign the back to indicate their willingness to participate in the study.

Participants were informed that the study would take approximately 50 minutes to complete and were asked to quietly remain seated until all other individuals had completed the tasks and had submitted their results. Participants were informed that, when all participants in the session had completed the tasks, the researcher would debrief participants as a group and answer any questions posed by participants about the study.

After all instructions were conveyed, participants were asked to begin the online questionnaire package, which participants viewed as a series of web pages. On the first page, visible to participants as they entered the room, a button labelled “Submit & Go to Beginning of Survey” appeared in the centre of the screen. Clicking this button, participants arrived at the first page of the questionnaire. On this page, participants were presented with instructions to complete two consecutive sets of questionnaires for two supposedly separate studies. In order to mask the true purposes of the MS prime and the subsequent dependent measures, participants were informed that the first study involved answering questions related to beliefs and personality and that the second study involved answering questions about various aspects of culture.

Participants first completed a demographics form followed by the Religious Fundamentalism Scale, the Social Axioms Survey, and the PNS scale. Each of these questionnaires appeared on a single web page, which participants were to scroll down in order to complete the items. When participants finished completion of this set of questionnaires they were to click a “Next” button in the bottom left corner of the screen to proceed to the next task.

Participants then completed either a MS prime or a control prime. When participants finished typing their answers to the open ended questions, they were to click

a button labelled “Next” in order to proceed to the next task. Following the prime was a period of delay and distraction before the dependent measures were administered. This delay consisted of the 60-item PANAS-X. When participants had finished this task they were to click a button labelled “Next” in order to proceed to the subsequent task.

The next section of the study was the same for all participants, except that the order of the two batteries of immigrant group-specific questions were counter-balanced within the MS and control groups, with subsequent analyses showing no order effects (see results section for the analyses). A Photograph-response priming procedure related to Arab-Muslims was presented to participants prior to completion of the dependent measures relevant to the Arab-Muslim immigrant target group. Participants were shown one image at a time. For each image shown, participants were asked to type their responses in a small box below each image. After each photograph-response pair, participants were to click a button labelled “Next” at the bottom of the screen. Participants were then to complete the battery of HCAS questions related to Arab-Muslim immigrants. The same photograph-response procedure was then run with relevance to British immigrants. Participants then completed the battery of HCAS questions related to British immigrants.

Upon completion of both HCAS questionnaires, participants were to click the “Submit” button at the bottom of the screen to indicate that they had finished all of the tasks and were ready to submit their completed data. Clicking this button inputs all entered data into a text file, along with all other participants’ data, which is then sent directly to the researcher to be incorporated into an SPSS data file. Participants were then prompted with a screen indicating that they had finished the questionnaire package.

Finally, participants were presented with a second consent form informing them that they had been deceived as to the true nature of the study (see Appendix M). This second consent form also acted as a debriefing form. Participants were given the option of withdrawing their data after having being informed about the deception. No participant desired that their data be removed. As participants read through it, the researcher debriefed them verbally and answered any questions that they may have had about the study. Participants were asked not to discuss any of the information about the study outside of the research centre as this could affect the responses of those individuals participating at a later time.

Results

Manipulation Check

In order to ensure that the control prime (pain salience) did not induce thoughts of death, a manipulation check was conducted. Two coders, who were blind to the specific manipulation task completed by participants, indicated whether each participant had made mention of death in their written response during the priming task. These codings (death related subject matter vs. absence of death related subject matter) were compared with the real task completed by each participant (MS prime vs. pain salience control). It was concluded that six participants in the control condition had mentioned death in their written answers to one or both of the control questions. These six participants were excluded from all further analyses.

Reliability

Reliability, as measured using Cronbach's alpha (α), was calculated for each of the six HCAS scales targeting both Arab-Muslim and British immigrants and for the

moderator variable of Personal Need for Structure (PNS). Scale reliabilities were calculated separately for the MS condition and the control condition (see Table 1). As all measures were found to have acceptable reliability (i.e., $\alpha > .70$), they were deemed to be satisfactory for use in the analyses.

Preliminary data analyses

All variables were examined to ensure accuracy of data entry, to check for missing values, and to determine whether assumptions of univariate and multivariate analyses had been met. Examination of variables was conducted separately for the MS group ($n = 80$) and the control group ($n = 74$).

For each scale, all data points were found to lie within the appropriate range. The presence of missing data was analyzed for all items. None of the scales had items with missing data exceeding three cases. As missing data did not exceed 5% of the sample for any given item, it was not deemed necessary to calculate data estimates (e.g., maximum likelihood estimation) in the place of the missing data (Tabachnick & Fidell, 2001).

Testing Assumptions for the Examination of MS effects on Affective State. To maintain consistency with theory, it was necessary to ensure that participants' affective states were not influenced by the MS prime. To examine whether MS had an influence on affect, two ANOVAs were conducted on the aggregate positive and negative affect scales. Aggregate positive affect demonstrated acceptable normality. The distribution for the aggregate negative affect scale was found not to be normal. An inverse transformation was conducted on this variable to correct for violations to the assumption of normality. The ANOVA for aggregate negative affect was conducted with transformed and untransformed data. As normalizing transformations did not influence the results, the

analyses with the untransformed data are reported. Levene's test for the positive affect aggregate scale and for the negative affect aggregate scale indicated that homogeneity of variance was achieved for both univariate tests.

A MANOVA was also conducted on the specific positive (joviality, self-assuredness, and attentiveness) and negative (fear, hostility, sadness and guilt) subscales of the PANAS-X. As all negative affect subscales exhibited potentially problematic distributions (i.e. skewness z-scores above a value of 3.29; Tabachnick & Fidell, 1996) inverse transformations were conducted on these variables prior to analyses. Analyses were then conducted on transformed and untransformed data. However, as normalizing transformations did not affect the results, analyses for the untransformed data are reported. See Table 2 for skewness and kurtosis values and the variables.

In order to test for multicollinearity, Pearson's correlations were calculated for the PANAS-X subscales. Correlations for these affect subscales can be viewed in Table 3. To avoid issues of multicollinearity, the sadness subscale of the PANAS-X, which was highly correlated with fear (correlation above .70; Tabachnick & Fidell, 1996), was removed from the analysis. Sadness was believed to be the redundant variable rather than fear because it was also correlated more highly with the subscales of hostility and guilt. Possible violations of homogeneity of the variance-covariance matrix were tested using Box's test of Equality of Covariance Matrices. Box's M did reveal violations to homogeneity of variance-covariance matrices, Box's $M = 41.91$ [$F(21, 82, 265.76) = 1.91, p = .007$]. However, as suggested in Field (2005), because Box's test is highly sensitive to deviations from multivariate normality, generally there is not cause for concern unless $\alpha < .001$ (Wuensch, 2006). At the univariate level, Levene's test

revealed no significant deviations from homogeneity of variance, thus supporting the robustness of the multivariate test statistics (Field, 2005).

Testing Assumptions for the Examination of Order Effects. As participants completed counterbalanced Arab-Muslim and British tailored HCAS scales, two MANOVAs were conducted to test whether there were order effects for responses on the British HCAS and responses on the Arab-Muslim HCAS respectively. Prior to analyses, consistency between the distributions of the acculturation attitudes and assumptions of multivariate analyses were tested.

The first MANOVA was a check for order effects on the Arab-Muslim immigrant condition (occurring either before or after the British immigrant HCAS). The six acculturation attitudes toward Arab-Muslim immigrants were entered into a MANOVA with order as the independent variable. Box's test of Equality of Covariance Matrices revealed that there were no threats to the assumption of equal variance-covariance matrices, Box's $M = 34.07$ [$F(21, 82,632.23) = 1.55, p = .05$]. At the univariate level, Levene's test revealed a significant outcome for integrationism, $F(1, 150) = 8.29, p < .01$. However, as Levene's test tends to liberally reject the null, double-checking the variance ratio (1.92) between the two order groupings of integrationism, revealed a value less than 2, which indicates that it is safe to assume homogeneity of variance (Field, 2005). In order to test for multicollinearity, Pearson's correlations were calculated for the six acculturation attitudes toward Arab-Muslim immigrants. Correlations can be viewed in Table 4. None of the correlations between dependent variables were above .70; therefore, issues of multicollinearity have been avoided.

The second MANOVA was a check for order effects on acculturation attitudes toward British immigrants (either before or after the Arab-Muslim HCAS). Box's test of Equality of Covariance Matrices revealed that there were no threats to the assumption of equal variance-covariance matrices, Box's $M = 9.35$ [$F(21, 82,632.23) = .43, p = .99$]. At the univariate level, Levene's test revealed a possible threat to homogeneity of variance for exclusionism, $F(1, 150) = 4.30, p < .05$. Double-checking the variance ratio (1.40) between the two order groupings of integrationism reveals a value less than 2. This indicates that it is safe to assume homogeneity of variance (Field, 2005). To test for multicollinearity, Pearson's correlations were calculated for the six acculturation attitudes toward Arab-Muslim immigrants. Correlations can be viewed in Table 4. As none of the correlations between dependent variables were above .70 issues of multicollinearity have been avoided.

Testing Assumptions for MS effects on Acculturation Attitudes. Six mixed design ANOVAs were conducted in order to assess, for each of the six acculturation attitudes, the within subjects main effect of target immigrant group (Arab-Muslim vs. British), the between subjects main effect of MS, and the interaction between target group and MS.

To examine the presence of multivariate outliers within the dependent variables, Mahalanobis distances (D^2) were computed for the six attitudes toward Arab-Muslim immigrants and the six attitudes toward the British immigrants separately. According to the critical cut-off values produced by Barnett and Lewis (1979) for a sample size of 100 and 200, cut-off values for $p > .05$ are 24.04 and 25.67 respectively. As no cut-off values are offered for my specific sample size, these values serve as approximate cut-off values. Thus, for the six attitudes toward Arab-Muslims, one case in the MS group (Mahalanobis

$D^2 = 41.85$) and one case in the control group (Mahalanobis $D^2 = 32.16$) were multivariate outliers. As the judgement was made that I could not afford to lose any additional participants in this group, the multivariate outlier observed in the control group was not removed from the analyses. Using the same criteria for multivariate outliers in acculturation attitudes toward British immigrants, no cases had significant Mahalanobis D^2 's.

Box-plots revealed two recurring outliers on the integrationism, assimilationism, and exclusionism acculturation attitudes in the MS group. One of these two cases was also previously found to be a multivariate outlier (above). Both cases were noticeably affecting the normality of outcome scale distributions; therefore, they were removed from subsequent analyses. No further participants were removed from the analyses; thus, 152 total cases remained (78 in the MS group and 74 in the control group).

Examination of normality for dependent variables was pursued by observing histograms, P-P plots, and skewness and kurtosis z-scores, and Shapiro-Wilk tests. Problematic distributions were revealed for each of the acculturation attitudes as measured by the HCAS. Shapiro-Wilk tests with $p < .05$ revealed significant deviations from normality for all acculturation attitudes toward both target immigrant groups in each experimental condition. However, small deviations from normality that do not necessarily bias statistical procedures have been known to yield significant results on the Shapiro-Wilk test (Field, 2005). Observing distributions for acculturation attitudes toward Arab-Muslim immigrants, using a z-score cut-off of 3.29 (Tabachnick & Fidell, 1996), significantly skewed distributions were found for individualism, assimilationism, segregationism, and exclusionism in the MS condition. Integrationism and exclusionism

were found to be significantly skewed in the control condition. Using a z-score cut-off of 3.29, significant kurtosis was observed for exclusionism in both the MS and control conditions.

For acculturation attitudes toward British immigrants, significantly skewed distributions were observed for individualism, integrationism-transformation, assimilationism, and exclusionism in the MS condition. Individualism, assimilationism, and exclusionism exhibited significant skew in the control condition. Significant kurtosis was found for assimilationism in the MS condition and for exclusionism in both conditions. Skewness and Kurtosis values and their respective standard errors can be viewed in Table 2.

As indications of non-normality were observed for each of the six acculturation attitudes, transformations were pursued for all HCAS scales and all subsequent analyses were conducted with the transformed data and with the untransformed data. Square root transformations were pursued first as they tend to have a less severe impact on distributions, in comparison with other common transformations. After square root transformations, all scale distributions exhibited acceptable skewness and kurtosis z-scores except for exclusionism. Therefore, inverse transformations were carried out on exclusionism scales. Aside from the transformations of exclusionism, normalizing transformations for acculturation attitudes did not affect the results of the statistical tests. Thus, with the intention of staying true to the data, all analyses were reported for untransformed data except those for exclusionism.

Testing for violations of the assumption of homogeneity of variance, Levene's test for each of the acculturation attitudes by experimental condition revealed significant

effects for assimilation toward Arab-Muslim immigrants, $F(1, 150)=6.57, p < .05$, and exclusionism toward Arab-Muslim immigrants, $F(1, 150) = 12.49, p < .001$. However, because of the liberal nature of Levene's test, a double-check on the variance ratios for each (1.57 and 1.39 respectively) indicated that it was safe to assume homogeneity of variance, as the variance ratios were below a value of 2 (Field, 2005).

Mortality Salience effects on Affect

ANOVAs conducted on the positive and negative aggregate scales of the PANAS-X, revealed that neither was affected by MS condition, $F(1, 150) = 0.25, p = .61$ and $F(1, 150) = 1.25, p = .27$ respectively.

Using the Wilks' Lambda statistic, a MANOVA conducted on the specific positive (joviality, self-assuredness, and attentiveness) and negative (hostility, guilt, and fear) subscales of the PANAS-X revealed that there were no MS effects on affect for the PANAS-X affect subscales, $F(7, 144) = 0.51, p = .80$. Therefore, as in prior studies, MS did not influence self-report affect and it was deemed unnecessary to take affect into account in further analyses.

Order Effects for Acculturation Attitudes

Entering each of the six acculturation attitudes toward Arab-Muslim immigrants as dependent variables and order of presentation as the independent variable, Using the Wilks' Lambda statistic, a MANOVA revealed that order of presentation did not affect acculturation attitudes toward Arab-Muslim immigrants, $F(6, 145) = .59, p = .74$.

Entering each of the six acculturation attitudes toward British immigrants as dependent variables and order of presentation as the independent variable, a MANOVA revealed that the order of presentation did not affect responses on acculturation attitudes

toward British immigrants, $F(6, 145) = 1.82, p = .10$. As no order effects were observed for attitudes toward either immigrant group, the main analyses were pursued as planned.

Mortality Salience Effects on Acculturation Attitudes

Six mixed design ANOVAs were conducted in order to assess, for each of the six acculturation attitudes, the within-subjects main effect of target immigrant group (Arab-Muslim vs. British), the between-subjects main effect of MS, and the interaction between target immigrant group and MS.

Individualism. There was a significant main effect for target immigrant group on individualism, $F(1, 150) = 10.22, p < .01, \eta_p^2 = .06$. An examination of estimated marginal means revealed that participants endorsed individualism toward British immigrants ($M = 6.12$) to a greater degree than they did toward Arab-Muslim immigrants ($M = 5.90$). There was no significant main effect for MS, $F(1, 150) = .37, p = .54$. However, there was a significant interaction between target immigrant group and MS, $F(1, 150) = 4.20, p < .05, \eta_p^2 = .03$. This indicates that degree of individualism held toward Arab-Muslim versus British immigrants varies as a function of MS.

Tests of simple effects for mixed designs were conducted in order to determine if there were significant differences between individualism held toward the two target immigrant groups within the MS and control groups. Within the MS group, the difference between individualism held toward Arab-Muslim immigrants versus British immigrant was not significant, $F(1, 150) = .68, p = .41$. Within the control group, the difference between individualism held toward Arab-Muslim immigrants versus British immigrant was significant, $F(1, 150) = 13.41, p < .001$.

The interaction graph in Figure 1 reveals that in the control group individualism held toward Arab-Muslim immigrants ($M = 5.78$) is lower than individualism held toward British immigrants ($M = 6.14$). However, in the MS group, individualism toward Arab-Muslim ($M = 6.03$) and British ($M = 6.10$) immigrants does not differ significantly.

Integrationism. There was a significant main effect for target immigrant group on integrationism, $F(1, 150) = 7.74, p < .01, \eta_p^2 = .05$. Examination of estimated marginal means revealed that participants endorsed integrationism toward British ($M = 5.17$) immigrants to a greater degree than toward Arab-Muslim ($M = 4.93$) immigrants. There was no significant main effect for MS on integrationism, $F(1, 150) = .00, p = .95$. There was also no interaction between MS and target immigrant group, $F(1, 150) = 1.73, p = .19$.

Integrationism-Transformation. For integrationism-transformation, there was no significant main effect for target immigrant group, $F(1, 150) = 1.34, p = .25$, or for MS, $F(1, 150) = .01, p = .93$. There was also no interaction between MS and target immigrant group, $F(1, 150) = 1.22, p = .27$.

Assimilationism. There was a significant main effect for target immigrant group on assimilationism, $F(1, 150) = 17.80, p < .001, \eta_p^2 = .11$. Examination of estimated marginal means indicated that assimilationism was endorsed to a higher degree toward Arab-Muslim immigrants ($M = 2.22$) than toward British immigrants ($M = 1.88$). There was no main effect for MS, $F(1, 150) = 2.21, p = .14$. There was also no interaction between MS and target immigrant group, $F(1, 150) = .40, p = .53$.

Segregationism. There was a significant main effect for target immigrant group on segregationism, $F(1, 150) = 8.11, p < .01, \eta_p^2 = .05$. Examination of estimated marginal

means revealed that segregationism was endorsed to a higher degree toward Arab-Muslim immigrants ($M = 2.55$) than toward British immigrants ($M = 2.34$). There was no main effect for MS, $F(1, 150) = .01, p = .94$. There was also no interaction effect for MS and target immigrant group, $F(1, 150) = .08, p = .78$.

Exclusionism. There was a significant main effect for target immigrant group on exclusionism, $F(1, 150) = 17.05, p < .001, \eta_p^2 = .10$. Examination of estimated marginal means revealed that participants endorsed exclusionism toward Arab-Muslim immigrants to a greater degree than they did toward British immigrants. The main effect for MS was not significant, $F(1, 150) = 1.06, p = .30$. No significant interaction was observed between target immigrant group and MS, $F(1, 150) = 1.12, p < .29$.

Moderating Effects of Personal Need for Structure

It was deemed necessary to further investigate MS effects by exploring the possibility that individual differences in PNS may affect the relationship between MS and acculturation attitudes. In the absence of significant interactions between MS and PNS, it remains theoretically justifiable to observe whether MS has an effect at a high level of PNS because the a priori expectations for MS effects are specific to high levels of PNS. It is possible that expected null effects at lower levels of PNS could wash out any effect at high levels of PNS; thus, leading to an insignificant interaction (Tybout & Sternthal, 2001).

Using multiple linear regression to analyze moderation effects (Aiken & West, 1991), PNS was applied as a moderator of the MS effect on each acculturation attitudes toward both Arab-Muslim and British immigrants. For each moderated regression analysis, dummy coded MS and the standardized PNS scores were entered into the

regression equation at the first step and the interaction term was entered at the second step.

The moderating effects of PNS were examined for each of the six acculturation attitudes toward each target immigrant group. First, descriptive statistics were obtained to ensure that MS vs. pain salience was dummy coded properly and that PNS was properly transformed into z-scores (i.e. had a mean of 0 and a standard deviation of 1). Z-scores were computed for continuous variables in order to reduce multicollinearity between predictors and interaction terms (e.g., Aiken & West, 1991; Holmbeck, 2002). Correlations were obtained to ensure that the interaction term was not highly correlated with PNS and salience condition as multicollinearity can pose statistical problems. As multicollinearity was not found to be an issue, analyses were pursued as planned.

Individualism. Observing the effect of PNS as a moderator of the relationship between MS and individualism endorsed toward Arab-Muslim immigrants, the first-order effects (as referred to in West, Aiken, & Krull, 1996) for MS and PNS were not significant. A significant interaction effect was observed between MS and PNS, $B = .41$, $p < .05$. R^2 change associated with the interaction term was .03. Thus, MS appears to affect individualism endorsed toward Arab-Muslim immigrants differently depending on individuals' level of PNS. Statistics for this analysis can be viewed in Table 5.

To further explore the significant moderation, post-hoc probing was conducted to examine conditional effects of MS on individualism at low and high levels of PNS. To explore the conditional effect of MS at high levels of PNS, a new conditional moderator variable was computed by subtracting 1 standard deviation from the z-scores of PNS (procedures follow those outlined in Aiken & West, 1991). A new interaction term was

also computed by taking the product of MS and conditional (high) PNS. The regression coefficient produced for MS represents the relationship between MS and individualism at a high level of PNS. MS was found to significantly affect individualism toward Arab-Muslim immigrants at high levels of PNS, $B = .65, p < .05$. Thus for individuals who are high in PNS, MS tends to result in higher scores on individualism. Conducting the same procedure for a low level of PNS (subtracting -1 standard deviation from PNS and creating a new interaction term), MS was not found to significantly affect individualism toward Arab-Muslim immigrants, $B = -.17, p = .55$. Thus, the effect of MS on individualism seems to hold only for those individuals who are high in PNS.

Figure 2a depicts the moderating effect of PNS on MS and individualism toward Arab-Muslim immigrants. At low and medium levels of PNS, participants in both the MS and control conditions scored similarly on individualism toward Arab-Muslim immigrants. At high level of PNS, however, participants in the control group scored lower on individualism toward Arab-Muslim immigrants ($M = 5.58$) than the MS group ($M = 6.23$).

PNS was also found to moderate the relationship between MS and individualism endorsed toward British immigrants. The first-order effects for MS and PNS were not significant. There was, however, a significant effect for the MS and PNS interaction term, $B = .39, p < .05$. R^2 change associated with the interaction term = .03. Thus, the interaction between MS and PNS accounts for 3% of the variance in individualism endorsed toward British immigrants. Additional statistics for this analysis can be viewed in Table 5.

As the interaction was found to be significant, post-hoc probing was undertaken next to observe effects for MS at levels of PNS (high and low). For a high level of PNS, MS was found not to significantly predict individualism, $B = .35, p = .15$. Despite insignificance, it is noteworthy that the unstandardized regression coefficient is in the positive direction. Conditional on a low level of PNS, MS was not found to significantly predict individualism, $B = -.43, p = .08$. Figure 2b depicts the moderating effect of PNS on MS and individualism toward Arab-Muslim immigrants.

In summary, while the interactions for individualism endorsed toward both Arab-Muslim and British immigrants displayed similar patterns, post-hoc probing of the interactions revealed that MS significantly influences individualism only toward Arab-Muslim immigrants at high levels of PNS.

Integrationism. No significant first-order or moderator effects for PNS were observed for the relationship between MS and integrationism toward Arab-Muslim or British immigrants. Statistics for these moderation analyses can be viewed in Table 6.

Integrationism-Transformation. No significant first-order or moderator effects for PNS were observed for the relationship between MS and integrationism toward Arab-Muslim or British immigrants. Statistics for these moderation analyses can be viewed in Table 7.

Assimilationism. No first order effects for MS were observed on assimilationism toward Arab-Muslim immigrants. A significant first order effect for PNS was observed, $B = .35, p = .05$. The interaction was found to be nonsignificant, $B = .35, p = .08$. Additional statistics for this moderation analysis can be viewed in Table 8.

Exploring the predicted values for assimilationism held toward Arab-Muslim immigrants, there is a visible trend for those individuals in the control group who are high in PNS to score higher on assimilationism than individuals who are low in PNS (Figure 3a). This trend does not appear in the MS group. Observing the effects of MS at a high level of PNS (one standard deviation above the mean), there is a clear trend toward MS leading to lower predicted assimilationism ($Y = 2.05$) than is observed in the control group ($Y = 2.73$). As there is specific interest in observing effects at high levels of PNS, probing for a MS effect specifically at a high level of PNS is justifiable. MS was found to significantly predict assimilationism toward Arab-Muslim immigrants at a high level of PNS, $B = -.68, p < .05$. For those individuals who are high in PNS, assimilationism toward Arab-Muslim immigrants was endorsed to a lesser degree in the MS condition than in the control condition.

For assimilationism endorsed toward British immigrants, no significant first-order effect was observed for MS. A significant first order effect for PNS was observed, $B = .24, p < .05$. However, there was no interaction effect for MS and PNS. Additional statistics for this analysis can be viewed in Table 8. An exploration of the interaction graph (Figure 3b) revealed a similar pattern as for assimilation endorsed toward Arab-Muslim immigrants. That is, at a high level of PNS, there is divergence between the control and MS groups. Despite an insignificant interaction, the effect of MS conditional at high levels of PNS was analyzed. This analysis is justifiable, as there is specific interest in observing effects at high levels of PNS. For those individuals who are high in PNS, MS was found to lead to lower endorsement of assimilationism toward British immigrants $B = -.44, p < .05$.

Segregationism. No significant first-order or moderator effects for PNS were observed for the relationship between MS and segregationism toward Arab-Muslim or British immigrants. Statistics for these moderation analyses can be viewed in Table 9.

Exclusionism. Analyses on exclusionism are carried out on the transformed data. For exclusionism endorsed toward Arab-Muslim immigrants no first-order effect was observed for MS. A significant first-order effect was observed for PNS, $B = .09, p < .01$. There was also a significant interaction effect for MS and PNS on exclusionism, $B = -.10, p < .05$. R^2 change associated with the interaction term was .03. Additional statistics for this moderation analysis can be viewed in Table 10.

Figure 4a depicts the moderating effect of PNS on the relationship between MS and exclusionism toward Arab-Muslim immigrants. At low levels of PNS, MS does not have an effect on exclusionism. At high level of PNS, however, participants in the MS group appear to endorse exclusionism toward Arab-Muslim immigrants to a lesser extent than participants in the control group. Post-hoc probing of the effects of MS on exclusionism toward Arab-Muslim immigrants at high PNS revealed significant result, $B = -.17, p < .05$. Thus, for those individuals who are high in PNS, MS leads to decreased levels of exclusionism.

For exclusionism endorsed toward British immigrants no first-order effect for MS was observed. There was a significant first-order effect for PNS, $B = .09, p < .001$. A significant effect was observed for the interaction between MS and PNS on exclusionism $B = -.08, p < .05$. Additional statistics for this moderation analysis can be viewed in Table 10.

Figure 4b depicts the moderating effect of PNS on the relationship between MS and exclusionism toward British immigrants. At low levels of PNS, the control group and the MS group do not differ substantially. At high levels of PNS, however, the control group endorsed exclusionism toward British immigrants to a greater extent than the MS group. It was therefore judged as valuable to conduct a post hoc analysis of the effect of MS on exclusionism toward British immigrants at a high level of PNS. Although the trend is in the same direction as that for exclusionism toward Arab-Muslim individuals, the effect was not significant $B = -.11, p = .06$.

Discussion

Overview

Study 1 was the first known study to examine whether terror management processes have an effect on acculturation attitudes. The objective was to test whether MS influences Anglo-Canadian receiving society members' desire for culturally close and culturally distant immigrant groups to maintain their heritage culture and/or adopt the culture of the receiving society.

It was hypothesized that when mortality was salient, compared to when it was not: (1) individuals would endorse individualism, integrationism, and integrationism-transformation to a greater degree toward British immigrants and to a lesser degree toward Arab-Muslim immigrants, (2) individuals would endorse assimilationism and exclusionism to a greater degree toward Arab-Muslim immigrants, (3) individuals would endorse segregationism to a lesser degree toward Arab-Muslim immigrants, and (4) acculturation attitudes would be affected to a greater degree for those individuals who are high in PNS.

Findings did not support hypotheses 1, 2, and 3. However, hypothesis 4 was partially supported. Specifically, MS led those individuals who are high in PNS to endorse individualism to a greater extent toward Arab-Muslim immigrants, exclusionism to a lesser extent toward Arab-Muslim immigrants, and assimilation to a lesser extent toward Arab-Muslim and British immigrants. These shifts in acculturation attitudes were in the opposite direction of the effects expected in hypotheses 1 and 2. Integrationism, integrationism-transformation, and segregationism remained unaffected by MS.

Interpretations of the present findings will be discussed in the following subsections. General findings with regard to acculturation attitudes will receive attention first. This will be followed by a discussion of the effects of MS on acculturation attitudes and the effects of PNS as a moderator of these relationships. Limitations of the present study will then be addressed, followed by tentative conclusions prior to proceeding with study 2.

Acculturation Attitudes

It was observed that Anglo-Canadians in southern Ontario were generally welcoming toward both Arab-Muslim and British immigrants. Anglo-Canadians were found to endorse the more welcoming attitudes of individualism and integrationism to a high degree toward both Arab-Muslim and British immigrants. This coincides with previous research (Safdar et al., in press) that examined acculturation attitudes toward British and Arab-Muslim immigrants among Anglo-Canadian receiving society members. Anglo-Canadians also exhibited low endorsement of assimilationism, segregationism, and exclusionism. Shared among these attitudes is the rejection of immigrants' heritage culture in the receiving society (Montreuil & Bourhis, 2004). The general finding of high

endorsement of the more welcoming attitudes and low endorsement of the unwelcoming attitudes, for both culturally similar and culturally dissimilar groups, is consistent with previous research conducted in Canada using the HCAS scale (e.g., Montreuil & Bourhis, 2004; Montreuil, Bourhis, & Vanbeselaere, 2004; Safdar et al., in press). These findings are also consistent with the Canadian National Policy of Multiculturalism in Canada (Berry, 2006; Montreuil & Bourhis, 2004). It appears that Canadian citizens have internalized, to some degree, principles that are consistent with the multicultural philosophy and policies adopted at the Canadian national level.

In accord with Safdar et al. (in press), scores on integrationism-transformation were relatively low toward both Arab-Muslim and British immigrants. The discrepancy between scores on integrationism and integrationism-transformation reflects a desire, amongst Anglo-Canadians, to have immigrants integrate into Canadian culture but, at the same time, ambivalence or even aversion to changing the Canadian cultural landscape in order to make accommodations for immigrants. Berry (2006) states that, inherent in the ideology of multiculturalism is the notion that the receiving society should be ready to adapt to the needs of immigrants. The present research findings indicate that the Anglo-Canadian participants were not prepared to embrace this aspect of multiculturalism.

Despite a general tendency toward more welcoming attitudes held toward both target groups, participants differed somewhat in their endorsement of attitudes toward Arab-Muslim and British immigrants. As has been found by Safdar et al. (in press), participants endorsed the more welcoming attitudes of individualism and integrationism to a significantly greater extent toward British immigrants than they did toward Arab-Muslim immigrants. They also endorsed the more unwelcoming attitudes of

assimilationism, segregationism, and exclusionism to a greater extent toward Arab-Muslim immigrants than toward British immigrants. These findings are also in agreement with past research that has consistently found more welcoming acculturation attitudes to be endorsed toward more culturally close immigrant groups in comparison with more culturally distant immigrant groups (e.g., Montreuil & Bourhis, 2004; Montreuil, Bourhis, & Vanbeselaere, 2004; Safdar et al., in press).

Mortality Salience and Acculturation Attitudes

The hypothesis that MS would lead to increased individualism, integrationism, and integrationism-transformation toward British immigrants and a decrease in these same acculturation attitudes toward Arab-Muslim immigrants was not confirmed. However, for individualism some support was garnered for the alternative possibility that a tolerant worldview might counter the potential for MS induced negative reactions toward Arab-Muslim immigrants. In the control group, participants did desire greater individualism for British immigrants in comparison with Arab-Muslim immigrants; however, it was found that when mortality was salient, there was no difference in individualism between these two groups.

A possible interpretation of this finding is drawn from research with MS and tolerance. Greenberg and colleagues (1992) found support for the notion that a tolerant worldview may work against the need to defend against the worldviews of dissimilar others. The MS induced motivation to distance oneself from or to derogate those with competing worldviews is pursued in an attempt to dispel the threat to one's own worldview posed by dissimilar others. Greenberg and colleagues argue, however, that there are conditions under which such negative reactions toward dissimilar others should

not be expected to occur. Acting on TMT findings, which revealed that MS induces greater adherence to culturally prescribed worldviews, they found that the value of tolerance can compete with the motivation to protect oneself from competing ideologies. In other words, if the value of tolerance is embraced, it is contrary to one's worldview to react intolerantly toward culturally distant individuals in order to preserve said worldview.

As Canada upholds a national policy of multiculturalism (Montreuil & Bourhis, 2004), it is possible that Canadian citizens have internalized a tolerant multicultural ideology as an important component of their worldview (Bourhis & Dayan, 2004). Bourhis and colleagues (1997), state that integration policies, such as Canada's Multiculturalism Act of 1988, can influence the acculturation attitudes held by receiving society members. Thus, members of the Canadian receiving society may be likely to maintain tolerance as an important aspect of their worldview. In fact, Berry (2006) asserts that the main goal of multiculturalism is to "enhance mutual acceptance among all ethnocultural groups" (p. 723).

Applying this possibility to the attitude of individualism, when mortality is salient, a tolerant/multicultural worldview may become more prominent, thus leading to a heightened sense that, whether culturally close or culturally distant, all immigrants in Canada deserve the right to make their own cultural choices as individuals. It is also possible that convergence may be due to a ceiling effect for individualism held toward British immigrants. In other words, although individualism held toward Arab-Muslims increased somewhat when mortality was salient, an upward shift in individualism toward

British immigrants may have been mitigated because participants' responses already approached the upper limit of the scale.

In addition to the observed effect for individualism, it is also possible that the null findings for each of the other acculturation attitudes occurred because tolerant worldviews among Anglo-Canadian participants contended with a MS induced need to protect oneself against a competing worldview. However, this speculation clearly necessitates further research.

The Moderating Role of Personal Need for Structure

The fourth hypothesis was tested to explore more extensively whether MS effects occur among specific individuals who tend to be more affected by thoughts of death. For this reason, analyses were conducted to test whether effects would be observed specifically for those individuals who are high in PNS.

For individuals who are high in PNS, MS was found to lead to increased individualism and decreased assimilationism and exclusionism held toward Arab-Muslim immigrants. No MS effects were observed for individuals who are low in PNS. Thus, for those who are high in PNS, MS was found to lead to greater tolerance toward Arab-Muslims in terms of freedom to make their own cultural choices upon immigration (individualism), less desire to have Arab-Muslims conform to Canadian culture (assimilationism), and less desire to exclude Arab-Muslims from Canadian society.

Why then did these findings occur only for those individuals who are high in PNS? As individuals are generally uncertain about what death entails, and because the notion of *post-death* is indefinable and bewildering to contemplate, thoughts of death present a great deal of ambiguity for individuals. This may be especially concerning for

those who desire a great deal of structure in their lives (Ladd, 2007). Worldviews provide for individuals a world of structure and meaning, or a way to negotiate reality (Marsella, 2005). So, when thoughts of death are salient, the structure provided by worldviews should be especially important for those individuals who need greater structure in their lives. If tolerance is an important component of English Canadians' cultural worldviews, enhancement of tolerance may provide structure in one's life where structure was threatened by the ambiguity of death. So, attempts to distance oneself from or to derogate those who are culturally distant may be mitigated by enhancement of the tolerant worldview for the average person; however, as thoughts of death may be more menacing amongst those who are high in PNS, for these individuals, a tolerant worldview may overwhelm the motivation to distance the outgroup or their culture.

Examining whether the subscales of the HCAS permit opportunities for the expression of a tolerant worldview may help to establish why MS effects were only found for individualism, assimilationism, and exclusionism. First, items for individualism do not ask participants to make decisions about culture that may not be theirs to make. Those who adopt this attitude leave the cultural decisions up to the immigrant themselves (e.g., Whether Arab-Muslim immigrants maintain their cultural heritage or adopt the Canadian culture makes no difference because each person is free to adopt the culture of their choice). High scores on individualism express an ideology of tolerance by allowing for recognition of the cultural freedom of immigrants. Contrastingly, high responses on the exclusionism items imply complete intolerance (e.g., Arab-Muslim immigrants should not maintain their culture of origin, nor adopt Canadian culture, because, in any case, there should be less Arab-Muslim immigration in this province), therefore, low

endorsement of exclusionism necessarily opposes intolerance. Similarly, assimilationism is clearly an ethnocentric attitude in which the immigrant's culture is not tolerated and the receiving culture is highly valued (e.g., Arab-Muslim immigrants should give up their culture of origin for the sake of adopting the Canadian culture). Low scores on assimilationism are therefore resistant to intolerance.

Examining the acculturation attitudes of integrationism and segregationism, as measured by the HCAS, it is observable that opportunities for the expression of tolerance may not be offered. Integration items ask individuals to make a decision about whether the target immigrant group "should" maintain their heritage culture and adopt the receiving culture. Scoring high on items that make up the integrationism scale (e.g., Arab-Muslim immigrants should maintain their own heritage culture while also adopting Canadian culture) implies forced cultural maintenance and forced cultural adoption for the immigrant group. So, whereas high scores are tolerant of both the immigrant group's heritage culture and of the immigrant group in society, inherent in the items is also an intolerance of the absence of culture for immigrants, which may induce among participants a state of confusion.

The expression of a multicultural or a tolerant ideology does not involve the imposition of one's own cultural ideology on others, or even the enforcement of the obligation for immigrants to maintain their heritage culture. In fact, Bourhis and colleagues (1997) indicate that the state should have no place in controlling the cultural activities of immigrants so long as they comply with acceptable conduct. If this is expected of the state, then individual members of the Canadian society should also have no place in imposing cultural constraints on immigrants. Thus, a closer look at this

conceptualization of integrationism clearly reveals little opportunity to uphold a tolerant worldview.

Furthermore, segregationism allows for the maintenance of heritage culture but is also intolerant of immigrants' adoption of the receiving culture. Because the items for segregation combine tolerant and intolerant statements in the double-barrelled items, both low and high endorsement of segregationism may not allow for the opportunity to express tolerance.

Although the acculturation attitudes of integrationism and segregationism allow immigrants to maintain their heritage culture, they also either impose culture on the immigrant (integrationism) or prohibit participation in the culture (segregationism). So, as conceptualized by the HCAS, endorsement of these attitudes may not allow members of the receiving society to express the idea of cultural freedom that a truly tolerant individual in a multicultural society would desire for immigrants. This may be why a potentially tolerant worldview, as enhanced by MS, did not lead to shifts in these acculturation attitudes.

As discussed above, it is possible that a MS enhanced tolerant ideology was responsible for the effects observed in the present study. Provided that this is the case, it is necessary to acknowledge that this enhanced tolerance may partially be due to the nature of the dependent measure. It is conceivable that participants were primed such that Canada and an associated Canadian ideology of multiculturalism were made salient in the present dependent measure. Items in the HCAS ask for participants' opinions as to how immigrants *should* acculturate. This may imply to participants that they are to indicate ideal immigrant acculturation from the perspective of Canadian ideology rather than from

the perspective of their own personal attitudes. Perhaps of equal consequence, references to Canada or Canadian culture are repeated a total of 46 times throughout the dependent measures. This might also have caused a Canadian identity to become salient at a more implicit level. Supporting the notion of identity priming effects, Walsh and Smith (2007) found that when different identities are primed, aspects of worldviews that are consistent with those identities become enhanced with MS. Additionally, Arndt et al. (2002) found that when America was primed among American women, nationalistic thoughts became more accessible when mortality was salient. This did not occur when America was not made salient. Perhaps then, the priming of a Canadian identity resulted in adherence to a tolerant worldview associated with this identity. However, additional research is necessary to further investigate the speculative argument that priming Canadian identity can enhance adherence to a multicultural worldview.

Limitations

Some important limitations of the present study must be discussed. First, some additional attention must be given to the limitations of the dependent measure used in the present study. One possible explanation for some of the null findings is that the cognitively complex nature of the double-barrelled items (Arends-Toth & Van de Vijver, 2007) may have caused participants to enter into a rational rather than an experiential mode of thought (Simon et al., 1997). Simon and colleagues found that when American participants were in a rational mode of thought MS did not lead to the expected worldview defence against an individual who wrote a negative essay about the United States. As many HCAS items necessitated a great deal of thought, participants were likely to have thoroughly considered what they felt to be the correct responses. This may well

have infringed on the use of worldview defence strategies as a means of reducing the potential for anxiety induced by MS.

Secondly, within one double-barrelled item, it may be possible that answering high on one statement provides worldview defence while answering low on the other may provide worldview defence. Items for integrationism toward Arab-Muslims, for example, ask whether participants feel that Arab-Muslims should maintain their culture (which may be worldview threatening), while also adopting the receiving culture (which may be worldview bolstering). As the statements are responded to within one item, they may negate any opportunity for worldview defence. Support for this notion can be taken from the only significant MS by cultural group interaction effect on an acculturation attitude, which occurred for individualism. Individualism is not double-barrelled as it is measured outside of the traditional bidimensional structure of acculturation attitudes.

One could also make the claim that integrationism-transformation is also measured outside of Berry and colleagues (1989) bidimensional structure, however, items for this subscale make the assumption of immigrants' integration (e.g., Canadians should transform certain aspects of their culture of origin in order to really integrate the culture of Arab-Muslim immigrants.). This subscale presents problems in that the items involve many assumptions. First, participants are assumed to understand that the notion of making accommodations for immigrants is accompanied by immigrants' maintenance of biculturalism. This may not be the case, as making accommodations may better enable immigrants to maintain their culture without adopting aspects of the receiving society's culture. Second, the idea of integrating the culture of immigrants is meant to imply the integration of immigrants within the given society, but answering yes to this question

does not necessitate that this will occur. For example, the adoption of Eastern religions and the serving of Eastern foods in the West can be considered the integration of culture; however, it does not necessitate the integration of immigrants from the associated regions. In addition, the use of the word “integrate” in the items implies that participants fully understand what the term means. People in general may not hold as clear a distinction, for example, between integration and assimilation, as do acculturation theorists.

A third problem encountered when measuring shifts in acculturation attitudes using the HCAS is that ceiling effects (individualism and integrationism) and floor effects (assimilationism and exclusionism) potentially diminished the possibility of a number of upward and downward shifts in attitudes to be detected. This was especially likely to have been the case with regard to British immigrants.

A fourth limitation focuses on the choice of acculturation domains measured in the present study. The three item attitude scales were each composed of one item measuring acculturation attitudes with regard to culture in general and the other two items measured attitudes toward customs and values respectively. These domains of acculturation were chosen because they represent aspects of culture that are core to individuals’ worldviews (Navas et al., 2005) and because the nature of the experimental design necessitated relatively short dependent measures. However, they do not cover the broad spectrum of life domains that are involved in the acculturation process (e.g., work habits, economics, family relations, social relations, etc). Perhaps MS may have greater influence within certain domains of acculturation that were not measured in the present study.

Fifth, the delay between the MS prime and the opportunity for worldview defence may have been too brief for MS to leave conscious awareness (Pyszczynski et al., 1999). If MS was not outside of conscious awareness when dependent measures were completed, only proximal or rational means of removing salience, such as distracting oneself from the thoughts of death, would have had the opportunity to present.

A sixth limitation in the present study was that the intense pain salience control prime was found to induce mortality salience in a subset of participants. The use of this prime was based on previous research by Landau et al., (2004) which indicated that the prime did not induce mortality salience. Unfortunately, six participants who had referred to mortality in some capacity had to be removed from the analyses. Therefore, future researchers with MS should be discouraged from using intense pain as a control topic.

A seventh concern was that the photograph primes may have allowed participants to have an opportunity for worldview defence prior to completion of the dependent measures. The photograph primes were intended to increase awareness of and attentiveness to the specific immigrant groups targeted in the dependent measure. However, when participants' were given the opportunity to give brief statements for each photograph, this presented the potential for defensive reactions that may have mitigated the need for later worldview defence when the dependent measures were administered.

A final minor concern is that this study transferred the traditional MS manipulation from paper and pencil administration to computer administration. It is plausible that because participants may vary to some extent with regard to their typing ability and/or general experience with computers, participants with lesser ability may enter into more of a rational mode of thought when answering questions for the

dependent measures. It is also conceivable that the use of computers introduced a level of formality that is generally not present in paper and pencil tasks. Simon et al. (1997) found that a formal experimental setting led participants to answer open ended questions in a more rational, intellectual manner in comparison with a more relaxed experimental setting. They also found that MS did not have effects on worldview defence in the formal versus the relaxed setting. Therefore, the perceived formality of the present study may have hindered MS effects.

Conclusions

It is possible that a tolerance ideology among Anglo-Canadians competes with a need to defend one's worldview against worldview-challenging others. This may be one reason why hypotheses 1-3 were disconfirmed. Obviously, this view cannot be verified simply by speculating about null findings. However, some support for the MS-induced enhancement of a tolerant ideology was provided by the MS-induced increases in individualism and decreases in assimilation and exclusionism toward Arab-Muslim immigrants, among those who are high in PNS.

As various limitations created difficulties with drawing conclusions about the terror management function of acculturation attitudes in the present study, a second study was conducted. Study 2 was designed and conducted in an attempt to improve upon the most pressing limitations of study 1.

STUDY 2

This study was conducted as a replication of study 1 with some important qualifications. Taking into account the concerns encountered in study 1 with regard to the use of the HCAS, a different measure of acculturation attitudes was employed in study 2. The measure for the receiving society's acculturation attitudes used by Navas et al. (2005) in their implementation of the RAEM was used in the present study. The most important features of this measure are that (1) it includes separate items for the maintenance of heritage culture and adoption of the receiving society's culture and (2) it allows for measurement within multiple domains of acculturation.

First, the separation of the two dimensions of acculturation allows participants to answer questions regarding immigrants' maintenance of the heritage culture independent of their answers regarding adoption of the receiving society. This allows for the researcher to examine the dimensions separately and, importantly, allows for the two dimensions to be combined and plotted on a bidimensional plane, which is divided into quadrants similar to those proposed by Berry, et al. (1989). Because participants are enabled to answer questions on the two dimensions separately, rather than within psychometrically problematic double-barrelled items as used in the HCAS, the researcher is better able to interpret the responses of participants. The greater simplicity of the questions may also enable participants to answer the items with more of a gut level response, as is often desired in TMT research. Additionally, in contrast with the HCAS, there is less of a threat with regard to ceiling and floor effects in the implementation of this scale (e.g., Navas et al., 2007).

Second, the measurement of attitudes within multiple domains of acculturation allows for more of a fine-grained approach to acculturation attitudes. The RAEM acknowledges that immigrants and receiving society members are likely to have different acculturation attitudes within different areas of life (Navas et al., 2005). Therefore, the RAEM scale for the receiving society makes it possible to determine whether MS induces shifts in acculturation attitudes within different areas of life. This being exploratory research, it is important to determine which components of acculturation are most affected by MS.

Some additional changes were made to study 2. Research with TMT has found that worldview defence occurs only when thoughts of death are present outside of conscious awareness (Pyszczynski et al., 1999). However, previous research is unclear as to how long a delay is necessary for thoughts of death to leave consciousness. It is possible that the delay and distraction for study 1 was too short. So, as in other TMT studies (e.g., Landau et al., 2004; Walsh & Smith, 2007), to lengthen the delay between the MS manipulation and the dependent measures, participants were to complete a puzzle task directly after the PANAS-X scale and before the dependent measures (e.g., Landau et al., 2004; Walsh & Smith, 2007). The demanding nature of this task should also help to remove thoughts of death from conscious awareness.

Second, photograph primes were removed to eliminate the possibility that worldview defence may occur prior to dependent measures. Instead, participants simply read a brief passage concerning the target immigrant group prior to completion of the dependent measures. Third, this study was run in paper and pencil format in order to lessen potential between-subjects variability in task completion competency.

Importantly, British and Arab-Muslim immigrant groups were targeted once again in study 2. This was done because the use of different target groups would produce results that are not directly comparable to study 1. This would create difficulty interpreting whether differences across the two studies were due to the particular groups targeted or due to the measures of acculturation attitudes used.

Hypotheses

Hypotheses for study 2 were somewhat easier to develop than those for study 1 because of the more easily interpretable structure of the present dependent measure. However, greater explanation is necessary here to provide a rationale for the hypotheses.

The tentative interpretation of the findings for study 1 was that a MS enhanced tolerant worldview might have interfered with the expected worldview defence effects on acculturation attitudes. However, in study 2, the hypotheses are based on the original notion that culturally distant Arab-Muslims present a threat to the Anglo-Canadian worldview while the culturally close British immigrants reinforce the Anglo-Canadian worldview. This central notion was maintained because items in the RAEM target the degree to which individuals *personally prefer* immigrants to acculturate, whereas items in the HCAS ask for opinions as to how immigrants *should* acculturate in Canada. The difference is subtle but the point to be made is that the RAEM focuses on attitudinal preferences of the person responding to the questions, whereas the HCAS may induce responses in accord with what is perceived to be correct conduct for immigrants in Canadian society. Additionally, the dependent measure in study 1 makes a total of 46 references to Canada, which may have primed aspects of the worldview consistent with Canadian ideology. In study 2, the dependent measure makes only two references to

Canada. As the attitudes of personal self are targeted more directly in study 2 (e.g., To what extent *would you like* Arab-Muslim immigrants to mix with people from their countries of origin?), it may be more likely that worldview threat and worldview reinforcement perceived in salient immigrant groups arise when mortality is salient.

Desire for Arab-Muslims to maintain their heritage culture is expected to decrease when mortality is made salient because maintenance of their heritage culture may be seen as a threat to the worldviews of Anglo-Canadians. By contrast, Arab-Muslim's adoption of Canadian culture should bolster the worldviews of receiving society members as their conformity to Canadian cultural practices would serve to legitimize the culture (Pyszczynski et al., 2003). Combining the expectations for these two dimensions leads to the prospect that, when mortality is salient, Anglo-Canadian receiving society members will shift toward assimilation and away from separation toward Arab-Muslim immigrants. Because shifts toward, or away from, integration and exclusion would each include one worldview protecting and one worldview weakening change in attitude, no hypotheses were made with regard to these attitudes.

Because of its closeness to Anglo-Canadian worldview, British culture is expected to bolster the worldviews of Anglo-Canadian receiving society members. Therefore, when mortality is salient, there should be a greater tendency to prefer cultural maintenance among British immigrants. One might assume that MS would induce a shift toward cultural adoption for just about any immigrant group as this would indicate support for the Canadian worldview. However, the present expectation is somewhat different. If British culture already serves to bolster the Anglo-Canadian worldview, then the capacity for that worldview to remain stable amongst the British in Canadian society

should be construed as enhancing to Anglo-Canadian worldview. In other words, imposing change on British immigrants' culture via integration with aspects of Canadian culture has the potential to shake up an already worldview bolstering ideology. Additionally, because Canadian culture may be construed as somewhat ambiguous by Anglo-Canadians (Sumara, Davis, & Laidlaw, 2001), and may not be representative of the Anglo-Canadian specific worldview, the broadly conceived Canadian culture may not be thought of as consistent with individuals' own worldviews.

Thus, contrasting with the hypotheses for Arab-Muslim target immigrants, combining expectations for these two dimensions leads to the prospect that receiving society members will shift away from assimilation and toward separation to when mortality is salient. Note that a shift toward separation in the RAEM does not mean that immigrants should remain separate from the receiving society (as is the case with segregationism as conceptualized by the HCAS). It simply means that it is seen as acceptable for immigrants to retain their culture, without necessarily taking on aspects of the receiving society's culture. Again, because shifts toward or away from integration and exclusion would each include one worldview protecting and one worldview weakening change in attitude, no hypotheses were made with regard to these two acculturation attitudes.

Six specific domains of acculturation, as measured by the RAEM, are also of interest in the current study: (1) labour or work, (2) economy and consumer habits, (3) religious beliefs and customs, (4) ways of thinking: principles and values, (5) social relations, and (6) family relations. As previously discussed, Navas and colleagues (2005) have grouped these domains into peripheral, core, and intermediate aspects of

acculturation. As core aspects of culture (e.g., religious beliefs and ways of thinking) provide individuals with a broad understanding of reality (Koltko-Rivera, 2004), they are likely to be more central to the cultural worldview than peripheral domains. When mortality is salient, these core aspects of culture may require a greater degree of protection than peripheral aspects of culture (e.g., labour and consumer habits). Although this is possible, distinct hypotheses will not be made because, given the somewhat exploratory nature of this study, it may be too complex to hypothesize varying degrees of MS effects for different domains. Furthermore, MS effects for the six domains are expected to occur in the same direction. Therefore, it is believed that hypotheses 1 and 2, listed below, comprehensively cover the present expectations with respect to aggregate acculturation attitudes and the individual domains of acculturation attitudes.

The RAEM also includes a measure of the perception of immigrant's adoption of strategies in the real situation. As these questions ask members of the receiving society to indicate how they perceive immigrants to actually acculturate, MS should not affect responses. That is, worldview defence should not affect individuals' perception of reality, but it should affect preferences for the ideal situation as discussed above. Thus, examining MS effects on perception of the real situation provides a means of examining whether MS effects are specific to acculturation attitudes.

The hypotheses for the current study are:

Hypothesis 1. MS will lead to lower endorsement of ideal assimilation and higher endorsement of ideal separation held toward British immigrants.

Hypothesis 2. MS will lead to higher endorsement of ideal assimilation and lower endorsement of ideal separation held toward Arab-Muslim immigrants.

Hypothesis 3. MS will not affect ideal integration and ideal marginalization held toward Arab-Muslim and British immigrants.

Hypothesis 4. MS will not influence perception of real situation acculturation strategies toward either Arab-Muslim or British immigrants.

Method

Participants

A total of 190 University students participated in this study. Participants were recruited using an undergraduate psychology class at the University of Guelph. In return for participation, individuals received one extra credit in their undergraduate psychology course. Individuals were asked to participate in this study only if they were born in Canada. One participant did not meet the inclusion criteria of having been born in Canada. This participant was excluded from analyses. Of the remaining 189 participants, 81.1% were female and 18.9% were male. The mean age was 19.71 ($SD = 1.50$).

The similarity of group composition was deemed to be satisfactory. The female composition of each group was 89.4% in the control/Arab-Muslim condition, 85.4% in the MS/Arab-Muslim condition, 74.4% in the control/British condition, and 75% in the MS/British condition. Average age was 19.57 in the control/Arab-Muslim condition, 19.56 in the MS/Arab-Muslim condition, 19.74 in the control/British condition, and 19.98 in the MS/British condition. The majority of participants indicated their family income to be in the middle (33.9%) or high middle-income ranges (49.5%). Across all groups, participants generally indicated that they were either Christian (53.8%) or that they were not religious (35.5%). The majority of participants indicated their ethnic origin as

Canadian or European-Canadian (94.1%). The remainder of participants indicated that they were Canadian with ethnic origins in various other parts of the world.

Design

This study used a 2×2 design with two between-subject variables: MS (mortality vs. control) and target group (Arab-Muslim immigrants vs. British immigrants).

Participants were randomly assigned to MS or control conditions and Arab-Muslim or British conditions. Thus, four different variations of a questionnaire were administered: (1) MS/Arab-Muslim target, (2) MS/ British target, (3) control/Arab-Muslim target, and (4) control/British target.

Materials

Demographics and Filler Questionnaires. The same demographics form and series of questionnaires used in study 1 were used in this study. The filler questionnaires were intended once again to disguise the MS prime (See the study 1 materials section).

In this study, the PNS scale was used simply as a filler questionnaire and was not used as a moderator of MS effects. The decision was made that introducing moderator analyses would have overly complicated the results of this study, as a large number of analyses are already necessitated to examine MS effects on the various dimensions of acculturation.

Mortality salience manipulation. Participants were to complete either a MS prime or a non-MS control prime (failing an exam). For the MS prime, participants were informed that they were to complete two open-ended questions as part of a new measure to assess personality (Rosenblatt et al., 1989). This prime was the same as the one used in study 1. The prime consisted of two open-ended questions concerning thoughts regarding

death. The questions were: “Please briefly describe the emotions that the thought of your own death arouses in you,” and “Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead.” (Landau, et al., 2006; see Appendix E) Directly underneath each of these two questions, a space appeared in which participants were asked to write their responses.

The control group was given a non-MS prime, which asked participants to answer two questions about failing an exam. Participants were informed that they were to complete two open-ended questions as part of a new measure to assess personality. This control prime is consistent with many previous studies involving MS (e.g., Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004; Routledge, Arndt, Sedikides, & Wildschut, 2008). In this study, exam failure salience was used as the control rather than intense pain salience because in study 1—and contrary to Landau et al. 2004—it was observed that thoughts of pain evoked MS in a small subset of individuals, which made some of the data unusable. This condition follows the same format as the MS condition except that different questions were asked. The questions for the control group were: “Please briefly describe the emotions that the thought of failing an exam arouses in you” and “Jot down, as specifically as you can, what you think will happen to you as you experience failing an exam and once you have experienced failing an exam.” (see Appendix N)

Delay and Distraction. Following the prime was a period of delay and distraction before the dependent measures were administered. As in past terror management studies, the measure was the PANAS-X. Past studies incorporating the PANAS-X (see Appendix

G) have used it to ensure that affective state does not play a role in determining the effects of MS (e.g., Greenberg et al., 2003; Landau et al., 2006).

Unlike Study 1, a word search puzzle was added to increase the period of delay and distraction before the dependent measures was given (see Appendix O). Puzzle tasks have been used to lengthen the delay between MS and dependent measures in previous TMT studies (e.g., Landau, Greenberg, Solomon, Pyszczynski, & Martens, 2006; Walsh & Smith, 2007). This was done to increase the confidence that thoughts of death were actually outside of conscious awareness when dependent measures were completed (Landau et al., 2004; Pyszczynski et al., 1999). For this task, participants were to find and circle as many of the indicated 12 words as they could. Words provided for this task were death-neutral (e.g., paper, computer, actor) so as not to evoke MS during the delay and distraction. Based on past TMT studies that have found worldview defence to occur after the same period of delay, it is expected that this delay will sufficiently allow thoughts of mortality to escape conscious awareness.

Dependent Measure. As discussed above, the dependent variable in study was the RAEM measure of acculturation attitudes for the receiving society (e.g., Navas et al., 2005). One group of participants received the scale tailored specifically to the Arab-Muslim immigrant target group (see Appendix P), whereas the other group received the same scale but tailored to the British immigrant target group (see Appendix Q). Unlike the HCAS, this scale incorporates a bidimensional structure of acculturation attitudes by including separate questions for the two dimensions. Items target ideal situation and perception of the real situation regarding the acculturation of the specified immigrant

group with relation to maintenance of the immigrant's heritage culture and adoption of the receiving society's culture.

Six of seven domains specified by the RAEM were incorporated into items. As previously discussed, the six domains are: (1) labour and work, (2) economic, (3) family, (4) social, (5) religious beliefs and customs, and (6) ways of thinking, principles and values. The domain of political and government system was excluded as it was deemed to be inapplicable to the present study. Thus, six questions (one for each domain) were asked with regard to participants' personal opinions toward each of the following aspects of acculturation: (1) ideal immigrant maintenance of heritage culture (2) ideal immigrant adoption of receiving culture, (3) reality of immigrant maintenance of heritage culture, (4) reality of immigrant adoption of receiving culture. The measure was 24 items in length. Answers to each question were given using a 5-point Likert scale ranging from "not at all" to "a lot". See Table 11 for reliabilities of the RAEM aggregate scales.

Procedure

The study was run in paper and pencil format in groups of two to ten individuals. As in the first study, Study 2 was conducted at the Centre for Cross-Cultural Research at the University of Guelph. On entering the room, participants were asked to sit at a table where the researcher had previously placed a questionnaire package and a consent form. One of the four questionnaire formats was randomly placed face down at each seat. Prior to beginning the questionnaire package, participants were asked to read the consent form and sign the back to indicate their willingness to participate. Participants were told that completion would take approximately 40 minutes and were asked to quietly remain seated until all other participants had completed all of the tasks and had submitted their

results. They were also informed that, when all participants in the session had completed the tasks, the researcher would debrief them as a group and answer any questions they might have about the study.

After all instructions were conveyed, participants were told to begin completion of the questionnaire package. The first page of the questionnaire package included instructions informing participants that the questions in this survey have been designed for two separate studies (see Appendix R). As in study 1, participants were informed that the questions in the first half of the package were of relevance to a study related to beliefs and personality and that the questions in the second half were for a study related to various aspects of culture. For those participants unfamiliar with the Likert-scale format, comprehensive instructions guided them through the answering process.

As in study 1, participants completed the demographics form and filler questionnaires, followed immediately by the MS or control prime depending on whether they were in the MS or the control group. Following the prime was a period of delay and distraction before the dependent measure was administered. This delay consisted of the 60-item PANAS-X and a short word-search puzzle. Participants then completed the dependent measure. Half the participants received receiving society scale of the RAEM targeting Arab-Muslim immigrants and half received a parallel scale targeting British immigrants.

After completing of all measures, participants were presented with a second consent form informing them that they had been deceived as to the true nature of the study (see Appendix M). This second consent form also acted as a debriefing form. While participants read through it, the researcher debriefed them verbally and answered any

questions that they may have had about the study. Participants were asked not to discuss any of the information about the study outside of the research centre as this could affect the responses of those individuals participating at a later time.

Results

Reliability

Main analyses were conducted using aggregate ideal situation and aggregate real situation acculturation attitude scales in order to test whether MS affects general acculturation attitudes of receiving society members and also to test whether MS affects perceived real situation acculturation strategies of immigrants. Four separate scales measured (1) ideal situation maintenance of heritage culture, (2) ideal situation adoption of the receiving society's culture, (3) perceived real situation maintenance of heritage culture, and (4) perceived real situation adoption of the receiving society's culture. Reliability was calculated for each of the 6-item ideal plane and 6-item real plane RAEM scales. Reliabilities were calculated separately for the scales targeting either Arab-Muslim immigrants or British immigrants and for the MS condition and the control condition (see Table 11). The six aggregate scales were generally found to have an acceptable level of reliability (i.e., $\alpha > .70$). However, ideal adoption of receiving culture was found to have lower reliability for the MS condition (.68) and the control condition (.58) for the Arab-Muslim target group. Real situation adoption of receiving culture was also found to have low reliability in the MS condition for the British target group (.67). However, in accord with recommendations regarding the use of Cronbach's Alpha by Schmitt (1996), as all items in the aggregate scales were deemed to be necessary for

meaningful content coverage of the acculturation process, these lower levels of reliability were judged to be acceptable.

Preliminary Data Analyses

All variables were examined to ensure accuracy of data entry, to check for missing values, and to determine whether assumptions of the analyses had been met. Variables were examined separately for (1) the MS/Arab-Muslim immigrants condition ($n = 48$), (2) the MS/British immigrants condition ($n = 48$), (3) the control group/Arab-Muslim immigrants condition ($n = 48$), and (4) the control group/British immigrants condition ($n = 45$). All participants in each condition were observed to have successfully completed the priming task and the subsequent distraction task prior to completion of the dependent measures.

All data points were found to lie within the appropriate range for each associated scale. The presence of missing data was analyzed for all items. One case in the British control condition was missing all values for 'ideal adoption of receiving culture', one case in the British MS condition was missing all values for 'ideal maintenance of heritage culture' and 'ideal adoption of receiving culture', and one case in the Arab-Muslim control condition was missing all values on 'real situation adoption of heritage culture'. These three cases were removed from all analyses. No further cases were removed from the data set.

Testing Assumptions for the Examination of MS effects on Affective State. To examine whether MS had an influence on affective state, two ANOVAs were conducted on the aggregate positive and aggregate negative affect scales. Positive affect demonstrated acceptable normality in the MS and control conditions. Distributions for the

negative affect scale in both the MS and control conditions were found to be non-normal; therefore, inverse transformations were conducted to normalize the data. The ANOVA for aggregate negative affect was conducted with transformed and untransformed data. However, as normalizing transformations did not affect the results, the analyses conducted with the untransformed data are reported. Levene's test for the positive affect aggregate scale and for the negative affect aggregate scale were not significant, thus indicating that homogeneity of variance was achieved for both univariate tests.

A MANOVA was also conducted on the specific positive (joviality, self-assuredness, and attentiveness) and negative (fear, hostility, sadness and guilt) subscales of the PANAS-X. As all negative affect subscales exhibited potentially problematic distributions (i.e. skewness z-scores above a value of 3.29) inverse transformations were conducted on these variables prior to analyses. Analyses were then conducted on transformed and untransformed data. As the results were not affected by normalizing transformations, the results for the untransformed data are reported.

In order to test for multicollinearity, Pearson's correlations were calculated for the PANAS-X subscales (see Table 12). To avoid issues of multicollinearity, the sadness subscale, which was highly correlated with fear and guilt, was removed from the analysis (correlation above .70; Tabachnick & Fidell, 1996). Also, the guilt subscale, which was highly correlated with hostility and sadness, was removed from the analysis. Five subscales remained in the MANOVA analysis after sadness and guilt were removed.

Possible violations of homogeneity of the variance-covariance matrix were tested using Box's test of Equality of Covariance Matrices. Box's M did not reveal violations to homogeneity of variance-covariance matrices $\text{Box's } M = 25.25 [F(15, 13,5083) = 1.63, p$

= .06]. At the univariate level, Levene's test revealed a significant deviation from homogeneity of variance for joviality, $F(1, 184) = 5.93, p < .05$. However, as Levene's test is considered to liberally reject the null, a double-check on the variance ratio for this subscale was conducted. As the variance ratio for joviality (1.44) was found to be less than four, variances were deemed to be sufficiently homogeneous (Howell, 2007; Clark-Carter, 2004).

Testing Assumptions for Analyses with Aggregate Outcome Variables. ANOVAs were implemented to analyse the effects of MS on the aggregate scores for ideal cultural maintenance and adoption. ANOVAs were also implemented to analyse the effects of MS on the four possible acculturation attitudes. This was done using the Euclidean distances from the maximal values for each acculturation attitude to the location on a bidimensional plane designated by the combined scores on the dimensions of cultural maintenance and adoption (as measured using the Pythagorean Theorem).

Euclidean distance is merely the length of a straight line in multidimensional space, from one point to another. As used here, this is the length of the straight lines from maximal scores on each attitude (each of the four corners of the matrix) to the obtained points within the matrix as designated by scores on the two dimensions. A difference in length between the lines for the MS group and the control group indicates a significant MS induced shift in a given attitude. To better grasp what is meant by the Euclidean distance from the maximal score on each acculturation attitude to a single location in bidimensional space, see Figure 5 and Figure 6. For example, in Figure 5 the length of a straight line from the top right corner of the graph (maximal integration) to the small circular point labelled "S" is the mean Euclidean distance for ideal integration of Arab-

Muslim immigrants within the social relationships acculturation domain. The length of a straight line from the bottom left (maximal marginalization) to the same point gives the mean Euclidean distance for ideal marginalization of Arab-Muslim immigrants within the social relationships acculturation domain. The same can be observed in Figure 6, but for British immigrants or within either figure for any of the domains of acculturation. Figures 5 and 6 will be discussed in a subsequent section.

Box-plots revealed that there were no extreme outliers for the aggregate dependent variables (ideal maintenance, ideal adoption, real situation maintenance, real situation adoption). To examine the presence of multivariate outliers, Mahalanobis distances (D^2) were computed for the four RAEM scales separately for the two MS conditions and the two control conditions. According to the critical cut-off values, produced by Barnett and Lewis (1979), for a sample size of 50 with four variables, the cut-off value for $p > .05 = 18.41$. As no cut-off values are offered for the sample sizes obtained in the present study, this cut-off value serves as the best available estimation, according to which no cases were found to be multivariate outliers within any of the four groups.

Examination of distributions for the aggregate dependent variables revealed that measures of acculturation attitudes were normally distributed within each of the four experimental groupings. That is, all skewness and kurtosis z-scores were found to lie below a cut-off of 3.29 (Tabachnick & Fidell, 1996). Skewness and Kurtosis statistics can be observed in Table 13. The means and standard deviations for each aggregate acculturation scale can be viewed in Table 11.

For the between groups factorial ANOVAs comparing MS effects on the dimensions of cultural maintenance and adoption toward the two target immigrant groups, Levene's tests for equality of error variances revealed that there were no violations to the assumption of homogeneity of variance for ideal maintenance, ideal adoption, real situation maintenance, and real situation adoption.

Examination of distributions for the mean Euclidean distances generally revealed normal distributions for each acculturation attitude within the four experimental groups. The few exceptions were for marginalization in the British control condition, which had a skewness z-score of -3.73 and a kurtosis z-score of 6.29, and assimilation in the British control condition, which had a kurtosis z-score of 3.47. However, because of a desire to keep Euclidean distances in their original and more easily interpretable metric and because distributions were generally normal, the decision was made not to conduct normalizing transformations on the data. The means and standard deviations for Euclidean distances can be viewed in Table 15.

Levene's tests for the ANOVAs measuring between groups differences in acculturation attitudes using Euclidean distances revealed that there were possible threats to the assumption of homogeneity of variance for assimilation, $F(3, 183) = 2.89, p < .05$, and for integration, $F(3, 183) = 3.18, p < .05$. However, as the largest variance in each analysis was less than four times the smallest—variance ratios between the largest and smallest variances for assimilation and integration were 2.16 and 2.93 respectively—the variances were not heterogeneous to such an extent that concern was warranted (Howell, 2007; Clark-Carter, 2004).

Testing Assumption for Analyses of Specific Acculturation Domains. Between groups factorial ANOVAs were conducted on the distances of the obtained scores on the six domains of acculturation from the maximal values for the acculturation attitudes of assimilation and separation.

For the Euclidean distances of the specific domains, normal distributions were generally observed for each acculturation attitude within the four experimental groups. The few exceptions were assimilation within the dimension of social relationships which had a skewness z-score of -3.32 and a kurtosis z-score of 5.08 and separation within the dimension of social relationships which had a kurtosis z-score of 3.78. As with the aggregate measures of acculturation attitudes, because of a desire to keep Euclidean distances in their original metric and because distributions were generally normal, the decision was made not to conduct normalizing transformations on the data.

Potentially problematic violations to homogeneity of variance were revealed for certain domains. Levene's test was significant for assimilation, $F(3, 182) = 2.72, p = .05$, and separation, $F(3, 182) = 2.73, p = .05$, in the work and labour domain, and for assimilation, $F(3, 182) = 3.33, p < .05$, in the ways of thinking domain. However, as the largest variance for each analysis was less than four times the smallest—variance ratios for each were 2.36, 1.98, and 1.87 respectively—the variances were not heterogeneous to such an extent as to warrant concern (Howell, 2007; Clark-Carter, 2004).

Mortality Salience effects on Affect

ANOVAs conducted on the positive and negative aggregate scales of the PANAS-X, revealed that there was a difference in general positive affect between the MS and control conditions, $F(1, 184) = 7.47, p < .01$. Examination of the means indicated that

positive affect was higher in the MS condition ($M = 2.70$) than in the control condition ($M = 2.39$). However, positive affect was not correlated with the aggregate acculturation scales or acculturation domains for either target immigrant group. Therefore, positive affect was not taken into account as a factor affecting group differences in acculturation attitudes. General Negative affect did not differ between the MS and control conditions, $F(1, 184) = 2.18, p = .14$.

Using the Wilks' Lambda statistic, a MANOVA conducted on the PANAS-X subscales of fear, hostility, joviality, self-assuredness, and attentiveness. No significant effect for MS on the PANAS-X affect subscales was found, $F(5, 180) = 2.13, p = .06$.

Mortality Salience Effects on General Acculturation Attitudes

Bidimensional effects of Mortality Salience. In order to measure the effects of MS on acculturation attitudes, Euclidean distances were calculated on a bidimensional plane from the maximal score on each acculturation attitude to the location designated by the combined scores on the dimensions of aggregate cultural maintenance and adoption. Four between-subjects factorial ANOVAs were conducted on the Euclidean distances from maximal scores on acculturation attitudes to obtained scores, with MS condition (MS vs. control) and target immigrant group (Arab-Muslim vs. British) as independent variables.

To illustrate for assimilation—though the same procedure is conducted for each acculturation attitude—maximal assimilation is characterized by a score of 1 on the dimension of heritage culture maintenance and 5 on the dimension of receiving culture adoption (see Figures 5 and 6). The obtained mean for attitudes toward Arab-Muslims in the MS condition on cultural maintenance was 3.45 and the mean on cultural adoption was 2.69. Both the maximal values on assimilation and the obtained values can be

displayed by graphing points on a bidimensional plane (with the maximal score on assimilation located in the upper left corner of the matrix). The Euclidean distance is the length of a straight line from the maximal point for assimilation to the obtained mean score (as measured using the Pythagorean Theorem).

As there are separate mean scores obtained for attitudes toward Arab-Muslim and British immigrants and for MS and control groups, distances can be calculated from the mean score of each of the four experimental groupings to the maximal score on assimilation, amounting to four calculated distances. It is then possible to determine whether these four obtained distances differ statistically from one another. If, for example, a shorter distance from the maximal possible score on assimilation to the mean score is obtained for a MS group versus a control group, a MS induced shift toward assimilation has occurred. This allows one to determine whether MS induces shifts in each acculturation attitude and whether effects differ depending on the immigrant group being targeted. A similar procedure is briefly discussed by Arends-Toth and Van de Vijver (2007) as a method of measuring acculturation attitudes.

For assimilation, no main effect was observed for MS, $F(1, 185) = 1.50, p = .22$, or for target immigrant group, $F(1, 185) = .01, p = .92$. However, there was an interaction between MS and target immigrant group, $F(1, 185) = 6.55, p = .01$.

Tests of simple effects for MS on each target immigrant group were conducted to explore the interaction. As expected in hypothesis 1, MS was found to affect the extent of assimilation held toward British immigrants, $F(1, 185) = 4.90, p < .05$. However, contrary to hypothesis 2, MS did not significantly affect assimilation held toward Arab-Muslim immigrants, $F(1, 185) = 2.05, p = .15$.

It is important to note that all reported means are distances (d) from the maximal score on a given attitude; therefore, smaller values indicate higher endorsement.

Observing Figure 7a, it is clear that distance between maximal assimilation and the observed attitude toward British immigrants is greater in the MS group ($d = 3.60$) versus in the control group ($d = 3.23$). When mortality is salient, individuals were found to be less likely to endorse assimilation toward British immigrants than when mortality was not salient. This finding supports hypothesis 1.

Simple effects analyses also revealed that, whereas individuals' attitudes toward the Arab-Muslim and British immigrants did not differ significantly in the control condition $F(1, 185) = 1.96, p = .16$, they did differ when mortality was salient, $F(1, 185) = 4.94, p < .05$. Figure 7a reveals that when mortality is salient, individuals endorse assimilation to a greater degree toward Arab-Muslim immigrants ($d = 3.24$) than toward British immigrants ($d = 3.60$). So, MS induces significant difference in assimilation held toward Arab-Muslim and British immigrants, and this divergence is due largely to a significant shift away from assimilation for British immigrants.

For separation, no main effect was observed for MS, $F(1, 185) = 1.01, p = .32$, or for target immigrant group, $F(1, 185) = .00, p = .98$. However, there was an interaction between MS and target immigrant group, $F(1, 185) = 6.06, p = .01$.

Tests of simple effects for MS on each target immigrant group were conducted to explore the interaction. As expected, MS was found to affect the degree of separation held toward British immigrants, $F(1, 185) = 5.93, p < .05$. However, contrary to expectations, MS did not significantly affect separation held toward Arab-Muslim immigrants, $F(1, 185) = 1.10, p = .29$.

Observing Figure 7b, the distance between maximal separation and the observed attitude toward British immigrants is significantly smaller in the MS group ($d = 2.22$) versus in the control group ($d = 2.64$). Thus, when mortality is salient, individuals were found to be more likely to endorse separation toward British immigrants than when mortality was not salient. This finding supports hypothesis 1.

An examination of whether MS had an effect on integration for Arab-Muslim versus British immigrants revealed that there was no main effect for MS, $F(1, 185) = 1.50, p = .22$, or for target immigrant group, $F(1, 185) = .01, p = .92$. There was also no interaction between MS and target immigrant group, $F(1, 185) = .41, p = .52$. Thus, MS was not found to affect the degree to which integration was desired by the receiving society for either immigrant group.

Examining whether MS had an effect on marginalization for Arab-Muslim versus British immigrants, no main effect was observed for MS, $F(1, 185) = .06, p = .80$, or for target immigrant group, $F(1, 185) = .32, p = .57$. There was also no interaction between MS and target immigrant group, $F(1, 185) = .73, p = .40$. Null effects for integration and marginalization support the hypothesis that neither attitude serves a terror management function, as indicated in hypothesis 3.

In order to determine whether the obtained MS effects are specific to attitudes, a set of analyses were conducted on the aggregate scales for perception of the real situation. Examining whether MS had an effect on real situation assimilation for Arab-Muslim versus British immigrants, no main effect was observed for MS, $F(1, 185) = .79, p = .37$. However, there was a main effect for target immigrant group, $F(1, 185) = 20.80, p < .001$. Observing the graph in Figure 8a British immigrants were perceived to assimilate to

a greater degree ($d = 3.09$) than were Arab-Muslim immigrants ($d = 3.57$). As predicted, there was no interaction between MS and target immigrant group, $F(1, 185) = .02, p = .90$.

Examining whether MS had an effect on real situation separation for Arab-Muslim versus British immigrants, no main effect was observed for MS, $F(1, 185) = 1.87, p = .17$. However, there was a main effect for target immigrant group, $F(1, 185) = 24.66, p < .001$. Observing the graph in Figure 8b Arab-Muslim immigrants were perceived to separate to a greater degree ($d = 2.23$) than were British immigrants ($d = 2.74$). As predicted, there was no interaction between MS and target immigrant group, $F(1, 185) = .04, p = .85$.

Summarizing the set of analyses on aggregate acculturation attitudes, MS was found to induce a shift in acculturation attitudes held toward British immigrants on a trajectory toward separation and away from assimilation. The opposite shift was expected to be observed for attitudes toward Arab-Muslim immigrants. However, the effect was not found to be significant. Importantly, no MS shifts occurred for perception of actual assimilation and separation. As MS did not affect perception of the actual strategies undertaken by immigrants, effects are specific to the preferred acculturation strategies.

The next step was to conduct additional analyses in an attempt to illuminate how the observed effects are occurring. First, analyses on each of the two separate dimensions of acculturation attitudes (heritage culture maintenance and receiving culture adoption) were conducted to determine the degree to which the two dimensions are responsible for the shifts in attitudes on the bidimensional plane. Second, separate analyses were

conducted on each domain of acculturation in order to observe whether MS affects attitudes within specific areas of life.

Maintenance of Heritage Culture. Between-subjects factorial ANOVAs were conducted with MS condition (MS vs. Control) and target immigrant group (Arab-Muslim vs. British) as independent variables and the dimension of ideal situation maintenance of heritage culture as the dependent variable.

Observing ideal maintenance of immigrants' heritage culture as a function of MS and target immigrant group, no main effects were observed for MS, $F(1, 185) = .04, p = .85$, or for target immigrant group, $F(1, 185) = .00, p = .98$. However, there was an interaction effect for MS and target immigrant group, $F(1, 185) = 5.89, p < .05$.

Following up on the interaction, simple effects analyses revealed no significant effects for MS for ideal maintenance of Arab-Muslim heritage culture, $F(1, 185) = 2.58, p = .11$, or for ideal maintenance of British heritage culture, $F(1, 185) = 3.37, p = .07$. The interaction graph can be observed in Figure 8.

Adoption of Receiving Society's Culture. Observing ideal adoption of receiving society's culture, no main effects were observed for MS, $F(1, 185) = 1.24, p = .27$, or for target immigrant group, $F(1, 185) = .16, p = .69$. The interaction between MS and target immigrant group was also found to be nonsignificant, $F(1, 185) = 2.94, p = .09$.

Mortality Salience Effects on Specific Domains of Acculturation

In accordance with previous research with the RAEM (e.g., Navas et al., 2007), analyses involving specific domains of acculturation were pursued to achieve a better understanding of how MS affects the receiving society's acculturation attitudes.

Figures 5 and 6 were designed to accompany the analyses of the bidimensional structure of acculturation attitudes. Some brief comments about the location of domains on the bidimensional plane are warranted prior to analyses of the MS effects. Figure 5 graphically displays means for the MS group and control group participants on each domain for attitudes toward Arab-Muslim immigrants. Means for each of the central acculturation domains in addition to the (peripheral) economic domain lie within the separation quadrant. The means for the social relations and friendship domain lie within the integration quadrant and the means for the work domain lie within the assimilation domain. When mortality is made salient, there is a general tendency for attitudes in most domains to become more assimilationist and less separationist. However there are exceptions. There appears to be little change in the economic domain. The religious beliefs and customs domain exhibits somewhat of a tendency toward marginalization. Also, for acculturation attitudes toward Arab-Muslims, shifts appear to be greater along the cultural maintenance dimension versus the cultural adoption dimension of acculturation attitudes. It is noteworthy that no domains completely shift from one attitude quadrant to another.

Figure 6 graphically displays means for attitudes toward British immigrants. As with acculturation attitudes toward Arab-Muslim immigrants, each central domain for British immigrants lies within the separation quadrant. The separation quadrant also contains the mean for the economic domain. As with Arab-Muslim immigrants, the social relationships and friendships domain lies within the integration quadrant and the work domain for the control group lies within the assimilation quadrant. However, when mortality is salient, the mean for the work domain lies in the separation quadrant.

Generally, a pattern emerges again for MS effects on acculturation attitudes. For British immigrants, however, the general pattern appears to be a MS induced shift away from assimilation and toward separation.

To test whether MS influences acculturation attitudes within specific life domains, between subjects factorial ANOVAs were conducted on the Euclidean distances from ideal scores on acculturation attitudes to the obtained mean scores, with MS condition (MS vs. Control) and target immigrant group (Arab-Muslim vs. British) as independent variables. Again, to observe exact locations of mean scores on each dimension, see Figure 5 for Arab-Muslim immigrants and Figure 6 for British immigrants.

As no hypotheses were made for integration and marginalization, only analyses of group differences in assimilation and separation were tested. Analyses of the aggregate acculturation attitude scales revealed significant findings specifically for assimilation and separation; therefore, the following analyses are intended to look more closely at the effects observed at the aggregate level. Additional support for focusing analyses on assimilation and separation is drawn from an observation of Figures 5 and 6. The general pattern reveals that only shifts in assimilation and separation warrant further inspection as no MS induced shifts seem to lead toward or away from integration or marginalization. It is crucial to note that all values reported in this section are mean Euclidean distances (d), thus, smaller values represent a closer association with the given acculturation attitude.

Labour or Work. For the domain of labour or work, an examination of whether MS had an effect on assimilation for Arab-Muslim versus British immigrants, revealed no main effects for MS, $F(1, 185) = 1.09, p = .30$, or for target immigrant group, $F(1, 185) =$

1.54, $p = .22$. The interaction between MS and target immigrant group was not significant, $F(1, 185) = 3.40, p = .07$.

Observing whether MS had an effect on separation toward Arab-Muslim versus British immigrants within the domain of labour or work, there was no main effect for MS, $F(1, 185) = 1.17, p = .28$, or for target immigrant group, $F(1, 185) = .83, p = .37$. There was also no interaction between MS and target immigrant, $F(1, 185) = 2.51, p = .12$.

Consumer Habits and Family Economy. For the economic domain, observing whether MS had an effect on assimilation for Arab-Muslim versus British immigrants, there was no main effect for MS, $F(1, 185) = 2.67, p = .10$, or for target immigrant group, $F(1, 185) = 1.79, p = .18$. There was also no interaction between MS and target immigrant, $F(1, 185) = 2.85, p = .09$.

Observing whether MS had an effect on separation for Arab-Muslim versus British immigrants in the economic domain, there was no main effect for MS, $F(1, 185) = 2.79, p = .10$, or for target immigrant group, $F(1, 185) = 2.07, p = .15$. There was also no interaction between MS and target immigrant group, $F(1, 185) = 2.27, p = .13$.

Social Relationships. For assimilation within the domain of social relationships, there was no main effect for MS, $F(1, 185) = .11, p = .74$, or for target immigrant group, $F(1, 185) = .70, p = .40$. There was, however, a significant interaction between MS and target immigrant group, $F(1, 185) = 4.44, p < .05$.

Analysis of simple effects revealed that MS did not have a significant effect on assimilation toward either Arab-Muslim immigrants, $F(1, 185) = 1.61, p = .21$, or British immigrants, $F(1, 185) = 2.79, p = .10$. However, whereas there was a significant group difference in the control condition, $F(1, 185) = 4.17, p < .05$, this effect disappears in the

MS condition, $F(1, 185) = .84, p = .36$. The interaction graph of the Euclidean distances in Figure 9 indicates that, in the control condition, there is a greater desire to have British immigrants ($d = 2.90$) versus Arab-Muslim immigrants ($d = 3.21$) to assimilate in terms of their social relationships. When mortality is salient, degree of assimilation held toward British immigrants ($d = 3.16$) and Arab-Muslim immigrants ($d = 3.02$) does not statistically differ.

For separation within the domain of social relationships, there was no main effect for MS, $F(1, 185) = .01, p = .92$, or for target immigrant group, $F(1, 185) = 2.24, p = .14$. There was also no significant interaction between MS and target immigrant group, $F(1, 185) = 1.78, p = .18$.

Family Relationships. For assimilation within the domain of family relationships, no main effect was observed for MS, $F(1, 185) = .04, p = .84$, or for target immigrant group, $F(1, 185) = 2.10, p = .15$. However, there was a significant interaction between MS and target immigrant group, $F(1, 185) = 7.30, p < .01$.

An examination of simple effects revealed that MS had a significant impact on assimilation held toward Arab-Muslim immigrants, $F(1, 185) = 8.96, p < .01$. Figure 10a reveals that individuals endorsed assimilation toward Arab-Muslims to a greater extent when mortality was salient ($d = 3.48$) than when it was not ($d = 4.02$). The effect on British immigrants was not statistically significant, $F(1, 185) = .04, p = .84$. Simple effects also revealed that, whereas there was no difference between attitudes toward Arab-Muslim and British immigrants in the control group, $F(1, 185) = .78, p = .38$, there was a significant divergence between attitudes toward the two groups when mortality was

salient, $F(1, 185) = 8.96, p < .01$. When mortality was salient individuals exhibited a higher degree of assimilation toward Arab-Muslims than toward the British.

For separation within the domain of family relationships, there was no main effect for MS, $F(1, 185) = .35, p = .56$, or for target immigrant group, $F(1, 185) = 1.89, p = .17$. However, there was a significant interaction between MS and target immigrant group, $F(1, 185) = 6.86, p < .05$.

Examination of simple effects reveals that MS affected attitudes toward British immigrants, $F(1, 185) = 5.25, p < .05$. Figure 10b indicates that when mortality was salient, individuals were more separationist toward British immigrants ($d = 1.60$) than they were in the control condition ($d = 2.23$). MS did not induce a significant shift in separationist attitudes toward Arab-Muslim immigrants, $F(1, 185) = 2.15, p = .15$. A simple effect was also observed for differences between the groups in the MS condition, $F(1, 185) = 8.28, p < .01$, but not in the control condition, $F(1, 185) = .72, p = .40$. As observed in Figure 10b, when MS was salient, individuals were more likely to endorse separation toward British immigrants than they were toward Arab-Muslim immigrants.

Religious Beliefs and Customs. For assimilation within the domain of religious beliefs and customs, there was no main effect for MS, $F(1, 185) = .00, p = .97$, or for target immigrant group, $F(1, 185) = .03, p = .86$. There was also no interaction between MS and target immigrant group, $F(1, 185) = .87, p = .35$.

For separation within the domain of religious beliefs, there was no main effect for MS, $F(1, 185) = .00, p = .96$, or for target immigrant group, $F(1, 185) = .38, p = .54$. There was also no interaction between MS and target immigrant group, $F(1, 185) = .14, p = .70$.

Ways of Thinking: Principles and Values. For assimilation within the ways of thinking domain, there was no main effect for MS, $F(1, 185) = .02, p = .89$, or for target immigrant group, $F(1, 185) = 1.47, p = .23$. There was also no interaction effect for MS and target immigrant group, $F(1, 185) = 3.51, p = .06$.

For separation within the ways of thinking domain, there was no main effect for MS, $F(1, 185) = .22, p = .64$, or for target immigrant group, $F(1, 185) = .44, p = .51$. The interaction effect for MS and target immigrant group was not significant, $F(1, 185) = 3.69, p = .06$.

To summarize the findings within the specific domains for the acculturation attitude of assimilation, there were significant interactions between MS and target immigrant group for the domains of social relationships and family relations. For the acculturation attitudes of assimilation and separation, there were significant effects within the family relations domain. No significant interactions were found for the work, economic, religious beliefs, or ways of thinking domains for assimilation or separation.

Discussion

Overview

Study 2 was conducted to rectify the limitations encountered in study 1, while maintaining consistency with the general experimental design. Among the most important changes was the implementation of a new dependent measure.

In consideration of the new method of measuring acculturation attitudes, hypotheses differed somewhat from study 1. It was hypothesized that: (1) MS would lead participants to endorse assimilation to a greater extent and separation to lesser extent toward Arab-Muslim immigrants, (2) MS would lead participants to endorse separation to

a greater extent and assimilation to a lesser extent toward British immigrants, (3) integration and marginalization would not be affected by MS for attitudes toward either target group, and (4) MS would not affect perceived real situation acculturation strategies of immigrants.

Hypothesis 1 was partially supported. That is, when mortality was salient, individuals were more likely to endorse separation and less likely to endorse assimilation toward British immigrants at the aggregate level. MS also led to greater endorsement of separation toward British immigrants in the family relations domain. Findings also partially supported hypothesis 2. MS did not significantly affect acculturation attitudes held toward Arab-Muslim immigrants at the aggregate level. However, MS did lead to greater endorsement of assimilation toward Arab-Muslim immigrants in the family relations domain. Consistent with hypothesis 3 the attitudes of integration and marginalization were not affected by MS. Lastly, consistent with hypothesis 4, perception of actual acculturation strategies undertaken by immigrants was not affected by MS.

Interpretations of the present findings will be discussed in the following subsections. General findings with regard to the specific domains of acculturation attitudes will receive attention first. This will be followed by a discussion of the effects of MS on acculturation attitudes at the aggregate level and effects of MS within the specific domains of acculturation. Limitations of the present study will then be addressed.

Acculturation Attitudes

Similar patterns of acculturation attitudes were endorsed toward both Arab-Muslim and British immigrants. As with Navas and colleagues' (2007) research with the RAEM in Spain, integration was the desired option only for the social relationships

domain. Therefore, Anglo-Canadians expected both groups to maintain links with members of their heritage culture while also participating in the Canadian society. This is consistent with a multicultural ideology, which involves the desire, not only for cultural groups to be present and to interact amongst themselves, but also for all cultural groups to engage actively in the receiving society (Berry, 2006).

For the domain of work, a modest preference for assimilation was observed. Thus, immigrants in Canada may be expected to conform somewhat to the work habits of Canadians. However, the mean response for this dimension was very close to the midpoint of the matrix, indicating only a slight preference for assimilation.

Whereas Navas et al. (2007) found that a Spanish receiving society generally preferred assimilation for family economy, family relationships, and ways of thinking, and were ambivalent about religious beliefs of immigrants (indicated by a tendency toward midpoint of the matrix), the preference for these four domains in the present Anglo-Canadian sample was for separation. As stated by Hiller (2006), multiculturalism tends to manifest, among immigrants in Canada, as a partial maintenance of heritage culture. He states that, whereas assimilation to the receiving culture often necessarily takes place within life domains such as work habits, aspects of heritage culture are often maintained in domains such as family life. Therefore, in tending toward separation in the more private life domains while preferring moderate assimilation at work and a high degree of social integration, Anglo-Canadians' preferences may compare quite well with the strategies of immigrants. Nevertheless, further research with the RAEM is necessary to determine whether this is indeed the case.

According to Berry (2006), the willingness of the receiving society to accept immigrants' maintenance of their cultural integrity while upholding intergroup contact among immigrants and members of the receiving society is indicative of multicultural ideology. The present findings are consistent with multiculturalism as a means through which cultural identity can be retained by immigrants and tolerated or even accepted by the receiving society, while cross-cultural contact is fostered between groups (Berry, 2006; Hiller, 2006).

Mortality Salience and Acculturation Attitudes

Supporting hypothesis 1, MS induced a shift toward separation and away from assimilation for the preferred acculturation of British immigrants. Studies have found MS induced shifts in evaluations of and aggressive tendencies toward individuals who display worldview consistency or worldview discrepancy (e.g., Greenberg et al. 1990; McGregor et al., 1998); however, to my knowledge, studies have not observed whether preferences for maintenance, adoption, or rejection of culture amongst other individuals or groups serves a terror management function.

This being the case, support for why the present effects were observed must be drawn largely from previous research dealing with MS effects on evaluations of and behaviours directed toward others. As discussed previously, the TMT literature has found that reminders of mortality enhance liking for those who display worldview-consistent attributes and decrease liking for those who display worldview-inconsistent attributes (e.g., Greenberg et al. 1990). Applying this to acculturation attitudes, it is reasonable to assume that MS should lead to encouragement of worldview-consistent cultures and suppression of worldview-inconsistent cultures.

Three interrelated reasons for the terror management function of enhanced separation and diminished assimilation of British immigrants are proposed. These are: (1) the ambiguous nature of Canadian culture, (2) the support provided by British culture for an Anglo-Canadian identity, and (3) the presence of threats to the cultural anxiety buffer in Canadian society.

First, the ambiguous nature of Canadian national identity may help account for the shift toward separation. Sumara, et al. (2001) observe that, aside from statements defining what Canadians are not, individuals from Canada have some trouble agreeing upon a unifying national identity. That is, “discussions around Canadian identity tend to cluster around claims that Canadians are not overbearing, not totalizing, not monolithic, not unified, [and] not static” (Sumara, Davis, & Laidlaw, 2001, p.147). Although it is difficult to distinguish an unambiguous Canadian identity, clear distinctions within Canada are often made along cultural, regional, historic, and linguistic lines. In fact, the diversity and flexibility of identities within Canada’s borders, proliferated by the acceptance of and respect for different ideologies, are often referred to as the nation’s defining characteristics (e.g., Adams, 1997; Bibby, 1990; Sumara, Davis, & Laidlaw, 2001).

From a terror management perspective, the indistinct nature of Canadian identity presents a unique problem. That is, Canadian identity may be too ambiguous to provide strong support for a culturally derived worldview. Canadian citizens may not associate British immigrants’ adoption of Canadian culture as worldview enhancing if the culture of this group, as is, already provides support for their worldview. In other words, if British immigrants were to take on the Canadian culture, which can be perceived as

ambiguous, the threat exists that their worldview would no longer provide support for an Anglo-Canadian worldview. Thus, the maintenance of heritage culture among culturally close British immigrants, without compromising its integrity by allowing it to merge with an uncertain Canadian culture, may have come about, in part, as a desire for a source of secure worldview protection.

As similar worldviews are shared among Anglo-Canadians and the British, the MS enhanced desire for British immigrants' maintenance of their heritage in the absence of cultural integration should enhance the viability of an Anglo-Canadian worldview. There is certainly an affinity held toward the British within Canada, especially amongst Anglo-Canadians. Canadian life was shaped initially by the institutions and culture derived from Canadian ties with Britain and from early British settlers (Winter, 2007). Britain's historical influence on and maternalistic status toward Canada are obvious in Canadian symbolism. Some salient examples are the incorporation of the Union Flag within the designs of provincial flags (e.g., Ontario, Manitoba, British Columbia) and the presence of Queen Elizabeth II on Canadian coins. In fact, Jansen (2005) suggests that, although immigrants from other nations tend to be considered as outsiders, British immigrants are often assumed to have adapted to Canadian society prior to their arrival. According to Jansen, this is likely to be why studies regarding the acculturation of modern British immigrants in Canada are practically absent from the social sciences literature.

The MS enhanced acceptance of the British for their culturally similar worldview may be compounded by the ubiquitous presence of worldview threatening others in Canadian society. As the present study was conducted in the unique multicultural setting

of Canadian society, specific concerns may arise with regard to the defence and enhancement of cultural worldviews among Canadian citizens in general, and specifically among Anglo-Canadians. When mortality is salient, Anglo-Canadians' enhanced partiality for British cultural maintenance in the absence of union with Canadian culture is posited to occur in an effort to preserve an Anglo-Canadian worldview. Support for which may be perceived as having dissipated in the presence of increasing cultural diversity.

Whereas Anglo-Canadians may, in most cases, be comfortable embracing a multicultural ideology (as supported by the similar patterns of acculturation attitude domains for the British and Arab-Muslims in this study), this ideology may not provide the consolation that individuals need in order to quell the potential for MS induced anxiety. The mutual tolerance and open-mindedness that must be present for the successful coexistence of multiple cultures is necessarily characterized by some degree of cultural relativism. Supporting this notion, Bibby (1990) states that the ideology of relativism has come to dominate thought in Canadian society. Relativism implies that all cultures may be construed as equally valid, given the different contexts in which they developed. From a terror management perspective, a certain level of insecurity necessarily accompanies a worldview that embraces its own relativity (Pyszczynski, et al., 2003). In other words, a worldview acknowledging that it itself is not flawless, and that the worldviews of other individuals may also have merit, may be less secure than a rigid worldview with a clear sense of right and wrong. Recent research by Pyszczynski et al. (2006) found that, if dominant worldviews were not security providing, they were not enhanced with MS. Rather, proponents of relativistic worldviews may become more

inclined to embrace ideologies that provide a greater sense of security when thoughts of death are salient.

Consequently, rather than a MS induced enhancement of an insecure multicultural ideology, MS may lead Anglo-Canadians to enhance a more secure desire for greater homogeneity of culture in Canada. This is supported by the finding that, when mortality is salient, individuals desired higher assimilation for Arab-Muslim immigrants in comparison with British immigrants, which was not observed in the control condition. The enhanced acceptance of culturally close British culture in Canadian society is not accompanied by an acceptance of culturally distant Arab-Muslim immigrants. Therefore, the suggestion that MS induces the enhancement of a tolerant culturally-relative ideology (see study 1 discussion) was disconfirmed in the present study.

Hypothesis 2 was not supported. Although aggregate acculturation attitudes toward Arab-Muslims exhibited a tendency to shift in the expected direction (toward assimilation and away from separation), the effect was not significant. It was somewhat surprising to find that acculturation attitudes held toward Arab-Muslim immigrants appear not to have as strong a terror management function as do attitudes held toward British immigrants. It is possible that MS leads Anglo-Canadians to increasingly seek reassurance for their cultural worldviews in those who are culturally close, but that the social desirability of responding in a non-ethnocentric manner mitigated reactions consistent with the need to defend one's worldview against those who are culturally distant. Supporting this notion, the present research used a direct measure of attitudes toward immigrants, whereas past research within the TMT literature has tended to use more covert measures of attitudes and behavioural responses toward others, in order to

remove socially desirable responses (e.g., Greenberg et al., 1990; Greenberg et al., 1992; McGregor et al., 1998; Simon et al., 1997). Despite the possibility that social desirability may interfere with responses, a significant MS effect for attitudes toward Arab-Muslims did occur within the domain of family relations. This will be discussed in a subsequent section.

Supporting hypothesis 3, there were no MS effects on the acculturation attitudes of integration and marginalization. MS-induced shifts in these attitudes were expected not to occur because high and low endorsement of both integration and marginalization involve one potentially worldview protecting attitude and one worldview weakening attitude. To illustrate for Arab-Muslim immigrants, high endorsement of integration entails: (1) the desire for Arab-Muslims to take on aspects of Canadian culture, which should be worldview enhancing for Anglo-Canadians, and (2) the desire for Arab-Muslims to maintain their heritage culture, which should be worldview threatening for Anglo-Canadians. In contrast, high endorsement of marginalization toward Arab-Muslims entails: (1) the desire for Arab-Muslims not to take on aspects of the Canadian culture, which is posited to be worldview threatening, and (2) the desire for this group to give up their heritage culture, which should be worldview enhancing. So, for integration and marginalization, although one component of each may be worldview enhancing, neither can serve a terror management function because they each involve a simultaneous threat to the worldview. Again, the findings of the current study support this line of reasoning.

As the RAEM includes a measure of perceptions of actual acculturation strategies undertaken by immigrants, it was possible to observe whether MS affected the perception

of the real situation in comparison with the hypothesized effects on ideal acculturation of immigrants. Consistent with the expectations of hypothesis 4, MS did not affect the degree to which immigrants were perceived to actually adopt assimilationist or separationist strategies. This is an important finding because it indicates that the MS effects are specific to acculturation preferences versus the reality of acculturation strategies pursued by immigrant groups.

Whereas MS affected attitudes toward the preferred acculturation of British immigrants at the aggregate level, this was not the case for attitudes toward Arab-Muslim immigrants. However, the expected MS effect was observed within the family relations acculturation domain.

For assimilation within the domain of family relations, an interaction was observed between MS and the two target immigrant groups. When mortality was salient, Anglo-Canadians were found to desire that Arab-Muslim immigrants assimilate to a greater extent in terms of their family relations (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters). In contrast, MS lead to a greater degree of separation for the family relations of British immigrants. Thus, perceived family relations of Arab-Muslim immigrants appear to pose a threat to the cultural-worldviews of Anglo-Canadians.

The domain of family relations in Muslim societies, especially with regard to women's rights, has figured prominently as a major topic of discussion within Western discussion about the Muslim world (e.g., Alatas, 2006; Gardels, 2005; Park, Felix, & Lee, 2007; Smidt, 2005). Although individuals' notions of Arab-Muslim families are likely influenced by media-propagate misunderstandings and Western bias (Nasr, 2002),

perceived differences between Western and Arab-Muslim families may be quite salient amongst Western individuals. Bibby (1990) states that, as countless choices are available to Canadians in terms of socially acceptable living situations, the Canadian family is virtually indefinable. Perhaps the threat perceived in Arab-Muslim family life is its more structured nature in which the bonds of marriage are stronger than is generally the case in the modern West (Nasr, 2002).

The family relations domain also entails human rights issues. Many Anglo-Canadians may believe that the rights of women in particular are repressed within Arab-Muslim family life. When culturally derived ideals regarding human rights are perceived to be at stake, Anglo-Canadians may be more likely to desire that immigrants conform to the ideology of Canadian culture.

Whether or not it is actually the case that Arab-Muslim family life is contrary to a Western worldview is not the issue here; rather, it is the perception held by Westerners (specifically Anglo-Canadians) out of which emerges a potential for worldview threat. According to Nasr (2002), views of Muslim family life in the West often arise from misleading and biased sources. As this is the case, a more open and multi-perspective discourse needs to be developed in order to create a better understanding of the reality. Otherwise, Western perceptions will continue to be drawn from various misleading and disreputable sources, which can only serve to exacerbate the perceived threat.

Limitations

As similarly applicable to study 1, the argument can be made that as a university student sample was used in the present study, the current findings may not be generalized to the broader Anglo-Canadian receiving society. Especially pertinent to the issue of

acculturation attitudes is that university students' attitudes tend to be less fully formed than older individuals. Sears (1986) suggests that individuals within the post-secondary age range tend to be uncertain with regard to their attitudes and preferences. He argues further that young university students' concern with public affairs tends to be fleeting, if present at all. Although this is a sweeping statement that clearly does not apply to all individuals at this age, it may be true for many. Additionally, research has found that university students are generally more liberal and tolerant than the general population (Guimond & Palmer, 1996).

Perhaps, the reliance on student samples may diminish the ability to generalize acculturation attitudes to the broader Anglo-Canadian population; however, the findings indicating that MS affects acculturation attitudes should be generalizable. Whereas attitudes may change, the threat posed by MS remains present throughout adulthood (Maxfield et al, 2007). In fact, if older adults are thought to have acculturation attitudes that are more solidified and more integrated into their personalities (Sears, 1986), then this should only strengthen their need to defend these attitudes as an important part of their worldview when mortality is salient. Nevertheless, further research is needed to determine the strength and direction of MS effects on acculturation attitudes among older adults.

An additional limitation applies to the terminology used for the acculturation attitudes in the dependent measure. Specifically, the use of the term separation may be construed as implying the desire, among receiving society members, to maintain separation between the immigrant group's culture and that of the receiving society. This conceptualization can be likened to Bourhis et al.'s (1997) conceptualization of

segregationism (e.g., Arab-Muslim immigrants can maintain their culture of origin as long as they do not mix it with Canadian culture). However, in Navas and colleagues' (2005) conceptualization of separation, the combining of cultures is not presented as negative. That is, there is no suggestion that the two cultures are not to be mixed as in Bourhis and colleagues' (1997) conceptualization of segregationism. Scoring high on separation may even be viewed as respectful of the immigrant group's culture, in that no requirement to take on aspects of the receiving society's culture is enforced.

General Discussion

Taken together, the two studies reported above provide support for the general hypothesis that terror management processes can affect acculturation attitudes. Under the condition of MS, shifts were observed in Anglo-Canadians' endorsement of acculturation attitudes held toward both culturally close British and culturally distant Arab-Muslim immigrant groups. However, there were clear differences between the findings of study 1 and study 2.

In study 1, Worldview defence hypotheses were not supported. However, those individuals who were high in PNS were found to become more tolerant when mortality was salient. So, in study 1 there was no support for the worldview defence directed hypotheses; instead, some support was garnered for the enhancement of a tolerant ideology. In contrast, the predicted worldview defence effects were observed in study 2. MS led individuals to be more inclined to prefer assimilation of Arab-Muslims immigrants compared with British immigrants. This was accompanied by a shift toward higher separation and lower assimilation held toward the British.

Why were worldview defence hypotheses confirmed in study 2, whereas null and alternative findings were present in Study 1? The most likely explanations are drawn from the use of two different models for the measurement of acculturation. Three features that distinguish the two measures from one another may be especially important. These are: (1) the potential for the priming of a national identity in the HCAS, (2) differences in measurement of the acculturation attitudes used in the two studies, and (3) differences in comprehensiveness of the acculturation domains.

First, it is possible that the HCAS may have inadvertently primed individuals to respond to items within the context of their national social identity as Canadian citizens. It is possible that the salience of Canadian identity may cause individuals to respond more consistently with their perceptions of Canadian multicultural ideology. As previously stated in the discussion of study 1, the modified version of the HCAS refers to Canada or Canadian culture a total of 46 times. This contrasts with the RAEM measure which only mentions Canada twice, (both occur in the instructions to the scale and not in the items themselves). Previous research supports this possibility. Arndt et al. (2002) found that, when MS was primed, nationalistic thoughts were activated amongst American men but relationship thoughts were activated amongst American women. This was stated to occur because MS primes more central and security-providing aspects of the cultural worldview. However, nationalistic thoughts increased in accessibility instead of relationship thoughts among women when America was primed along with MS. Furthermore, Walsh and Smith (2007) found that when different identities (gender group vs. self) were primed, aspects of a worldview that are consistent with those identities became enhanced when mortality was salient.

Applying these findings to the present studies, in study 1, the persistent reference to Canada and Canadian culture may have primed a national identity consistent with the ideology of multiculturalism. In study 2, this may not have been the case because Canada was not directly referred to in the items of the dependent measure. Thus, individuals may have been responding from outside of a Canadian social identity in study 2. If this was the case, it might account for the tolerance consistent MS induced attitudinal shifts in study 1, in comparison with the findings consistent with worldview defence in study 2. It must be kept in mind that this interpretation is merely speculative and necessitates further research.

It is also possible that the different effects in the two studies were partially due to the way that the items were phrased in the HCAS and RAEM. Items in the HCAS ask for opinions as to how immigrants *can* or *should* acculturate (e.g., Arab-Muslim immigrants should give up their culture of origin for the sake of adopting the Canadian culture). It is possible that the phrasing of the items in the HCAS led participants to respond from their interpretation of Canadian societal ideology or policy rather than based on their own personal attitudes. Items in the RAEM ask participants specifically for their personal opinions with regard to the ideal situation (e.g., *to what extent would you like Arab-Muslim immigrants to maintain the customs of their country of origin, in relation to the following domains?*). Therefore, Future research with acculturation attitudes should pay heed to the phrasing of questions, so as not to confuse personal attitudes and interpretations of political correctness.

A third potential reason for different MS effects in the two studies is that the respective dependent measures contained different levels of comprehensiveness of

acculturation domains. The modified HCAS scale used in study 1 focused on domains of acculturation roughly comparable to what Navas and colleagues (2005) call ideological domains of acculturation. These domains focus on symbolic representations of the world which are more privately held aspects of culture. In study 2, significant effects were found to occur mainly in the domains related to social and family relationships. Therefore, it is possible that the domains of acculturation that are most likely to be affected by MS were not covered in study 1.

It ought to be stated here that greater emphasis should be placed on the findings of study 2. The general methodology was significantly improved upon in comparison with the methodology of study 1. Moreover, in accord with Arends-Toth and Van de Vijver (2007) who found that the double-barrelled style of acculturation attitude items presented response problems, those participants in study 1 generally indicated that they had difficulty answering the questions asked of them in the HCAS. Participants in study 2 indicated no such difficulties.

Implications and Future Directions

Within multicultural nations such as Canada and, more broadly, throughout a world that has recently witnessed increases in cross-cultural contact due to processes of globalization (Salzman, 2001), individuals are continually exposed to those others who may pose a threat to their culturally derived worldviews. In addition to heightened cross-cultural contact, traditional closely-knit ingroups have become progressively less common. In the case of modernized nations such as Canada, traditional social environments, which can foster the development and maintenance of rigid and secure cultural worldviews, have been supplanted by social environments that promote flexible

but perhaps ultimately more insecure system of meaning (Adams, 1997). This may lead individuals to desire a stronger source of worldview support than currently exists. The present research has indicated that MS can lead Anglo-Canadians to place greater value on the perpetuation of cultures close to their own, perhaps in order to preserve a source of worldview maintenance in a society that lacks a unifying culture.

In multicultural social environments, the problem also arises that culturally distant others and their cultural worldviews present the potential for continual symbolic threat to one's own worldview. The threat of alternative worldviews is resolved in various ways, including derogation of the other and invalidation of their worldview (Salzman, 2001). An additional method, initially proposed by Pyszczynski et al. (2003), was supported here. This is the assimilation of culturally threatening others into one's own culture.

As Canada is a relatively peaceful nation, Canadian citizens are not normally overwhelmed by the continual presence of unpredictable threats to mortality. However, when catastrophic events do take place close to home, such as the terrorist attacks occurring in the United States on September 11, 2002, the presence of existential threats become ubiquitous in the media and are often presented alongside references to cultural groups hastily perceived to be associated with the attacks. It is possible that, in such instances of heightened MS, threat perceived in other cultural groups may be exacerbated. As far as I am aware, there has not yet been research on the long-term effects of MS induced shifts in attitudes. However, the potential exists for periodic shifts toward more ethnocentric attitudes, as induced by MS, to affect long-term perceptions of immigrant groups in a society. Although this is only one example of the potential real world influence of MS on intercultural relations, mortality is an unavoidable aspect of

living, having the potential to permeate our thoughts daily at both explicit and implicit levels. It is therefore important for research to further explore how intergroup relations among immigrants and receiving society members can be affected by MS, and how negative reactions toward other outgroups may be countered.

As this research was, as far as I am aware, the first to explore the effects of terror management processes on acculturation attitudes, many questions remain unanswered and many related opportunities for investigation may be considered.

First, in terms of the Canadian receiving society, future research should examine the effects of MS on acculturation attitudes within an older, non-university student sample. A concern within the area of acculturation attitudes has been the use of tolerant and highly liberal student samples instead of those adults of the receiving society who are generally less well educated, more politically diverse, and who may perceive competition with immigrants for jobs and other resources (Montreuil & Bourhis, 2001). TMT studies have also found that, as liberals differ from conservatives in the composition of their worldviews, they often diverge in terms of their worldview defence responses (e.g., Greenberg et al., 1992). Further research involving MS and acculturation attitudes needs to be conducted amongst an older, non-university student sample in order to better substantiate the findings of the present studies.

Research on the acculturation attitudes toward other immigrant groups should be conducted prior to coming to conclusion about how MS affects the Canadian receiving society's preferences for the acculturation strategies of immigrants. The specific focus on British and Arab-Muslim immigrant groups has provided a starting point, but focusing solely on attitudes toward specific groups constrains the ability to generalize MS effects

on acculturation attitudes toward other culturally close and culturally distant immigrant groups.

Similarly, it is important to pursue research in this area within other receiving societies. This research would demonstrate whether the present findings are specific to Anglo-Canadian receiving society members. It is quite possible that MS effects on acculturation attitudes would vary with nationality, depending on the level of societal tolerance held toward immigrant groups and the degree of security provided by culturally derived worldviews among citizens. For example, because of a common view of immigrants as a threat to the national identity in a country such as Germany (Esses et al., 2006), inducing MS among German citizens might yield greater worldview defence. It is possible that different effects would be observed within nations that have a longer history and a less ambiguous cultural identity than that of Canada. This might be due to a more coherent cultural identity among citizens and a greater desire to preserve said identity for the defence of their psychological worldview. Several individuals, after completion of their participation in the current studies, commented that they had a difficult time determining what Canadian culture was as they completed the dependent measures.

Future research should examine whether priming tolerance influences MS effects on acculturation attitudes. This suggestion follows directly from the previous proposition that a tolerance ideology among Canadians may mitigate the worldview defense directed toward culturally distant immigrant groups. The preferred way to go about such research would be to follow tolerance-priming methodology similar to that used in Greenberg et al. (1992) among citizens within a receiving society known for its non-integrationist policies. Conducting this research in a somewhat intolerant nation would remove the

possibility that pre-existing tolerance may interfere with the observable effects of a tolerance prime.

One setback in the present research may have been the use of direct measures for the dependent variables. Generally, stronger MS effects have been found in the TMT literature by using indirect measures, which reduce social desirability of responses. It may be quite a challenge to come up with measures of acculturation attitudes that are indirect in nature but still applicable to the field. As far as I am aware, there are no such measures currently being used in the acculturation attitudes literature. Procedures implemented in the TMT literature (e.g., Greenberg et al., 1990; Greenberg et al., 1992; McGregor et al., 1998; Simon et al., 1997) often present participants with essays or bogus questionnaire responses completed by fictional others, which subtly indicate that the fictional other embraces a similar or dissimilar worldview. Participants are often given a MS prime and are asked to give interpersonal judgments of the fictional other, such as their liking of the individual or their desire to work with the individual on a subsequent task.

It would potentially be possible to do something similar with an immigrant individual representing a specific group who has adopted or plans to adopt specific acculturation strategies. This may reduce participants' desire to respond in a politically correct manner because participants would not be expressing their attitudes toward an entire cultural group. A research paradigm designed as such would not accurately represent acculturation attitudes as conceived in the literature because of the usage of a nontraditional measure; however, this research might help researchers to understand how cognitions related to terror management processes can affect individuals' perceptions of

individual immigrants' in one's social environment. Ultimately, this research would be more broadly applicable to the MS and intergroup relations literatures, rather than having specific applicability to the acculturation attitudes literature.

Another worthwhile research direction to pursue may involve a focus on how knowledge of the target cultural group influences MS effects on method of preferred acculturation. For example, Western perceptions of cultural groups from the Middle East, particularly Muslims, may be infused with misunderstandings and Western bias (Nasr, 2002), due to the current media coverage of this area and its peoples. What if individuals were taught about a group's culture at some point prior to indicating their attitudes toward the preferred acculturation strategies adopted by the group? It is possible that heightening knowledge of similarities of the group may lead to more welcoming attitudes by reducing the symbolic threat when mortality is salient. This research would have implications for the understanding of how increased knowledge of culturally distant others can affect intergroup relations.

It may also be important to measure how MS affects individuals' acculturation attitudes toward those others within a smaller setting or toward those others who one comes into some degree of first-hand contact with. The present research examined individuals' desires with regard to immigrants in all of Canada. However, Canada is so vast that, depending on the region individuals reside in, they may rarely or never expect to have contact with target cultural groups (Jansen, 2005). Thus, individuals may not have strong attitudes about immigrants spread throughout the nation. If the dependent measure were to refer specifically to international students at one's university or immigrants within one's neighbourhood, for example, greater worldview support or

worldview threat may be perceived. Future research should therefore examine whether attitudes are affected by perceptions of future contact with individuals of the target group.

Lastly, as a necessary accompaniment to this research, it is crucial that similar research is pursued with immigrant groups themselves as the population of interest. Promising research may develop from asking whether MS affects the degree to which immigrants are inclined to take on or reject aspects of the receiving society's culture, in addition to the maintenance of their own culture, and whether MS affects the desire for immigrants to maintain and adopt contacts with members of their heritage culture and members of the receiving society's culture. In fact, as this research would concern the immigrant themselves, and their own maintenance and adoption of culture, MS may have a greater influence on their attitudes.

Conclusions

Despite the occurrence of different findings in studies 1 and 2, support has been obtained for the idea that terror management processes can have an effect on the acculturation attitudes of receiving society members. This finding is important to TMT for several reasons.

Previous research on worldview defence within the TMT literature has focused largely on MS induced shifts in interpersonal evaluations or behavioural responses exhibited toward others who support or detract from the validity of one's culturally derived worldview (e.g., Greenberg et al., 1990; McGregor et al., 1998; Rosenblatt et al., 1989, Solomon, et al., 1998). The present research, on the other hand, supports the notion that terror management concerns may actually lead individuals to exhibit shifts in their desire for others to maintain, adopt, or reject cultural practices and ideology. This is

notable because it indicates that terror management processes can affect responses toward others on a societal scale in addition to specific salient others who clearly threaten or bolster one's worldview (e.g., Greenberg et al., 1990; McGregor et al., 1998). However, it is possible that terror management processes work more powerfully when applied to a smaller setting. That is, the effects in the present study may be weak in comparison to a similar study examining attitudes toward immigrant groups within one's own city, university, or workplace as the worldview threat would be acknowledged as being closer to home. This possibility deserves attention because the receiving society members in direct contact with immigrants clearly play a more important role in the lives of the immigrants (Jasinskaja-Lahti et al., 2003; Piontkowski et al., 2000).

It was established, specifically with reference to the findings in study 2, that MS can induce a divergence of attitudes among Anglo-Canadians toward British and Arab-Muslim immigrants. From a TMT perspective, it was proposed and argued that this divergence is directly related to existential concerns regarding perceived differences in cultural distance. Although study 2 involved improvements in methodology in comparison with study 1, the findings from study 1 cannot be ignored. In fact, study 1 provides further support for terror management processes not necessarily leading to negative reaction toward others who maintain a dissimilar worldview (see Niesta, Fritsche, & Jonas, 2008). So, although this research raises more questions than it answers, the questions that have arisen should contribute to furthering theoretical research with TMT, and the development of the potential for the application of TMT in practical settings. It must be left to future research to disentangle those conditions under which

worldview defence is exhibited from those conditions under which tolerant ideologies prevail over such defensive reactions.

Through heeding the call set forth by Greenberg et al. (1990) to pursue terror management related exploration within new fields of psychological inquiry, this research adds valuably to both the TMT and the acculturation literatures. The two studies presented above have provided the first known linkage between TMT and the acculturation attitudes literature. Specifically pertaining to the second study, support has been found for the possibility that terror management processes may be one route through which divergent expectations for distinct immigrant groups can develop.

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Table 1

Cronbach's Alpha, Means, and Standard Deviations for Scales in Study 1

	Mortality Salience		Control	
	Alpha	Mean (SD)	Alpha	Mean (SD)
HCAS (Arab-Muslim)				
Individualism	.89	6.03 (1.16)	.92	5.78 (1.24)
Integrationism	.90	4.99 (1.40)	.94	4.86 (1.55)
Integ-transformation	.88	2.35 (1.15)	.91	2.28 (1.23)
Assimilation	.86	2.07 (1.13)	.92	2.36 (1.41)
Segregationism	.90	2.57 (1.34)	.93	2.54 (1.34)
Exclusionism	.91	1.54 (.80)	.98	1.91 (1.28)
HCAS (British)				
Individualism	.91	6.10 (1.11)	.91	6.14 (1.03)
Integrationism	.92	5.12 (1.39)	.95	5.22 (1.34)
Integ-transformation	.90	2.36 (1.10)	.96	2.46 (1.21)
Assimilation	.83	1.78 (.84)	.83	1.97 (1.06)
Segregationism	.89	.34 (1.11)	.91	2.35 (1.27)
Exclusionism	.95	1.36 (.65)	.88	1.44 (.76)
Personal Need for Structure	.83	3.35 (.73)	.89	3.26 (.89)

Table 2

Skewness and Kurtosis Statistics with Standard Errors for HCAS Scales

	Mortality Salience		Control	
	Skew (SE)	Kurtosis (SE)	Skew (SE)	Kurtosis (SE)
HCAS (Arab-Muslim)				
Individualism	-1.02 (.27)*	.06 (.54)	-.87 (.28)	.10 (.55)
Integrationism	-.60 (.27)	.25 (.54)	-1.08(.28)*	.62 (.55)
Integ-transformation	.59 (.27)	-.56 (.54)	.67(.28)	-.68 (.55)
Assimilation	1.19 (.27)*	.59 (.54)	.90 (.28)	-.44 (.55)
Segregationism	.94 (.27)*	.77 (.54)	.48 (.28)	-.84 (.55)
Exclusionism	1.62 (.27)*	2.26 (.54)*	1.42 (.28)*	1.17 (.55)*
HCAS (British)				
Individualism	-1.30 (.27)	1.19 (.54)	-1.29 (.28)*	1.56 (.55)
Integrationism	-.85 (.27)	.99 (.54)	-.90 (.28)	1.13 (.55)
Integ-transformation	.98 (.27)*	.71 (.54)	.30 (.28)	-1.05 (.55)
Assimilation	1.31 (.27)*	1.93 (.54)	1.12 (.28)*	.56 (.55)
Segregationism	.44 (.27)	-.95 (.54)*	.76 (.28)	-.32 (.55)
Exclusionism	2.08 (.27)*	4.42 (.54)*	1.99 (.28)*	3.72 (.55)*
Personal Need for Structure	.12 (.27)	-.17 (.54)	.02 (.28)	-.34 (.55)

Note. * = Significant skewness or kurtosis at $p < .001$.

Table 3

Intercorrelations for Affect Subscales in Study 1

	1	2	3	4	5	6	7
1. Fear	--	.63*	.60*	.75*	.03	.02	-.03
2. Hostility		--	.57*	.65*	-.02	.13	-.02
3. Guilt			--	.68*	-.05	-.10	-.15
4. Sadness				--	-.11	-.09	-.09
5. Joviality					--	.69*	.55*
6. Self Assuredness						--	.52*
7. Attentiveness							--

* $p < .01$

Table 4

Intercorrelations for Acculturation Attitudes Held toward Arab-Muslim and British Immigrants

	1	2	3	4	5	6
Arab-Muslim Immigrants						
1. Individualism	--	-.19*	.17*	-.60**	-.34**	-.40**
2. Integrationism		--	-.04	.28**	.19*	.18*
3. Integ-Transformation			--	-.21**	-.15	-.15
4. Assimilationism				--	.64**	.59**
5. Segregationism					--	.49**
6. Exclusionism						--
British Immigrants						
1. Individualism	--	-.04	.09	-.44**	-.24**	-.32*
2. Integrationism		--	-.01	.05	.14	.03
3. Integ-Transformation			--	.11	.06	.10
4. Assimilationism				--	.56**	.53**
5. Segregationism					--	.33**
6. Exclusionism						--

* $p < .05$, ** $p < .01$

Figure 1. Mean Individualism as a Function of Mortality Salience and Target Immigrant Group

Table 5

Testing Moderator Effects of PNS on the Relationship between MS and Individualism toward Arab-Muslim and British Immigrants in Study 1

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Individualism toward Arab-Muslim Immigrants				
Step 1				
MS	0.24 (0.19)	-0.14, 0.62	.10	
PNS (z score)	-0.19 (0.13)	-0.45, 0.06	.16	.01
Step 2				
MS $\times$ PNS (z score)	0.41 (0.20)	0.02, 0.80	.22*	.03*
Individualism toward British Immigrants				
Step 1				
MS	-0.04(0.17)	-0.38, 0.30	-.02	
PNS (z score)	-0.15(0.11)	-0.37, 0.07	-.14	.00
Step 2				
MS $\times$ PNS (z score)	0.39 (0.18)	0.04, 0.74	.24*	.03*

Note. CI = confidence interval.

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

Figure 2a. The effect of Mortality Salience on Individualism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.

Figure 2b. The effect of Mortality Salience on Individualism held toward British Immigrants as Moderated by Personal Need for Structure.

Table 6

Testing Moderator Effects of PNS on the Relationship between MS and Integrationism toward Arab-Muslim and British Immigrants in Study 1

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Integrationism toward Arab-Muslim Immigrants				
Step 1				
MS	0.11 (0.24)	-0.36, 0.59	.04	
PNS (z score)	0.26 (0.16)	-0.05, 0.57	.17	.01
Step 2				
MS $\times$ PNS (z score)	-0.30 (0.24)	-0.78, 0.13	-.13	.01
Integrationism toward British Immigrants				
Step 1				
MS	-0.11 (0.22)	-0.55, 0.33	-.04	
PNS (z score)	0.15 (0.15)	-0.14, 0.43	.11	.00
Step 2				
MS $\times$ PNS (z score)	-0.25 (0.23)	-0.70, 0.20	-.12	.01

Note. CI = confidence interval

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

Table 7

Testing Moderator Effects of PNS on the Relationship between MS and Integrationism-Transformation toward Arab-Muslim and British Immigrants in Study 1

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Integrationism-Transformation toward Arab-Muslim Immigrants				
Step 1				
MS	0.08 (0.19)	-0.30, 0.46	.03	
PNS (z score)	-0.21 (0.13)	-0.46, 0.04	.17	.01
Step 2				
MS $\times$ PNS (z score)	0.28 (0.20)	-0.11, 0.67	.15	.01
Integrationism-Transformation toward British Immigrants				
Step 1				
MS	-0.11 (0.19)	-0.48, 0.27	-.05	
PNS (z score)	-0.14 (0.12)	-0.38, 0.11	-.12	.00
Step 2				
MS $\times$ PNS (z score)	-0.29 (0.19)	-0.10, 0.66	.16	.01

Note. CI = confidence interval

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

Table 8

Testing Moderator Effects of PNS on the Relationship between MS and Assimilationism toward Arab-Muslim and British Immigrants in Study 1

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Assimilationism toward Arab-Muslim Immigrants				
Step 1				
MS	-0.31(0.20)	-0.72, 0.10	-.12	
PNS (z score)	0.35 (0.13)	0.08, 0.61	.27*	.04
Step 2				
MS $\times$ PNS (z score)	-0.36 (0.21)	-0.77, 0.05	-.18	.02
Assimilationism toward British Immigrants				
Step 1				
MS	-0.21 (0.15)	-0.51, 0.09	-.11	
PNS (z score)	0.24 (0.10)	0.05, 0.44	.26*	.03
Step 2				
MS $\times$ PNS (z score)	-0.23 (0.15)	-0.54, 0.08	-.16	.01

Note. CI = confidence interval

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

Figure 3a. The effect of Mortality Salience on Assimilationism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.

Figure 3b. The effect of Mortality Salience on Assimilationism held toward British Immigrants as Moderated by Personal Need for Structure.

Table 9

Testing Moderator Effects of PNS on the Relationship between MS and Segregationism toward Arab-Muslim and British Immigrants in Study 1

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Segregationism toward Arab-Muslim Immigrants				
Step 1				
MS	0.01 (0.22)	-0.42, 0.44	.00	
PNS (z score)	0.13 (0.14)	-0.15, 0.41	.10	.03
Step 2				
MS $\times$ PNS (z score)	0.20 (0.22)	-0.23, 0.64	.10	.01
Segregationism toward British Immigrants				
Step 1				
MS	-0.03 (0.19)	-0.41, 0.35	-.01	
PNS (z score)	0.15 (0.13)	-0.10, 0.40	.12	.03
Step 2				
MS $\times$ PNS (z score)	0.12 (0.20)	-0.27, 0.51	.07	.00

Note. CI = confidence interval

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

Table 10

Testing Moderator Effects of PNS on the Relationship between MS and Exclusionism toward Arab-Muslim and British Immigrants

Step and Variable	<i>B</i> (<i>SE</i>)	95% CI	β	R^2
Exclusionism toward Arab-Muslim Immigrants				
Step 1				
MS	-0.07 (0.05)	-0.16, 0.03	.11	
PNS (z score)	0.09 (0.03)	0.02, 0.15	.29**	.03
Step 2				
MS $\times$ PNS (z score)	-0.10 (0.05)	-0.19, 0.00	-.21*	.03*
Exclusionism toward British Immigrants				
Step 1				
MS	-0.03	0.04	-0.10, 0.05	-.05
PNS (z score)	0.09	0.03	0.04, 0.14	.37** .05*
Step 2				
MS $\times$ PNS (z score)	-0.08	0.04	-0.16, 0.00	-.21* .03*

Note. CI = confidence interval

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

Figure 4a. The effect of Mortality Salience on Exclusionism held toward Arab-Muslim Immigrants as Moderated by Personal Need for Structure.

Figure 4b. The effect of Mortality Salience on Exclusionism held toward British Immigrants as Moderated by Personal Need for Structure.

Table 11

Cronbach's Alpha, Means, and Standard Deviations of Aggregate RAEM

Dimensions for Study 2

	Mortality Salience		Control	
	Alpha	Mean (SD)	Alpha	Mean (SD)
RAEM (Arab-Muslim)				
Maintenance (Ideal)	.83	3.45 (.85)	.76	3.70 (.71)
Maintenance (Real)	.81	3.76 (.71)	.81	3.70 (.66)
Adoption (Ideal)	.68	2.93 (.67)	.58	2.87 (.57)
Adoption (Real)	.76	2.71 (.64)	.72	2.80 (.56)
RAEM (British)				
Maintenance (Ideal)	.81	3.72 (.66)	.85	3.43 (.77)
Maintenance (Real)	.84	3.42 (.69)	.76	3.45 (.66)
Adoption (Ideal)	.75	2.72 (.65)	.78	3.00 (.74)
Adoption (Real)	.67	3.07 (.51)	.71	3.29 (.54)

Table 12

Correlations for Affect Subscales in Study 2

	1	2	3	4	5	6	7
1. Fear	--	.64**	.63**	.73**	-.10	-.09	-.08
2. Hostility		--	.70**	.67**	-.21**	-.08	-.17*
3. Guilt			--	.74**	-.20**	-.13	-.24**
4. Sadness				--	-.26**	-.18*	-.22**
5. Joviality					--	.72**	.46**
6. Self Assuredness						--	.50**
7. Attentiveness							--

* $p < .05$, ** $p < .01$

Figure 5. Acculturation attitudes toward Arab-Muslim immigrants. The control group is represented by circles and the mortality salience group is represented by triangles. W, work; E, economic; S, social relationships; F, family relations; R, religious beliefs and customs; T, ways of thinking: principles and values.

Figure 6. Acculturation attitudes toward British immigrants. The control group is represented by circles and the mortality salience group is represented by triangles. W, work; E, economic; S, social relationships; F, family relations; R, religious beliefs and customs; T, ways of thinking: principles and values.

Table 13

Skewness and Kurtosis Statistics for Aggregate Acculturation Scales for Study 2

	Mortality Salience		Control	
	Skew (SE)	Kurtosis (SE)	Skew (SE)	Kurtosis (SE)
RAEM (Arab-Muslim)				
Maintenance (Ideal)	-.44 (.34)	.17 (.67)	-.33 (.34)	-.27 (.68)
Maintenance (Real)	-.07 (.34)	-.64 (.67)	-.62 (.34)	1.00 (.68)
Adoption (Ideal)	.25 (.34)	-.46 (.67)	.08 (.34)	-.47 (.68)
Adoption (Real)	.03 (.34)	-.25 (.67)	.25 (.34)	-.78 (.68)
RAEM (British)				
Maintenance (Ideal)	-.65 (.34)	.58 (.67)	-.94 (.36)	1.27 (.71)
Maintenance (Real)	-.51 (.34)	-.07 (.67)	-.09 (.36)	.41 (.71)
Adoption (Ideal)	.54 (.34)	1.05 (.67)	.04 (.36)	-.51 (.71)
Adoption (Real)	.18 (.34)	-.08 (.67)	-.34 (.36)	-.60 (.71)

Table 14

Means and standard deviations for ideal acculturation domains for Study 2

	Mortality Salience		Control	
	Arab-Muslim	British	Arab-Muslim	British
Ideal Maintenance				
Work Habits	2.79 (1.18)	3.04 (.85)	2.91 (1.19)	2.72 (.98)
Consumer Habits	3.60 (1.14)	3.56 (.94)	3.56 (1.08)	4.14 (.91)
Family Relations	3.52 (1.09)	4.10 (.90)	4.04 (1.02)	3.79 (1.15)
Beliefs and Customs	3.77 (1.24)	3.83 (1.08)	4.09 (1.06)	3.70 (1.07)
Principles and Values	3.35 (1.28)	3.92 (.94)	3.72 (1.16)	3.60 (1.05)
Heritage Contact	3.65 (.93)	3.85 (.85)	3.85 (.75)	3.58 (1.01)
Ideal Adoption				
Work Habits	3.33 (1.04)	2.88 (1.00)	3.28 (.88)	3.26 (1.03)
Consumer Habits	2.65 (1.16)	2.56 (.92)	2.60 (.85)	2.98 (1.03)
Family Relations	2.73 (1.16)	2.19 (.94)	2.55 (1.21)	2.65 (1.15)
Beliefs and Customs	2.06 (1.12)	2.04 (1.09)	2.17 (1.11)	2.14 (1.19)
Principles and Values	2.83 (1.14)	2.58 (1.03)	2.68 (1.02)	2.86 (1.19)
Receiving Contact	3.96 (.90)	4.08 (.85)	3.94 (.92)	4.09 (.81)

Note. Means are reported with standard deviations in parentheses

Table 15

Means and Standard Deviations for Euclidean Distances from Maximal Acculturation Attitudes for Study 2

	Mortality Salience		Control	
	Arab-Muslim	British	Arab-Muslim	British
RAEM (Ideal Plane)				
Integration	2.77 (.44)	2.70 (.61)	2.61 (.52)	2.65 (.75)
Assimilation	3.24 (.99)	3.60 (.67)	3.47 (.76)	3.23 (.78)
Separation	2.52 (.97)	2.22 (.73)	2.34 (.73)	2.64 (.80)
Marginalization	3.27 (.44)	3.29 (.61)	3.36 (.54)	3.24 (.73)
RAEM (Real Plane)				
Integration	2.73 (.47)	2.58 (.52)	2.63 (.56)	2.40 (.54)
Assimilation	3.61 (.85)	3.14 (.69)	3.53 (.64)	3.03 (.68)
Separation	2.16 (.83)	2.66 (.66)	2.29 (.68)	2.82 (.63)
Marginalization	3.35 (.48)	3.26 (.54)	3.31 (.58)	3.42 (.53)

Note. Means are reported with standard deviations in parentheses

Figure 7a. Mean Euclidean distance from maximal assimilation to obtained aggregate scores on ideal acculturation as a function of mortality salience and target immigrant group.

Figure 7b. Mean Euclidean distance from maximal separation to obtained aggregate scores on ideal acculturation as a function of mortality salience and target immigrant group.

Figure 8. Ideal heritage culture maintenance as a function of mortality salience and target immigrant group.

Figure 9. Mean Euclidean distance from maximal assimilation to obtained scores on ideal situation social relationships as a function of mortality salience and target immigrant group.

Figure 10a. Mean Euclidean distance from maximal assimilation to obtained scores on ideal situation family relationships as a function of mortality salience and target immigrant group.

Figure 10b. Mean Euclidean distance from maximal separation to obtained scores on ideal situation family relationships as a function of mortality salience and target immigrant group.

Appendix A: Demographics

Instructions: Please fill in the information below, so that we may obtain some general information on the people participating in this study (This information will not be associated with your name in any way).

1. Gender: Male ___ Female ___

2. What is your age? ____.

3. What is your program of study? (e.g. Psychology, English, etc):
_____.

4. What is your marital Status? (Choose one)

___ Married

___ Single

___ Common Law (living with my partner)

___ Other (Divorced/Separated)

5. Where you born in Canada: Yes ___ No ___

6. Was your mother born in Canada: Yes ___ No ___

7. Was your father born in Canada: Yes ___ No ___

8. How would you describe your ethnic background? (e.g. Scottish-Canadian, Italian-Canadian): _____.

9. Religious/Spiritual affiliation (e.g. Protestant, Muslim, Pagan, non-denominational spiritual. **please note:** You may indicate “none” if you do not have a religious or spiritual affiliation): _____.

10. Extent of personal Spiritual or Religious involvement. **Please note:** this is a subjective assessment of how central your spiritual or religious beliefs are in your life, and may or may not refer to involvement in an organized religion (Please circle the number on the scale below that most applies to you):

1
Not at all
Involved

2

3

4
Somewhat
Involved

5

6

7
Very
Involved

11. How would you characterize the economic level of the household in which you grew up? (Choose one)

___ low income

___ low middle income

___ middle income

___ high middle income

___ high income

Appendix B: Religious Fundamentalism Scale

This survey investigates your opinions on a variety of religious issues. You will probably find that you *agree* with some of the statements, and *disagree* with others, to varying extents. Please indicate your reaction to each statement by responding according to the following 9-point scale.

- 1 = if you *very strongly disagree* with the statement.
- 2 = if you *strongly disagree* with the statement.
- 3 = if you *moderately disagree* with the statement.
- 4 = if you *slightly disagree* with the statement.
- 5 = if you feel exactly and precisely *neutral* about the statement.
- 6 = if you *slightly agree* with the statement.
- 7 = if you *moderately agree* with the statement.
- 8 = if you *strongly agree* with the statement.
- 9 = if you *very strongly agree* with the statement.

You may find that you sometimes have different reactions to different parts of a statement. For example, you might *very strongly disagree* (1) with one idea in a statement, but *slightly agree* (6) with another idea in the same item. When this happens, please combine your reactions, and write down how you feel “on balance” (i.e., a 2 in this case).

_____ 1. God has given mankind a complete, unfailing guide to happiness and salvation, which must be totally followed.

_____ 2. *All* of the religions in the world have flaws and wrong teachings.

_____ 3. Of all the people on this earth, one group has a special relationship with God because it believes the most in his revealed truths and tries the hardest to follow his laws.

_____ 4. The long-established traditions in religion show the best way to honor and serve God, and should never be compromised.

_____ 5. Religion must admit all its past failings, and adapt to modern life if it is to benefit humanity.

_____ 6. When you get right down to it, there are only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.

_____ 7. Different religions and philosophies have different versions of the truth, and may be equally right in their own way.

_____ 8. The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against God.

Appendix B: Continued

_____ 9. It is more important to be a good person than to believe in God and the right religion.

_____ 10. No one religion is especially close to God, nor does God favour any particular group of believers.

_____ 11. God will punish most severely those who abandon his true religion.

_____ 12. No single book of religious writings contains all the important truths about life.

_____ 13. It is silly to think people can be divided into “the Good” and “the Evil.” Everyone does some good, and some bad things.

_____ 14. God’s true followers must remember that he requires them to *constantly* fight Satan and Satan’s allies on this earth.

_____ 15. Parents should encourage their children to study all religions without bias, then make up their own minds about what to believe.

_____ 16. There *is* a religion on this earth that teaches, without error, God’s truth.

_____ 17. “Satan” is just the name people give to their own bad impulses. There really is *no such thing* as a diabolical “Prince of Darkness” who tempts us.

_____ 18. Whenever science and sacred scripture conflict, science must be wrong.

_____ 19. There is *no* body of teachings, or set of scriptures, which is completely without error.

_____ 20. To lead the best, most meaningful life, one must belong to the one, true religion.

Appendix C: Social Axioms Survey

The following sentences are statements relating to beliefs. Please read each statement carefully, and check the response that most closely reflects your opinion.

1= strongly disbelieve

2= disbelieve

3= no opinion

4= believe

5= strongly believe

1. ____ Kind-hearted people usually suffer losses.
2. ____ Powerful people tend to exploit others.
3. ____ Power and status make people arrogant.
4. ____ Kind-hearted people are easily bullied.
5. ____ It is rare to see a happy ending in real life.
6. ____ To care about societal affairs only brings trouble for yourself.
7. ____ Harsh laws can make people obey.
9. ____ Significant achievement requires one to show no concern for the means needed for that achievement.
10. ____ The various social institutions in society are biased towards the rich.
11. ____ People deeply in love are usually blind.
12. ____ Old people are usually stubborn and biased.
13. ____ It is easier to succeed if one knows how to take short-cuts.
14. ____ People will stop working hard after they secure a comfortable life.
15. ____ Females need a better appearance than males.
16. ____ Old people are a heavy burden on society.
17. ____ Humility is dishonesty.
18. ____ Young people are impulsive and unreliable.
19. ____ Most people hope to be repaid after they help others.
20. ____ Too much money ruins one's character.
21. ____ One will succeed if he/she really tries.
22. ____ Hard working people will achieve more in the end.
23. ____ Failure is the beginning of success.
24. ____ Mutual tolerance can lead to satisfactory human relationships.

Appendix C: Continued

25. ____ One who does not know how to plan his or her future will eventually fail.
26. ____ Adversity can be overcome by effort.
27. ____ A modest person can make a good impression on people.
28. ____ Every problem has a solution.
29. ____ The just will eventually defeat the wicked.
30. ____ Competition brings about progress.
31. ____ Good deeds will be rewarded, and bad deeds will be punished.
32. ____ Caution helps avoid mistakes.
33. ____ Knowledge is necessary for success.
34. ____ Social justice can be maintained if everyone cares about politics.
35. ____ To identify a problem, open criticism is important.
36. ____ One will not accomplish much if one does not put any effort into the important things in life.
37. ____ Human behavior changes with the social context.
38. ____ One has to deal with matters according to the specific circumstances.
39. ____ People may have opposite behaviors on different occasions.
40. ____ Individual effort makes little difference in the outcome.
41. ____ To deal with things in a flexible way leads to success.
42. ____ To experience various life styles is a way to enjoy life.
43. ____ To plan for possible mistakes will result in fewer obstacles.
44. ____ There is usually only one way to solve a problem.
45. ____ Current losses are not necessarily bad for one's long-term future.
46. ____ There are phenomena in the world that cannot be explained by science.
47. ____ One's appearance does not reflect one's character.
48. ____ Acting according to principles prevents the need to make troublesome decisions.

Appendix C: Continued

1= strongly disbelieve

2= disbelieve

3= no opinion

4= believe

5= strongly believe

- 49. ____ People behave differently although they do not differ in essence.
- 50. ____ Fate determines one's successes and failures.
- 51. ____ Individual characteristics, such as appearance and birthday, affect one's fate.
- 52. ____ There are certain ways to help us improve our luck and avoid unlucky things.
- 53. ____ There are many ways for people to predict what will happen in the future.
- 54. ____ All things in the universe have been determined.
- 55. ____ Most disasters can be predicted.
- 56. ____ A person's talents are inborn.
- 57. ____ Good luck follows if one survives a disaster.
- 58. ____ There is a supreme being controlling the universe.
- 59. ____ Belief in a religion makes people good citizens.
- 60. ____ Ghosts or spirits are people's fantasy.
- 61. ____ Belief in a religion helps one understand the meaning of life.
- 62. ____ Religious faith contributes to good mental health.
- 63. ____ Religious people are more likely to maintain moral standards.
- 64. ____ Religion makes people escape from reality.
- 65. ____ Religious beliefs lead to unscientific thinking.

Appendix D: Personal Need for Structure

Please read each of the following statements and decide how much you agree with each according to your attitudes, beliefs, and experience. It is important for you to realize that there are no "right" or "wrong" answers to these questions. People are different, and we are interested in how you feel. Please respond according to the following 6-point scale:

- 1 = *strongly disagree*
- 2 = *moderately disagree*
- 3 = *slight disagree*
- 4 = *slightly agree*
- 5 = *moderately agree*
- 6 = *strongly agree*

1. ____ It upsets me to go into a situation without knowing what I can expect from it.
2. ____ I'm not bothered by things that interrupt my daily routine.
3. ____ I enjoy having a clear and structured mode of life.
4. ____ I like to have a place for everything and everything in its place.
5. ____ I enjoy being spontaneous.
6. ____ I find that a well-ordered life with regular hours makes my life tedious.
7. ____ I don't like situations that are uncertain.
8. ____ I hate to change my plans at the last minute.
9. ____ I hate to be with people who are unpredictable.
10. ____ I find that a consistent routine enables me to enjoy life more.
11. ____ I enjoy the exhilaration of being in unpredictable situations.
12. ____ I become uncomfortable when the rules in a situation are not clear.

Appendix E: Mortality Salience Prime

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

Appendix F: Pain Salience Prime

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF INTENSE PAIN AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOU AS YOU PHYSICALLY EXPERIENCE INTENSE PAIN AND ONCE YOU HAVE PHYSICALLY EXPERIENCED INTENSE PAIN.

Appendix G: PANAS-X

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers.

1 very slightly or not at all	2 a little	3 moderately	4 quite a bit	5 extremely
___ cheerful	___ sad	___ joyful		___ angry at self
___ disgusted	___ calm	___ nervous		___ enthusiastic
___ attentive	___ afraid	___ lonely		___ downhearted
___ bashful	___ tired	___ sleepy		___ sheepish
___ sluggish	___ amazed	___ excited		___ distressed
___ daring	___ shaky	___ hostile		___ blameworthy
___ surprised	___ happy	___ proud		___ determined
___ strong	___ timid	___ jittery		___ frightened
___ scornful	___ alone	___ lively		___ astonished
___ relaxed	___ alert	___ ashamed		___ interested
___ irritable	___ upset	___ at ease		___ loathing
___ delighted	___ angry	___ scared		___ confident
___ inspired	___ bold	___ drowsy		___ energetic
___ fearless	___ blue	___ active		___ concentrating
___ disgusted with self	___ shy			___ dissatisfied with self
	___ guilty			

Appendix H: Photograph for Arab-Muslim Prime

Appendix H: Continued

Appendix H: Continued

Appendix I: Photographs for British Prime

Appendix I: Continued

Appendix I: Continued

Appendix J: HCAS for Arab-Muslim Immigrants

*The following statements deal with opinions concerning **Arab-Muslims** who have settled in the Province of Ontario. Arab-Muslims are individuals born in the Middle East or North Africa who speak Arabic and who practice Islam. Arab-Muslim immigrants are individuals who have emigrated to Canada and who have received Canadian citizenship or will receive it in the near future. In this section we use the term "Canadian culture" to refer to **English Canadian** culture within Ontario and Canada. For each statement, please provide your opinion by using the following scale:*

1	2	3	4	5	6	7
Totally disagree			Neutral			Totally agree

Regarding the **culture** of Arab-Muslim immigrants...

- 1- Arab-Muslim immigrants can maintain their culture of origin as long as they do not mix it with Canadian culture. 1 2 3 4 5 6 7
- 2- Arab-Muslim immigrants should give up their culture of origin for the sake of adopting the Canadian culture. 1 2 3 4 5 6 7
- 3- Whether Arab-Muslim immigrants maintain their cultural heritage or adopt the Canadian culture makes no difference because each person is free to adopt the culture of their choice. 1 2 3 4 5 6 7
- 4- Arab-Muslim immigrants should maintain their own heritage culture while also adopting Canadian culture. 1 2 3 4 5 6 7
- 5- Canadians should transform certain aspects of their culture of origin in order to really integrate the culture of Arab-Muslim immigrants. 1 2 3 4 5 6 7
- 6- Arab-Muslim immigrants should not maintain their culture of origin, nor adopt Canadian culture, because, in any case, there should be less Arab-Muslim immigration in this province. 1 2 3 4 5 6 7

Appendix J: Continued

Regarding the **values** of Arab-Muslim immigrants...

- 1- Arab-Muslim immigrants should give up their own values for the sake of adopting Canadian values. 1 2 3 4 5 6 7
- 2- Arab-Muslim immigrants can maintain their own values as long as they do not mix it with Canadian values. 1 2 3 4 5 6 7
- 3- Arab-Muslim immigrants should not maintain their values of origin, nor adopt Canadian values, because, in any case, there should be less Arab-Muslim immigration in this province. 1 2 3 4 5 6 7
- 4- Arab-Muslim immigrants should maintain their own values while also adopting Canadian values. 1 2 3 4 5 6 7
- 5- Whether Arab-Muslim immigrants maintain their own values or adopt Canadian values makes no difference because each person is free to adopt the values of their choice. 1 2 3 4 5 6 7
- 6- Canadians should transform certain aspects of their own values in order to really integrate the values of Arab-Muslim immigrants. 1 2 3 4 5 6 7

Regarding the **customs** of Arab-Muslim immigrants...

- 1- Arab-Muslim immigrants should not maintain their own customs, nor adopt Canadian customs, because, in any case, there should be less Arab-Muslim immigration in this province. 1 2 3 4 5 6 7
- 2- Canadians should transform certain aspects of their own customs in order to really integrate the customs of Arab-Muslim immigrants. 1 2 3 4 5 6 7
- 3- Arab-Muslim immigrants should give up their own customs for the sake of adopting Canadian customs. 1 2 3 4 5 6 7
- 4- Whether Arab-Muslim immigrants maintain their customs or adopt Canadian customs makes no difference because each person is free to adopt the customs of their choice. 1 2 3 4 5 6 7
- 5- Arab-Muslim immigrants can maintain their own customs as long as they do not mix it with Canadian customs. 1 2 3 4 5 6 7
- 6- Arab-Muslim immigrants should maintain their own customs while also adopting Canadian customs. 1 2 3 4 5 6 7

Appendix K: HCAS for British Immigrants

*The following statements deal with opinions concerning **British immigrants** who have settled in the Province of Ontario. British immigrants are individuals born in Great Britain (England, Scotland, Wales or Northern Ireland) who have emigrated to Canada and who have received Canadian citizenship or will receive it in the near future. In this section we use the term "Canadian culture" to refer to **English Canadian** culture within Ontario and Canada. For each statement, please provide your opinion by using the following scale:*

1	2	3	4	5	6	7
Totally disagree			Neutral			Totally agree

Regarding the **culture** of British immigrants...

- 1- British immigrants should give up their culture of origin for the sake of adopting Canadian culture. 1 2 3 4 5 6 7
- 2- British immigrants can maintain their culture of origin as long as they do not mix it with Canadian culture. 1 2 3 4 5 6 7
- 3- British immigrants should not maintain their culture of origin, nor adopt Canadian culture, because, in any case, there should be less immigration from Britain in this province. 1 2 3 4 5 6 7
- 4- British immigrants should maintain their own heritage culture while also adopting Canadian culture. 1 2 3 4 5 6 7
- 5- Whether British immigrants maintain their cultural heritage or adopt Canadian culture makes no difference because each person is free to adopt the culture of their choice. 1 2 3 4 5 6 7
- 6- Canadians should transform certain aspects of their culture of origin in order to really integrate the culture of British immigrants. 1 2 3 4 5 6 7

Appendix K: Continued

Regarding the **values** of British immigrants...

1-	Whether British immigrants maintain their own values or adopt Canadian values makes no difference because each person is free to adopt the values of their choice.	1 2 3 4 5 6 7
2-	British immigrants can maintain their own values as long as they do not mix it with Canadian values.	1 2 3 4 5 6 7
3-	Canadians should transform certain aspects of their own values in order to really integrate the values of British immigrants.	1 2 3 4 5 6 7
4-	British immigrants should maintain their own values while also adopting Canadian values.	1 2 3 4 5 6 7
5-	British immigrants should give up their own values for the sake of adopting Canadian values.	1 2 3 4 5 6 7
6-	British immigrants should not maintain their own values, nor adopt Canadian values, because, in any case, there should be less immigration from Britain in this province.	1 2 3 4 5 6 7

Regarding the **customs** of British immigrants...

1-	British immigrants can maintain their own customs as long as they do not mix it with Canadian customs.	1 2 3 4 5 6 7
2-	Canadians should transform certain aspects of their own customs in order to really integrate the customs of British immigrants.	1 2 3 4 5 6 7
3-	British immigrants should maintain their own customs while also adopting Canadian customs.	1 2 3 4 5 6 7
4-	Whether British immigrants maintain their own customs or adopt Canadian customs makes no difference because each person is free to adopt the customs of their choice.	1 2 3 4 5 6 7
5-	British immigrants should give up their own customs for the sake of adopting Canadian customs.	1 2 3 4 5 6 7
6-	British immigrants should not maintain their own customs, nor adopt Canadian customs, because, in any case, there should be less immigration from Britain in this province.	1 2 3 4 5 6 7

**COLLEGE OF SOCIAL AND APPLIED HUMAN SCIENCES
Department of Psychology**

CONSENT TO PARTICIPATE IN RESEARCH

An Examination of Attitudes, Personality, and Acculturation

You are asked to participate in a research study conducted by Darcy Dupuis, from the Psychology Department at the University of Guelph. The results will be contributed to his Honours and Master's theses.

**If you have any questions or concerns about the research, please feel free to contact:
Dr. Saba Safdar (519) 824-4120 x. 53520**

PURPOSE OF THE STUDY

This study is designed to examine individuals' attitudes toward a wide range of topics. We are also interested in studying social beliefs and the influence of such beliefs on day to day behaviour. This is a computerized study and your responses on a series of questionnaires are recorded automatically. Please note that there is no right or wrong answer as we are interested in individual's beliefs, attitudes, values, and everyday behaviour.

PROCEDURES

The study will be conducted in the Centre for Cross-Cultural Research, Room 25B in the MacKinnon building. If you agree to participate in this study you will be directed to a computer administered questionnaire package. This package includes various questionnaires which ask for attitudes, beliefs, and opinions related to specific topics. Your involvement in this study is limited to filling out this questionnaire. This should take about 20-30 minutes to complete. You will not be contacted for any follow-up sessions or anything else that is related to this study. Research findings will be available to you in June 2008. You will need to get in contact with Darcy Dupuis and request to see these findings if you would like to do so.

Appendix L: Continued

POTENTIAL RISKS AND DISCOMFORTS

There is a very minimal risk that you will experience slight discomfort when responding to certain items contained within the questionnaire. You are free to withdraw from this study at any time if you experience too much discomfort.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

By completing this questionnaire package you may have a chance to think about things that you do not normally get a chance to think about. In doing so, completing this questionnaire may prove to be a rewarding experience. Your participation in this study may also have benefits for the university and scientific community by providing advances in our understanding of aspects of culture and intergroup relations.

PAYMENT FOR PARTICIPATION

If you are participating in the pilot testing, you will not receive any payment or compensation for your involvement in this study.

If you are participating in this study as part of a course in psychology, you will receive compensation in the form of bonus marks indicated by your professor.

CONFIDENTIALITY

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

Your name will not appear anywhere on any of the scales or questionnaires that you will fill out. Your name will be collected on this consent form the sole purpose of ensuring that you have consented to participation in this study. Your name will not be associated in any way with the answers you provide. The data will be retained electronically by the researcher and no one else will have access to this data. The demographic data that you provide will not be reported on an individual basis. Instead, these data will be grouped together and trends will be examined, rendering you entirely unidentifiable.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.

Appendix L: Continued

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Research Ethics Coordinator

Telephone: (519) 824-4120, ext.

56606

**University of Guelph
437 University Centre
Guelph, ON N1G 2W1**

**E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236**

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “*An Examination of Attitudes and Culture*” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Name of Participant (please print)

Signature of Participant

Date

SIGNATURE OF WITNESS

Name of Witness (please print)

Signature of Witness

Date

Appendix M: Consent Form 2 (Debriefing)

**COLLEGE OF SOCIAL AND APPLIED HUMAN SCIENCES
Department of Psychology**

CONSENT TO PARTICIPATE IN RESEARCH

An Examination of the Effects of Mortality Salience on Acculturation Orientations

You are asked to confirm whether your data may be used in a research study conducted by Darcy Dupuis, from the Psychology Department at the University of Guelph. The results will be contributed to his Honours and Master's theses.

**If you have any questions or concerns about the research, please feel free to contact:
Dr. Saba Safdar (519) 824-4120 x. 53520**

PURPOSE OF THE STUDY

The purpose of this study is to examine the effects of thinking of one's own death on attitudes one holds toward two groups of immigrants: British and Arab-Muslim. The British immigrants are considered to be an example of culturally similar group and Arab-Muslim immigrants are considered to be an example of culturally dissimilar group.

Embedded near the beginning of the questionnaire package was a set of open ended questions asking you to think about either intense pain, for half of the participants, or about your own death, for the other half of participants. The purpose behind these questions was for certain people (the experimental group) to be made to think about their mortality. The pain salience set of questions was part of a control condition designed to have individuals think of something similarly aversive.

The use of the mortality salience prime was based on research with Terror Management Theory. This theory considers that within each of us there is the possibility for anxiety that results from the awareness of human vulnerability and mortality. The theory posits that one of the central purposes of our cultural conceptions of reality (e.g. religious beliefs, beliefs about how the world works, values) is to buffer against this anxiety. In other words, our views of the world and our place in it help us to understand that we are meaningful beings.

Next you were asked to look at a series of pictures and report what you saw. This was done to get you thinking about the relevant cultural group presented in the subsequent questions. You were then asked to complete a set of questions designed to measure acculturation orientation toward British and Arab-Muslim immigrants. This is done to observe the degree to which individuals wish to have the relevant immigrants integrate, assimilate, separate etc. with regard to the larger society. This was the dependant variable, which was expected to be affected by the mortality salience prime. Generally I wanted to observe how mortality salience would affect acculturation orientations toward culturally similar and culturally dissimilar immigrant groups.

Appendix M: Continued

Research has found that when people are made to think about their own mortality, they tend to hold more strongly to their own worldviews and to push away divergent worldviews so that their views of the world, which have anxiety buffering capabilities, can be held with greater confidence. As certain groups of individuals have world views that differ to varying degrees from our own, when mortality is made salient, we tend to embrace similar others and avoid or belittle others who are different from us. This is why you completed questionnaires of relevance to British

immigrants, or a group that is quite similar to Canadian society on the whole, and questionnaires of relevance to Arab-Muslims, who are a group that differs in many ways from much of Canadian society.

Of course, effects are expected to be different for different individuals. The hypothesized effects are not expected to hold true for everyone as individuals with more embracing worldviews tend not to see the worldviews of others as a threat to their own.

Our study is unique as we are studying the effect of mortality salience on people's attitude toward immigrants. There is limited research in the area and we hope this research is a step toward better understanding of people's belief and ultimately their acceptance or rejection of immigrants in our society.

PARTICIPATION AND WITHDRAWAL

You can choose whether the data you provided may be included in this study or not. You may exercise the option of removing your data from the study without penalty of any kind.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

**Research Ethics Coordinator
University of Guelph
437 University Centre
Guelph, ON N1G 2W1**

**Telephone: (519) 824-4120, ext. 56606
E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236**

COUNCILING SERVICE INFORMATION

If you would like to contact counseling services at the University of Guelph telephone numbers and information are available below:

**Counseling Services
Level 3, University Centre
University of Guelph
Guelph - Ontario - N1G 2W1**

**Tel: (519) 824-4120 ext. 53244
Fax: (519) 824-9689**

Appendix M: Continued

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “*An Examination of the Effects of Mortality Salience on Acculturation Orientations*” as described herein. My questions have been answered to my satisfaction, and I consent to participate in this study.

Name of Participant (please print)

Signature of Participant

Date

SIGNATURE OF WITNESS

Name of Witness (please print)

Signature of Witness

Date

Appendix N: Exam Failure Salience Prime

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF FAILING AN EXAM AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOU AS YOU EXPERIENCE FAILING AN EXAM AND ONCE YOU HAVE EXPERIENCED FAILING AN EXAM.

Appendix O: Word Search Puzzle

In the puzzle below, please circle as many of the following words as you can (Note: Some words may appear backwards).

Book	Computer
Desk	Phone
Movie	Train
Paper	School
Grass	Beer
Music	Actor

S C O M P U T E R O
 W P H O N E R E E B
 A M U S I C P Z S N
 B T N R O T C A S K
 B M R K S E D E A O
 R F O A G O L B R O
 E L G V I Z B O G B
 P A N U I N E L W Q
 A G T A B E T G D O
 P S C H O O L N I T

Appendix P: RAEM for Arab-Muslim Immigrants

The following statements deal with opinions concerning Arab-Muslim immigrants who have settled in the Province of Ontario. Arab-Muslims are individuals born in the Middle East or North Africa who speak Arabic and who practice Islam. Arab-Muslim immigrants are individuals who have immigrated to Canada and who have received Canadian citizenship or will receive it in the near future. It is important for you to realize that there are no "right" or "wrong" answers to these questions. We are simply interested in your opinion. For each statement, please provide your opinion by using the following scale:

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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1. To what extent would you like Arab-Muslim immigrants to maintain the customs of their country of origin, in relation to the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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2. To what extent would you like Arab-Muslim immigrants to adopt this country's customs in the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

Appendix P: Continued

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to social relationships and friendships,

3. ____ To what extent would you like Arab-Muslim immigrants to mix with people from their countries of origin?

4. ____ To what extent would you like Arab-Muslim immigrants to mix with people from this country?

We have asked previously about how you would like things to be with regard to some aspects of Arab-Muslim immigrants' life if you had a choice. Please think now of the real situation. Once again, it is important for you to realize that there are no "right" or "wrong" answers to these questions. We are simply interested in your opinion. For each statement, please provide your opinion by using the following scale:

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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1. To what extent do you think Arab-Muslim immigrants maintain at present the customs they observed in their country of origin in relation to the following domains?

a. ____ Work (type of work carried out, tools and machinery they use, and work timetable).

b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).

c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).

d. ____ Religious beliefs and customs.

e. ____ Ways of thinking, principles and values.

Appendix P: Continued

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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2. To what extent do you think Arab-Muslim immigrants have adopted the customs of this country, in relation to the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use, and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to social relationships and friendships,

- 3. ____ To what extent do you think Arab-Muslim immigrants mix with people from their countries of origin?
- 4. ____ To what extent do you think Arab-Muslim immigrants mix with people from this country?

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to the political and government system (way in which governments are elected, make political decisions, distribution of wealth and power, justice, sanitary assistance, access to education and housing)

- 5. ____ To what extent do you think Arab-Muslim immigrants prefer the political system of their country of origin?
- 6. ____ To what extent do you think Arab-Muslim immigrants prefer the political system of this country?

Appendix Q: RAEM for British Immigrants

*The following statements deal with opinions concerning **British immigrants** who have settled in the Province of Ontario. British immigrants are individuals born in Great Britain (England, Scotland, Wales or Northern Ireland) who have immigrated to Canada and who have received Canadian citizenship or will receive it in the near future. It is important for you to realize that there are no "right" or "wrong" answers to these questions. We are simply interested in your opinion. For each statement, please provide your opinion by using the following scale:*

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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1. To what extent would you like British immigrants to maintain the customs of their country of origin, in relation to the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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2. To what extent would you like British immigrants to adopt this country's customs in the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

Appendix Q: Continued

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to social relationships and friendships,

3. ____ To what extent would you like British immigrants to mix with people from their countries of origin?

4. ____ To what extent would you like British immigrants to mix with people from this country?

We have asked previously about how you would like things to be with regard to some aspects of British immigrants' life if you had a choice. Please think now of the real situation. Once again, it is important for you to realize that there are no "right" or "wrong" answers to these questions. We are simply interested in your opinion. For each statement, please provide your opinion by using the following scale:

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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5. To what extent do you think British immigrants maintain at present the customs they observed in their country of origin in relation to the following domains?

a. ____ Work (type of work carried out, tools and machinery they use, and work timetable).

b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).

c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).

d. ____ Religious beliefs and customs.

e. ____ Ways of thinking, principles and values.

Appendix Q: Continued

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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6. To what extent do you think British immigrants have adopted the customs of this country, in relation to the following domains?

- a. ____ Work (type of work carried out, tools and machinery they use, and work timetable).
- b. ____ Consumer habits and family economy (items they buy, money they spend, money they save).
- c. ____ Family relationships (relationships between spouses, with their sons, with their daughters and upbringing of their sons and daughters).
- d. ____ Religious beliefs and customs.
- e. ____ Ways of thinking, principles, and values.

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to social relationships and friendships,

- 7. ____ To what extent do you think British immigrants mix with people from their countries of origin?
- 8. ____ To what extent do you think British immigrants mix with people from this country?

1 not at all	2 a little	3 somewhat	4 quite	5 a lot
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With regard to the political and government system (way in which governments are elected, make political decisions, distribution of wealth and power, justice, sanitary assistance, access to education and housing)

- 9. ____ To what extent do you think British immigrants prefer the political system of their country of origin?
- 10. ____ To what extent do you think British immigrants prefer the political system of this country?

Appendix R: Instructions for Study 2

Attitudes, Personality, and Acculturation Survey 1

Instructions

The questions in this survey have been designed for two separate studies. The questions in the first half are for a study related to beliefs and personality. The questions in the second half are for a study related to various aspects of culture. For much of the questionnaire, your task will be to indicate your responses to questions in a space beside each question using the accompanying scale.

1 Totally Agree	2	3 Neutral	4	5 Totally Disagree
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For example, using the above scale, answer the following question:

1. _____ *Basketball is one of the most exciting sports in the world.*

If you totally agree with the statement, you would indicate “5” in the space next to the question.

If you totally disagree with the statement, you would indicate “1” in the space next to the question.

If you feel that basketball is neither exciting nor boring, you feel neutral so you would indicate “3” in the space provided.

Finally, if you think basketball is moderately exciting or moderately boring, you would select either 2 or 4 as appropriate.

Note that different scales will accompany different sets of questions. Always make sure you are using the appropriate scale.

In other parts of the questionnaire you will be asked to complete different types of tasks. Please follow all instructions as appropriate.

We are only interested in your spontaneous candid opinions. **There are no right or wrong answers to the survey questions.** Please be assured that your answers will remain totally anonymous. The results of this survey will be analyzed statistically based on group responses, not your individual answers.

Please complete all questions in the order in which they appear in the survey. In other words, once you are entering responses on a given page, do not go back to previous pages to change previous answers.