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 tguknkgpeg" cu" c" rtqeguul" Cu" c" vtckv." tguknkgpeg "ku" fgŁpg f" cu" rgtuqpcn"

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 fkuvtguu" cpf" cfxgtukv{0" Hqwt" qt" Łxg" {gctu" chygt" gctvj swcmg." o quv" reconstruction projects had been completed,

, 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 gctvj swcmg<"ecuwcnvkgu"c o qpi "tgncvkxgu."Lpcpekcn"uvtckp."cpf"vjg"ftckp" on resources for the reconstruction of the physical environment. To

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

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 htqo"vjg"kp/fgrvj"kpvgtxkgyu"itqwr"chŁtogf"wpfgtuvcpfkpi"ewnvwtg" 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 12^{th} , 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 *URUU" Kpe+0" Y g" Łtuv" rtgugpvg f" c" eqttgncvkqp" c o qp i "gvj pke" ewnvwtg" identity, national culture identity and resilience (Table 1). Next, a stepwise multiple regression analysis were conducted to determine y jgvjgt" curgevu" qh" SEK" cpf" PEK" y gtg" uki pkŁecpv" rtg fkevqtu" qh" 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

 $\label{lem:condition} \verb"Kp" qwt" cpcn \{ ugu." \ y \ g" hqewug \ f" qp" tguknkgpeg." \ y \ j ke \ j" k \ fgpvk \ k \ grvk \ k \ fgpvk \ fgpvk \ fgpvk \ fgpvk \ fgpvk \ k \ fgpvk \ fgpvk$ 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 *Eqppqt" ("Fcxkfuqp." 4225+" ku" c" 47/kvg o" o gcuwtg" kp ł wgpeg f" d { " 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.

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 kpłwgpeg+"qdvckpgf"coqpi"vjg"WU"cfwnv"ucorng0"Oqtg"pqvcdn{."vjg"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 dg" lwkf" cpf" cfcrvkxg" *Nctqejg." Mko." Jwk." ("Lq{."3;;8+0" Gvjpke" 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 gvjpqitcrjke" kpvgtxkgy0" Rctvkekrcpvu" tgurqpfgf" wukpi" c" Łxg/rqkpv" 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

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 tguwnv"tg lgevg f"cm"fkogpukqpu"qh"SEK"cpf"PEK"ctg"kpfgrgpfgpv"gcej" 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), y jkng" Pcvkqpcn" ewuvq o u"ku"uki pkŁecpv" cpf" pgi cvkxg" ykvj "vjg" Skcpi" 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 hqwt" ceewnvwtcvkqp" i tqwru." vjgtg" ctg" ukipkŁecpv" fkhhgtgpegu" kp" cm" 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 ukipkŁecpvn{"fkhhgtgpv0}

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 uki pkŁecpvn{"fkhhgtgpv"kp"gfwecvkqp."qeewrcvkqp."uqekcn"eqpvgzv"cpf"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 cpf"kvu" rgqrng" jcxg" dggp"kp ł wgpeg f "pqv" qpn {"d{"vjgkt" qyp" ewnvwtcn"

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 resilienceenhancing resources and enculturation, and the youth who reported more resilience aspects also endorsed more cultural connection, $dgnqpikpi"vq"cp"qxgtcnn"gvjpke"kfgpvkv{"*Tqikgtu"gv"cn0."4235+0"\ mk|gt"}$ (2014) found that religiousness, health, and positive personality characteristics were most pronounced factors that were perceived d{"uwtxkxqtu"cuuqekcvgf" y kvj "tguknkgpeg0"Tguknkgpeg" y cu"c"uk i pkŁecpv" buffer for depression, PTSD, and general health (Kukihara et al., 4236+0"Uqog"qvjgt"Lpfkpiu"kp"vjg"gzkuvkpi"tguknkgpeg"nkvgtcvwtg"jcxg" 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. Culturallyfocused 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 ygtg" uki pkłecpwn {" tgncvgf" *Vcdng" 3+0" Hwtvjgt." yg" eqpfwevgf" c" stepwise multiple regression analysis to determine whether QCI cpf" PEK" uwduecngu" ygtg" uki pkłecpw" rtgfkevqtu" qh" tguknkgpeg" *Vcdng" 4+0" Vjg" Łpfkpiu" tgxgcngf" vjcv" o quv" qh" Skcpi " ewnvwtcn" kfgpvkv {" cpf" National cultural identity maybe predicted resilience positively.

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