Differences in Resilience by Acculturation Strategies: A Study with Qiang Nationality Following 2008 Chinese Earthquake

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ABSTRACT: *A number of studies have assessed the association between acculturation and resilience following a traumatic event. This study examines the relationship between acculturation strategies and resilience among the Qiang nationality following the 2008 Chinese earthquake. We found evidence that there are four acculturation strategies (integration, assimilation, separation and marginalization) based on the Qiang's cultural identity status. We also assessed resilience among this sample, using the Connor-Davidson Resilience Scale (CD-RISC). Correlation analysis results indicated that most dimensions of the Qiang cultural identities have positive relationships with participants' scores on CD-RISC dimensions of tenacity, strength and optimism. And regression analyses indicated that most of the cultural identity dimensions can predict resilience. The four acculturation strategies are also predictive of resilience: those with an Integration strategy have greater resilience than those pursuing marginalization; those pursuing assimilation and separation have intermediate levels of resilience.*

Key words: *Qiang nationality, acculturation strategies, resilience*

INTRODUCTION

Over the past two decades, more and more researches focused on resilience were conducted (Cicchetti, 2010; Fergusson & Horwood, 2003; Garmezy, 1991; Masten, 1989, 2008, 2011; Rutter, 1987, 2012; Seery, 2011). With the development of the "positive psychology movement" (Seligman & Csikszentmihalyi, 2000), there has been a notable tendency for researchers to shift their focuses from risk to resilience, and the "resilience" changes over time. Early research focused on the factors or characteristics that helped individuals succeed from adversity (Garmezy, 1991; Rutter, 1987), it turned to attach some importance to the dynamic processes among the factors mediating between the person and the environment, and the person and the outcome (Tusaie & Dyer, 2004). There are two prominent conceptualizations of resilience include resilience as a trait and resilience as a process. As a trait, resilience is defined as personal characteristics that allow for success in the face of adversity (Fougere & Daffern, 2011; Richardson, 2002). As a process, resilience should involve contextual, environmental, societal, and cultural aspects as well as relationships and opportunities that are available to individuals (Ungar, 2005; Norris et al., 2008). In this study, resilience is a combination of characteristics and abilities that interact dynamically allowing an individual to bounce back, cope successfully, and function to the best of their ability despite stress, adversity and disaster (Tusaie & Dyer, 2004). And facilitation of psychosocial resilience is particularly important for the longer-term recovery after mass emergencies and disasters (Williams & Drury, 2009).

An earthquake of magnitude 8 struck Sichuan province in China at 14:28 on May 12th, 2008. The disaster was most severe in the areas where many of the Qiang nationality live: Wenchuan, Beichuan, Mao County, Li County, and Pingwu County. There are a number of stressors challenging the Qiang people after the earthquake: casualties among relatives, financial strain, and the drain on resources for the reconstruction of the physical environment. To adapt positively to these changes, the Qiang people have required protective resources at several different levels. It is important resource is various large-scale reconstructions after disaster by China government, such as rebuilding houses, public facilities and roads to recover from the adversity as soon as possible. Meanwhile, many of Nongovernmental organizations played a large role in reconstruction of minority community and society. In this process, minority culture and custom attracted unprecedented attention of the public, and the Qiang people got more social support (internal and external supports, including material, emotional, cultural and spiritual) to cope the distress and adversity. Four or five years after earthquake, most reconstruction projects had been completed, but the Qiang people's psychological trauma whether to healing and their resilience whether to development. Like the other fifty-four ethnic nationalities in China, the Qiang people with many cultural backgrounds have come to live together in this diverse society, and gradually formed a plural multicultural society. In these culture-contact settings, acculturation plays an important role in how well people adapt both psychologically and socio-culturally (Berry, 2003; Phinney et al., 2006).

Acculturation has been used to refer both to immigrant people and nonimmigrant ethnic groups (Suleiman, 2002). This field seeks to comprehend how immigrants or ethnic groups deal with variation in culture, and how well they adapt to their new society. As the prominent acculturation scholars have asserted that the principles of acculturation theory are deeply grounded in the broader psychological theory of stress and coping (Berry, 1997, 2006; Ward & Kennedy, 2001). Many acculturation researches focused mainly on adjustment problems and the psychopathological consequences of the acculturation experience on mental health (Hovey & King, 1996; Ying & Liese, 1991). One important resource to support and promote the resilience of indigenous peoples may be indigenous spirituality (Berry, 1999; Fleming & Ledogar, 2008). A recent evidence on common components of these models is evaluated, including dose effects, mediators and moderators, and the individual or contextual differences that predict risk or resilience (Masten & Narayan, 2012). Therefore, research on the cultural background, especially on

peoples' cultural identity and acculturation, is necessary to inform prevention strategies to mitigate the risk of mental disorder in these diverse cultural communities (Carballo, Divino, & Zeric, 1998; Richmond, 2002).

In this study, we assess how acculturation relates to resilience after the Chinese earthquake on May 12th, 2008. By acculturation, we refer to the degree which members of ethnic nationalities are socially integrated into the dominant culture where they reside (Lopez-Class et al., 2011). Berry (1997, 2005) theorized an acculturation model with four adaptation strategies: assimilation, integration, separation, and marginalization. A resilience-based model of acculturation found that acculturation hassles have both direct and indirect effects on negative affect and have an indirect effect on positive affect (Pan, 2011). A qualitative research after Taiwan earthquake indicated that spirituality, ethnic spirit, and serving others have positive impacts on disaster resilience; Meanwhile, the participants from the in-depth interviews group affirmed understanding culture and meanings is important for the development of their resilience (Jang & Wang, 2009). A growing number of empirical studies have emphasized the positive contributions of culture and cultural identity in promoting resilience in youth from diverse cultural and ethnic backgrounds (Clauss-Ehlers, Yang, & Chen, 2006; Veronica, 2007). An empirical study by Tartakovsky (2007) indicated that the bicultural (integrated) youth were the most resilient. This is consistent with research with many acculturating peoples (Berry, 1997; Nguyen & Bennet-Martinez, 2013), where the most positive outcome is associated with integration when individuals are engaged in both cultures. Consequently, our analyses focus on whether or not different acculturation strategies predict different resilience, and which the better acculturation strategy compare to others to promote resilience following the 2008 Chinese earthquake.

DATA AND METHODS

The great earthquake in China on May 12th, 2008, caused at least 30,000 Qiang people injured, missing or died. The investigation was conducted between 2012 and 2013; data for the current study come from a random sample. Comprising a total of 898 Qiang people from the Qiang Autonomous Region in China: 414 male (46.1%) and 484 female (53.9%), aged 17-78 years ($M = 29.5$, $SD = 11.23$). Samples include villagers, students, teachers, civil servants and freelancers. Thirteen percent of the participants were primary school graduates, 16% junior, 16% senior and 55% college. A small part of participants accepted poster invitation, but most of participants through formal

invitation in their home. All participants were volunteers, gave their informed consent and then completed the questionnaires (taking between 25 and 35minutes). Participants were told that the study aimed to explore how to deal with differences in two cultures (ethnic culture and National culture), and the relationships between acculturation and resilience in their life.

The statistical analyses were performed by using SPSS 18.0 (SPSS Inc). We first presented a correlation among ethnic culture identity, national culture identity and resilience (Table 1). Next, a stepwise multiple regression analysis were conducted to determine whether aspects of QCI and NCI were significant predictors of aspects of Qiang people's resilience as measured by the CD-RISC (Table 2). Following those analyses, we described that Qiang people's acculturation strategies based on their ethnic cultural identity (QCI) and national cultural identity (NCI). A one-way analysis on resilience by different acculturation strategies in Qiang sample (Table 3).

Dependent Variable

In our analyses, we focused on resilience, which identified as a multi-level phenomenon that is a function of the quality of the interrelationships between personal, social, cultural and societal characteristics (Norris et al., 2008). Among survivors of violent traumas, higher levels of resilience are associated with better health condition and fewer posttraumatic stress disorder (PTSD) symptoms. Our resilience scale based on the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) is a 25-item measure influenced by Kobasa's (1979) work with hardiness. The CD-RISC was selected to provide information concerning comparative statistics because it is one of the resilience measures being used with diverse cultural groups (Clauss-Ehlers & Wibrowski, 2007) as well as a sample of Chinese adult residents of the Guangdong province and the City of Beijing (Yu & Zhang, 2007). Respondent rate items are from 0 ("not true at all") to 4 ("true nearly all the time''). Range is 0-100 and the high score leads to the high resilience. This study produced a 3-factor structure (tenacity, strength, and optimism), which corresponds to the features of the Chinese culture (Yu & Zhang, 2007). Tenacity is a quality of people who consciously integrate three behaviors (controlling, goal-setting, and decision-making), when they are drawn into a situation of frustration and setback. Strength reflects the process of disruption-reintegration (Richardson, 2002). It suggests that resilient people usually regard changes as a normal part of life rather than as a threat to life; this factor has been

Table 1.

Correlations among QCI, NCI and CD-RISC scale ($N = 898$)

	1	2	3	4	5	6	7	8	9
1. Qiang knowledge and behavior	—								
2. Qiang pride	-0.540**	—							
3. Qiang religious identity	-0.607**	-0.341**	—						
4. National knowledge	-0.002	-0.041	0.041	—					
5. National symbolic beliefs	-0.018	0.066	-0.043	-0.632**	—				
6. National customs	0.022	-0.023	-0.003	-0.526**	-0.326**	—			
7.Tenacity	-0.209**	0.270**	0.283**	-0.367**	0.340**	-0.300**	—		
8.Strength	-0.149**	0.194**	0.220**	0.309**	0.309**	0.256**	0.557**	—	
9.Optimism	-0.242**	0.319**	0.313**	0.390**	0.330**	0.250**	0.710**	0.557**	—

Note. ** $p < 0.01$

Table 2.

Regression of resilience on Qiang people's cultural identities ($N = 898$)

	Qiangknowledge and behavior		Qiang pride		Qiang religious identity		National knowledge		National symbolic beliefs		National customs	
	β	t	β	t	β	t	β	t	β	t	β	t
Tenacity	-0.094	-0.157	0.125	2.45*	0.283	8.84***	0.367	11.80***	0.164	3.82***	0.017	0.340
Strength	-0.040	-0.778	0.063	1.198	0.220	6.76***	0.309	9.73***	0.182	4.14***	0.012	0.235
Optimism	-0.120	-2.11*	0.319	10.07***	0.164	3.25***	0.390	12.67***	0.128	3.01**	-0.139	-2.92**

Table 3.
A one-way analysis on cultural identities and resilience for different acculturation strategies in Qiang sample ($M \pm SD$) ($N = 898$)

Resilience		Integration (n = 341)	Marginalization (n = 270)	Assimilation (n = 188)	Separation (n = 99)	F	P
Qiang knowledge and behavior	M	40.57	23.39	20.02	36.17	603.45	< 0.001.
	SD	6.75	6.14	6.23	5.20		
Qiang pride	M	44.43	25.51	26.97	39.57	623.53	< 0.001.
	SD	5.55	6.04	6.93	6.04		
Qiang religious identity	M	39.83	23.37	26.07	35.75	412.41	< 0.001.
	SD	6.06	6.37	6.90	5.47		
National knowledge	M	34.01[a]	20.13	34.15[a]	25.46	604.61	< 0.001.
	SD	3.93	5.63	3.73	3.77		
National symbolic beliefs	M	17.76[b]	10.54	17.74[b]	14.46	346.41	< 0.001.
	SD	2.13	4.03	2.25	3.51		
National customs	M	19.75	12.55	21.94	14.60	386.02	< 0.001.
	SD	3.22	3.94	2.59	3.21		
Tenacity	M	28.70	23.90	27.51	25.98	55.59	< 0.001.
	SD	4.29	4.83	5.22	4.49		
Strength	M	34.01	29.51	32.76	31.53	52.35	< 0.001.
	SD	4.07	4.37	5.66	3.60		
Optimism	M	25.79	21.07	23.71	22.67	60.75	< 0.001.
	SD	4.03	4.70	4.67	3.71		
Total score	M	88.50	74.48	83.98	80.17	74.49	< 0.001.
	SD	10.89	11.66	13.85	9.81		

Note. Means with superscript (a, b) in the line of Qiang cultural identity, National cultural identity and resilience cross with four acculturation strategies homogeneous subsamples according to Tamhane post hoc test ($p < .05$) (equal variances not assumed) and in other lines according to LSDs post hoc test ($p < .05$) (equal variances assumed)

addressed by many researchers as stress-related growth in health psychology and positive psychology (Frazier et al., 2004). Optimism represents the individual's generally positive attitude towards, and faith about, adverse situations and risk events. This formation is more in line with the collectivism culture than 5-factors model of resilience (tenacity, strength, hardiness, control and spiritual influence) obtained among the US adult sample. More notably, the Chinese version of CD-RISC was demonstrated to be a reliable and valid measurement (Cronbach's alpha = 0.89) in assessing resilience among Chinese sample after the 2008 earthquake (Yu et al., 2011).

Independent Variables

Qiang Cultural Identity (QCI)

In intercultural settings, cultural identity is usually considered to be composed of at least two components: an ethnic identity and a national identity. Both these components are considered to be fluid and adaptive (Laroche, Kim, Hui, & Joy, 1996). Ethnic identity is a particularly salient aspect of cultural identity for ethnic group members living within a culturally-plural society (Phinney, 1996). We assessed Qiang people's ethnic cultural identity by QCI. The items in the Qiang cultural identity questionnaire were originally developed from research with the Qiang people, using an ethnographic interview. Participants responded using a five-point scale (0 = Not true at all, 1= Rarely true, 2 = Sometimes true, 3 = Often true, and 4 = True nearly all the time). Scores can range from 0 to 120 with higher scores indicating a higher degree of Qiang ethnic cultural identity. Analysis of the 30 items remaining in the questionnaire after the initial analyses revealed three dimensions: Qiang knowledge and behavior; Qiang religious identity; and Qiang pride. A total of 898 Qiang participants were included in this further analysis of the relationship between three dimensions on Qiang cultural identity. There is a significant correlation among the three dimensions (r = -0.54, -0.61, -0.34, $p < 0.01$). Cronbach α for this scale was 0.86 in the present study.

National Cultural Identity (NCI)

National identity is also a multidimensional concept, and refers to the sense of attachment that individuals have to their nation state and

to the larger society in which they live (Delanty, 1996). We assessed Qiang people's ethnic cultural identity by NCI. The Qiang national cultural identity was assessed using a questionnaire with 17 items. Participants responded using the same five-point scale. Analysis showed that this identity also has three components: National cultural knowledge; National symbolic beliefs; and National customs. Scores range from 0 to 68 with higher scores indicating higher National cultural identity. 898 Qiang participants were included in this further analysis of the relationship between three dimensions on National cultural identity. There is a significant correlation among the three dimensions (r = -0.63, -0.52, -0.33, $p < 0.01$). Cronbach α for this scale was 0.86 in the present study.

Acculturation Strategies

Berry (2005) proposed a typology of acculturation strategies, which can be created by crossing responses to the two identity scales (as an alternative to using the two original dimensions (preferences for own-cultural maintenance and for contact with others outside their group). We assigned participants to four groups according to their mean scores on the two identity scales, rather than using the other two methods (dividing according to the theoretical midpoint or the median). We chose to use the mean score as the dividing point to create the four acculturation strategies because this approach yielded a distribution of participants that is similar to that found in previous studies. On this basis, we obtained four acculturation strategies groups: *Integration* (above the mean on both identities), *Assimilation* or *Separation* (above the mean on one, and below on the other identity), and *Marginalization* (below the mean on both identities).

RESULTS

A correlation analysis among ethnic culture identity, national culture identity and resilience is shown in Table 1.

The Pearson Product Moment correlation revealed that the Qiang cultural identity and resilience were significantly related (r = -0.242 to 0.319, $p = 0.01$), and the National cultural identity related with resilience is salient (r = -0.367 to 0.390, $p = 0.01$). Weaver (2010)

found that a positive relationship exists between cultural identity and resilience, and there are positive relationships among in most of Qiang and National cultural identity and resilience. But there is negative relationship with in QCI and NCI respectively, perhaps this result reflected all dimensions of QCI and NCI are independent each other.

In terms of the outcome measures assessed, all dimensions of QCI and NCI were entered as predictors of the three resilience dimensions (Table 2).

The results indicated that the QCI scores for Qiang knowledge and behavior are not predictive of any aspect of resilience; however, Qiang pride is positively predictive of tenacity, and Qiang religious identity is positively predictive of all three aspects of resilience. The NCI score for National knowledge, and National symbolic beliefs is positively predictive of tenacity and strength (but not of optimism), while National customs is significant and negative with the Qiang people's optimism.

Table 3 presents the present means, standard deviations, and F-statistics for resilience across the four acculturation strategy groups. The upper part of Table 3 shows a one-way analysis of variance (ANOVA) of the components of identity across the four acculturation strategies. This analysis indicates that across the four acculturation groups, there are significant differences in all variables: Qiang cultural identity; National cultural identity; and all components of resilience. Applying the Tamhane post hoc test ($p < 0.05$), we found that, with the exception of National knowledge and symbolic beliefs for those with Integration and Assimilation strategies, all other means for cultural identities and resilience are significantly different.

The lower part of Table 3 shows variations in the components of resilience (and the total score) across the four acculturation strategies. This analysis shows that the Qiang people with an Integration acculturation strategy have the highest score on all the three aspects of resilience, and on the total resilience score. In contrast, those who pursue Marginalization have the lowest score on all resilience dimensions and cultural identities. Participants who adopt the Assimilation acculturation strategy have a higher score than those with a Separation acculturation strategy.

In order to understand the characteristics of those with the different acculturation strategies, demographic information on the participants in each of the four acculturation groups was analyzed. Integration group mean age is 30.21(range 17-75years old), Marginalization group is 29.26 (range 17-69years old), Separation group is 30.04 (range 17-78years old), and Assimilation group is 28.13 (range 18-59years old). There is no difference in age ($F = 1.498$, $P > 0.05$) or sex ($x^2 = 4.828$, $p = 0.185$) across the four acculturation strategies groups. With respect to other demographic variables, Chi-square test results found that the four groups are significantly different in education, occupation, social context and economic conditions.

DISCUSSION

With 3,000 years of history behind them, China's Qiang ethnic group has attracted much recent attention because of the earthquake in Sichuan on May 12th, 2008. The earthquake caused an enormous disaster, which was not only a natural disaster, but is also a cultural catastrophe. Many precious Qiang cultural relics were destroyed, and some of the Qiang intangible cultural heritage inheritance people died in the earthquake. This means that it is important to understand the challenges of recovering the individual mental health, and how to maintain the Qiang culture after the disaster. The traditional Qiang culture is the sum of all previous civilizations created by the Qiang people in their long historical development. The Qiang culture and its people have been influenced not only by their own cultural

heritage, but also by the dominant culture during the long process of intercultural contact and mixed residence. This intercultural and multicultural experience of the Qiang people has been investigated in this study using psychological approaches mainly derived from the research approach of cross-cultural psychology (Berry et al., 2011; Segall, Lonner, & Berry, 1998), in which the cultural contexts and individual behaviors and identities are examined. It has also used the approach of intercultural psychology (Sam & Berry, 2006) in which changes in the behaviors and identities that ensue from intercultural contact are examined. In these intercultural encounters, many individuals are exposed to and internalize more than one culture, with the result that they become the bicultural or multicultural (Hong et al., 2000; Nguyen & Benet-Martínez, 2007).

Relationships among Cultural Identities and Resilience among Qiang

Intercultural psychology has shown that cultural groups and their individual members (both indigenous and ethnic) usually undergo cultural and psychological changes following intercultural contacts. There are many researches on the acculturation and psychological adaption of these cultural groups in relation to the way they seek and experience acculturation (Berry, 1980, 1997, 2005; Phinney, 2003). The immigrants keep norms and values of the original culture associated with their lower PTSD-symptomatology, and acculturation also affects their mental health after disaster (Drogendijk et al., 2012). Adams & Boscarino (2013) found that low acculturation individuals were more likely to experience negative life events, and also more likely to experience post-disaster panic attacks, have higher anxiety, and have poorer mental health status.

Some studies focused on the relationships between culture identity and resilience (Bhui et al., 2005; Weaver, 2010; Chen et al., 2012); and others focused on the relation of acculturation and resilience (Miller & Chandler, 2002; Pan, 2011). Recently, a study result showed a positive association between the resilience-enhancing resources and enculturation, and the youth who reported more resilience aspects also endorsed more cultural connection, belonging to an overall ethnic identity (Rogiers et al., 2013). İkizer (2014) found that religiousness, health, and positive personality characteristics were most pronounced factors that were perceived by survivors associated with resilience. Resilience was a significant buffer for depression, PTSD, and general health (Kukihara et al., 2014). Some other findings in the existing resilience literature have been obtained with qualitative studies of the identity formation of youth, and their potential to serve as protective factors to guard against major life challenges (Chen et al., 2012). Michele (2013) considered that 'Cultural resilience' considers the role that cultural background plays in determining the ability of individuals and communities to be resilient in the face of adversity. Culturally-focused resilience suggests that people can manage and overcome stress and trauma based not on individual characteristics alone, but also from the support of broader socio-cultural factors (Clauss-Ehlers, 2010).

In light of this previous research, resilience variables were included in the present study because they are an important indicator of the extent of recovery from this natural and cultural disaster. Identity and acculturation variables were included in this study because resilience has previously been shown to be related to a person's cultural identity (Clauss-Ehlers, 2008; Currie et al., 2013). The correlation analysis results indicated that most of Qiang ethnic cultural identity, national cultural identity and resilience were significantly related (Table 1). Further, we conducted a stepwise multiple regression analysis to determine whether QCI and NCI subscales were significant predictors of resilience (Table 2). The findings revealed that most of Qiang cultural identity and National cultural identity maybe predicted resilience positively.

It is well known that people's ideology is usually influenced by thinking ability, environment (culture, social, life style) and value orientation etc. Qiang's cognition of ethnic culture or national culture would influence their behaviors. Qiang pride, such as "I'm proud as a Qiang people" and "I'd like to be one of the Qiang ethnic cultural propagators" that kind of emotion and behavior may be positively predictive of tenacity. Another ethnic factor is Qiang religious identity. Such as "I believe that the Qiang is the God's son, and get bless from the God" and "Qiang nationality has been kept the ethnic cultural customs of cremation and inhumation" that kind of belief s and faiths would influence on their daily life and help their recovery after earthquake. Likewise, the Qiang people's identity of NCI would contribute to their recovery. For instance, "Learning the national culture and history is very important to me", "I admire the values of socialism and collectivism" and abide by the national customs (such as, "it is an important custom to sacrifice to and appreciate the moon during the Mid-Autumn Festival") would help them integrate into a dominant society, get more social support, then get more chance to develop their resilience. Clauss-Ehlers (2006) found that the strong ethnic identities were predictive of resilience in response to stress. And Weaver (2010) found that the ethnic identity was significantly and positively correlated with resilience. In keeping with these previous findings, Qiang people's resilience appears to be promoted by both two cultural identities after the earthquake.

Difference in Resilience by Acculturation Strategies among Qiang

Based on the existing researches, we considered that the Qiang people acculturation strategies also accord with the Berry's bilinear acculturation model. Thus, there are four acculturation strategies based on the Qiang ethnic and National cultural identities: Integration, Marginalization, Assimilation, and Separation. We classified these four strategies by dividing individuals into groups based on their mean scores on their two cultural identities. We found that the largest number of Qiang people adopted the *Integration* strategy, having a high identification with both two cultures. The second largest group was in a *Marginalization* category, which is opposite to that of Integration, having individuals with relatively low identification with both cultures. The third largest group is *Assimilation*, which prefers to accept the national culture than ethnic culture. And the smallest group is *Separation*, which prefers to maintain their ethnic cultural identity, while excluding the national culture.

Acculturation involves a complex set of processes that appear to have differential impacts on mental health outcomes. The meta-analysis by Nguyen and Benet-Martinez (2013) provided broad supports for this relationship between integration and wellbeing. A study of acculturation and life satisfaction among Mexican immigrants found both individuals that reported being culturally integrated and assimilated reported higher rates of resilience than their separated or primarily Spanish speaking counterparts (Marsiglia et al., 2013). On this basis, we proposed that there are significant differences in the resilience of the Qiang people across the four acculturation strategies. We found that the Qiang with different acculturation strategies have different levels of resilience (Table 3). Integration was the most optimal strategy to promote the development of resilience, followed by Assimilation, Separation and finally Marginalization. Establishing personal interactions and relationships, and identifying with both co-ethnic people and with members of the dominant society was found to facilitate greater resilience and wellbeing. This supports many previous findings that sought to find a link between acculturation strategy and wellbeing (Berry, 1997; Kim, Lujan, & Dixon, 1998). Marginalisation was the second most frequent strategy, and was associated with the lowest level of resilience.

In contrast to this relationship with integration, many previous studies have shown that being connected to neither culture during acculturation (marginalization) is associated with the poorest adaptation (Berry, 1997; Bhui et al., 2005). In the study of immigrants to Germany (Schmitz & Berry, 2010), marginalization was significantly related to negative aspects of coping (emotions, avoidance and distraction). Similarly, separation and assimilation have also been found to be associated with poorer outcomes that for integration. A lack of social interaction with the dominant culture (or too much interaction, with an associated loss of heritage culture) may lead to an acculturation mode of either separation or assimilation (Berry, 1998; Berry et al., 2006), which in turn may produce poor psychological adaptation outcomes such as negative emotions (Mori, 2000; Zheng, Sang, & Wang, 2004) and even emotional disorder (Kosic, 2002).

These findings have important implications for promoting the resilience and wellbeing of acculturating individuals, and their cultural communities. The positive link between the integration strategy and wellbeing among immigrant and ethnic cultural groups that has been found in many previous researches, has now been confirmed with a group that is being severely challenged by a natural disaster. This finding in an earthquake setting resembles those found with refugees and asylum seekers who are living in other difficult situations (Allen, Vaage & Hauff, 2006; Dona & Ackerman, 2006). Individuals and groups who are being assisted through the adaptation process following a disaster requiring information about the advantages of being involved with and identifying with both cultures. In particular, efforts need to be made by assisting agencies and their field staff to prevent the tragic psychological costs of feeling marginalized during this period of recovery.

They also have implications for the policies and practices of the larger dominant society. It has been found that societies that promote Integration (through a policy of multiculturalism) tend to achieve better outcomes for the wellbeing of all members of their societies, both non-dominant and dominant (Berry & Sam, 2013). In a multicultural society, such as in China, where many Nationalities (including the Qiang) are officially recognized, the stage is formally set for the promotion of Integration, and for the achievement of the wellbeing of these Nationalities.

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