

Effects of social group work with survivors of the Wenchuan earthquake in a transitional community

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What is known about this topic

- Group work is an effective way to work with vulnerable people.
- The majority of people have resilience to loss and trauma and can potentially recover by various pathways.
- Little empirical evidence about the effect of group work with older people and women affected by disasters was available.

What this paper adds

- Disasters can lead to long-term psychosocial harm to survivors.
- Group work is effective in alleviating the feelings of distress and depression among women and older people affected by disasters and improving their psychosocial well-being.
- Social workers can facilitate disaster survivors' self recovery through organising recreational activity groups for them.

Abstract

This research examined the effects of group work with survivors of the Wenchuan earthquake. The two groups studied were organised by social workers in a transitional community. One group was composed of older people and the other of women. The research adopted qualitative research methods. Data were collected by focus group meetings and in-depth individual interviews. The 24 research participants were mainly asked to describe their lives before and after joining the groups. The findings indicated that disaster survivors had resilience to loss and trauma and could recover themselves. Group participation facilitated disaster survivors' self recovery and had positive effects on them. Before joining the groups, many members of both groups felt bored and depressed. After joining, they felt better physically and psychologically and enjoyed socialising with each other. Their lives became more meaningful and their social network was broadened and strengthened. The practical and policy implications of the study are noted and further research recommended. It was concluded that group work, in the form of recreational activities, is effective in alleviating disaster survivors' feelings of distress and depression, improving their psychosocial well-being and fostering their self recovery.

Keywords: China, disaster survivors, group work, resilience, self recovery

Introduction

The Wenchuan earthquake, measuring 8.0 on the Richter scale, hit Wenchuan County, Sichuan, China and its neighbouring regions at 2:28 p.m. on May 12, 2008. Affected by the quake were 440 000 square kilometres, 280 000 square kilometres of which were in Sichuan. The quake caused 69 226 known deaths, 17 923 missing people and 374 643 injured (The State Council 2008). Social workers throughout China quickly responded to the call for disaster assistance. Many studies (e.g. Bian *et al.* 2009, Chen 2009, Xu 2009, Zhang *et al.* 2009) have been conducted to explore social workers' roles and functions in this earthquake recovery. However, the effects of social work involvement in this earthquake recovery were seldom examined.

This article investigated the effects of group work with survivors of the Wenchuan earthquake. Two groups that social workers organized in a transitional community were examined. The study adopted qualitative research methods. The members of the two groups were asked to report life experiences before and after joining the groups. Findings indicated

that the survivors had resilience to loss and trauma and that group work was effective in alleviating feelings of stress and powerlessness and improving social function. The implications of the findings for practice, research and policies were discussed.

Literature review

Disasters can be defined in different ways and include natural events, social disruptions and political phenomena (Quarantelli 1998, Mirzamani & Mohammadi 2007). Disasters affect individuals, families and communities physically, psychologically and spiritually (Erikson 1976, Myers 1994, Rosenfeld *et al.* 2010). Those with significant loss of life, widespread damage to property, serious and ongoing economic difficulties for the community, and other disasters intentionally caused by humans tend to trigger severe, lasting and pervasive psychological problems (Freedy *et al.* 1993, Green 1995, Adams *et al.* 2002, Norris *et al.* 2002a,b). For example, a study on survivors of the 1999 Turkey earthquake revealed that 40% satisfied the criteria for Post-Traumatic Stress Disorder (PTSD) at least 3 years following the event (Salcioglu *et al.* 2007).

Social scientists have conducted research on the people affected by disasters and attempted various interventions and supports to help them (Gist & Rubin 1999, Eyre 2006, Rodríguez *et al.* 2006). For example, in psychology, Lindemann (1944) proposed to help survivors and the bereaved express grief to reduce their later symptoms in the research on the Cocoanut Grove nightclub fire. Caplan (1964) indicated that providing material resources such as temporary housing and social resources such as emotional support for the bereaved was a major form of post disaster intervention. Other interventions were also developed, such as Critical Incident Stress Debriefings (Mitchell 1983), eye movement desensitisation (Adúriz *et al.* 2009), exposure therapy (Foa & Kozak 1986, Taylor *et al.* 2003) and sleep dynamic therapy (Krakow *et al.* 2002). However, most interventions, which focus on PTSD and its prevention, may need more nuanced and individuated range of treatments (Gray *et al.* 2004).

Besides the research on interventions for disaster survivors, many studies examined their resilience and resistance to loss and trauma. It was indicated that the majority of people have resilience to loss and trauma and can potentially recover by a variety of different pathways (Bonanno *et al.* 2001, Bonanno 2004). Only a small number of people in the face of loss and trauma may need professional interventions (Bonanno 2004). It was also suggested that personal

factors such as dispositional optimism and hardiness shape individuals' responses to potential trauma by influencing emotion regulation, capacity to obtain social support and so on (Westphal & Bonanno 2007). Meanwhile, researchers have advocated enhancing family and community resilience and resistance to reduce potential impacts of disasters (e.g. Walsh 2007, Cox & Perry 2011).

In social work, evidence indicates that group work is effective in helping vulnerable people, such as older people with impaired vision (Baird 2005), those with severe mental health problems and disordered personality (Malone *et al.* 2008), children after homicide and violence (Salloum 2008) and children of divorce (Rose 2009). The literature shows that group work is also effective in helping disaster survivors. For instance, Zotti *et al.* (2006) evaluated Camp Noah, a free, weeklong day camp and a faith-based intervention for children affected by disaster, and found positive effects on children's behaviours and symptoms. Many studies also demonstrate that group work and counselling are effective in reducing PTSD symptoms of children affected by disasters (Galante & Foa 1986, Yule & Udwin 1991, Yule 1992, Richman 1993, Saylor & Gillis 1993).

However, except for studies on the effects of group work with children affected by disasters, little such research with other groups affected by disasters is available. A few articles (e.g. Armstrong *et al.* 1995, Johnstone 2007, Javadian 2008) mentioned group work with disaster survivors, but did not examine the effects of group work. In China, little research on the effects of social work intervention including group work with disaster survivors exists, probably because social work is a relatively new discipline (Yuen-Tsang & Wang 2008) and social workers' involvement in disaster recovery is a recent phenomenon (Bian *et al.* 2009). This suggests a strong need to conduct research on this topic. First, disasters affected about 300 million people in China between 1990 and 2008 (The State Council 2009). Such a huge number of people warrant research attention and effort. Second, research on this topic is useful in developing evidence-based practice with disaster survivors. Third, research in China is useful in exploring the applicability of theories or practice methods developed in Western societies in other contexts. In addition, the literature indicated that social workers had limited training to work with disaster survivors in Iran (Javadian 2008), the Caribbean (Rock & Corbin 2007), Taiwan (Chou 2003) and mainland China (Bian *et al.* 2009). This further implies that more research on the effects of social work with disaster survivors

should be conducted, to provide evidence for training social workers to serve disaster survivors better.

Description of the two recreational activity groups

The Wenchuan earthquake caused tremendous deaths and other damages. Besides the death and injury of people mentioned earlier, 5.36 million buildings collapsed and more than 21 million buildings were damaged (US Geological Survey 2012). The recovery of this earthquake was characteristic of strong central government control, weak participation by non-governmental organisations (NGOs) and a lack of disaster-affected people's participation (Huang *et al.* 2011, Tan *et al.* 2011). The government controlled large amounts of financial resources and set rules and regulations for recovery. However, among the 39 most severely or severely earthquake-affected counties in Sichuan, less than four NGOs were found to be involved in recovery in each county on average in late July and early August 2009, and many NGOs had financial constraints and other difficulties (Huang *et al.* 2011). Meanwhile, the government focused on physical recovery, such as infrastructure and house reconstruction. Social recovery, such as rebuilding social relationships or social functions, was rarely mentioned in government documents about this earthquake recovery (Huang *et al.* 2011, Tan *et al.* 2011).

With the common objective to serve the Wenchuan earthquake survivors and considering that government rarely is involved in psychosocial services for the survivors, two universities, one from Hong Kong and the other from Sichuan, worked together to establish a social work station in Beichuan, one of the most seriously affected counties. The station was funded by a Hong Kong social enterprise and supported by local government because of the involvement of the Sichuan local university. The station was located in a community, which was originally a part of a village and had an area of 84 200 square metres. Due to its flat geography, it was chosen by the government to build prefabricated houses as transitional dwellings.

The prefabricated houses, chosen by the government to accommodate homeless people in the earthquake before their permanent houses were rebuilt, were manufactured off-site and transported and assembled on site. They consisted of steel and galvanised steel clipping foam board. Each house ranged from 15 to 22 m² and accommodated three or four people. Some houses were supporting facilities like public flushing toilets, kitchens and bathhouses. It was estimated that 677 313 prefabricated houses were built within the first 4 months following the quake

(Xinhua News Agency 2008 Sept. 11). The costs associated with building prefabricated houses were paid by the government, so were the costs of living in the houses such as electricity and water costs. In the community where the station was established, there were 1788 prefabricated houses and about 3770 residents in early 2009. The residents, who made a living mainly from farming and whose houses had collapsed in the earthquake or were pulled down to make room for prefabricated houses, were peasants from nearby villages and local peasants.

The station rented a prefabricated house as office and intended to provide social services for the residents, for the next 2 years. Two full-time social workers were employed to work in the station. Given that most young people, especially young men, had left home for job opportunities or worked in nearby construction sites in the daytime, social workers mainly encountered older people, women and children. To efficiently use human resources, the social workers started their intervention by doing group work. Between June and July 2009, the social workers conducted a need assessment of residents and found that many felt distressed or depressed and indulged in thinking about the earthquake. Many reported that they did not know what to do and felt lonely and bored.

To alleviate people's feelings of distress and depression and to broaden and strengthen their social network, two recreational activity groups were organised by social workers in August and September 2009. One group consisted of about 20 older people, of whom the women were generally 55 years and above and the men were 60 years and above. About 75% of group members were women. The social workers did not set a minimum age for group members. However, according to *Labour Insurance Regulations of the People's Republic of China*, the retirement age for a female worker or staff member is 50 years and for a female official it is 55 years. Thus, women aged 50 years and over are sometimes regarded as older people in China. Waist drum beating, a traditional Chinese group recreational activity, was chosen as group activity by older people because they were interested in it and one social worker could teach them the activity. The other group was composed of about 20 women aged between 30 and 54 years old, who chose dance as recreational activity because they were interested in dance and another social worker could teach them a few forms of dance.

Both groups were open. All older people and women in the community could join or leave at any time. The groups developed smoothly from September 2009 to July 2011. They met at least once a week

on average, and each group activity lasted from 60 to 90 minutes. The groups sometimes performed waist drum beating and dance for other residents at holidays, such as National Day and other celebrations. Social workers played important roles in the groups' development. In the beginning, they approached and invited members to join. After the groups were formed, they taught group activities, promoted harmony among members and fostered group leaders. In the later phase, they helped connect the groups with other groups outside the community so that the two groups had opportunities to learn from and communicate with others. Although a few members withdrew mainly because they moved out of the community, a few new ones joined, so the number in both groups was always about 20. In the mature phase, the organiser role was transferred from the social workers to the leaders of the groups.

Methods

This study was to explore the effects of group work with survivors of the Wenchuan earthquake. In view of the limited knowledge about this topic and given its exploratory nature, the qualitative research method was chosen because it enables learning about people's subjective feelings, thoughts and experiences (Corbin & Strauss 2008, Creswell 2008, Gray 2009). Methodological triangulation involving focus group meetings and in-depth individual interviews was used to collect data. The informants were probed to report life experiences and changes before and after joining the groups.

Participants

A total of 10 people in each of the two groups participated in a focus group meeting separately. Seven older people, of whom five participated in the group meeting, were also interviewed individually. Six women, of whom four also participated in the group meeting, were later interviewed individually. Of the nine group meeting participants interviewed individually again, five did not provide a clear description about their lives before and after joining the group and thus were interviewed. The other four, two in each group meeting, were interviewed because we wanted to test the validity of individual reports in group meetings, given that social factors such as peer pressure might lead to inaccurate reports. The results showed that individual reports in group meetings were consistent with individual interviews.

Participants were recruited through convenience sampling. The researchers planned to approach all

members in two groups originally. Besides the 24 participants, another five people in the two groups were also approached, but not included in this research because they said that they did not know what to say. Other members in the two groups could not be approached during data collection period. Participants were informed about the purpose of the study and were told that they could withdraw at any time. Their names were replaced with pseudonyms to ensure confidentiality. The gender, age, marital status and education level of all 24 participants are shown in Table 1.

Table 1 Socio-demographic characteristics of participants

	Gender	Age	Marital status	Education level
No.1.1 Xiao (G)	Female	72	Widowed	No formal education
No.1.2 Qiao (G)	Male	73	Married	No formal education
No. 1.3 Zhou (G)	Female	64	Married	No formal education
No. 1.4 He (G & I)	Female	60	Married	Primary school
No. 1.5 Shu (G & I)	Female	58	Married	No formal education
No. 1.6 Qiao (G)	Female	68	Married	No formal education
No. 1.7 Han (G & I)	Female	57	Married	No formal education
No. 1.8 Xu (G)	Female	71	Married	No formal education
No. 1.9 Tan (G & I)	Female	76	Widowed	No formal education
No.1.10 Huang (G & I)	Female	56	Married	No formal education
No. 1.11 Liu (I)	Male	65	Married	No formal education
No. 1.12 Zhu (I)	Female	60	Married	No formal education
No. 2.1 Yu (G & I)	Female	51	Married	Primary school
No. 2.2 Wang (G & I)	Female	41	Married	Primary school
No. 2.3 Huo (G)	Female	52	Married	Primary school
No. 2.4 Yang (G)	Female	39	Married	Primary school
No. 2.5 Xia (G)	Female	37	Married	Primary school
No. 2.6 Tan (G & I)	Female	36	Married	Primary school
No. 2.7 Chuan (G & I)	Female	33	Married	Primary school
No. 2.8 Zhao (G)	Female	36	Married	Primary school
No. 2.9 Qiao (G)	Female	40	Married	Primary school
No. 2.10 Lin (G)	Female	43	Married	Primary school
No. 2.11 Duan (I)	Female	39	Married	Primary school
No. 2.12 Chen (I)	Female	42	Married	Primary school

No. 1, Group of older people; No. 2, Group of women; G, participant of focus group meeting; G & I, participant of focus group meeting and individual interview; I, participant of individual interview.

Data collection

Both group meetings were conducted in the local dialect in a prefabricated house in the middle of July 2011. Each meeting lasted approximately 90 minutes. The in-depth interviews, conducted in July and August 2011, were semi-structured, and each lasted about 30 minutes. The time and place for interview depended on the respondent's convenience. Both group meetings and interviews were conducted and recorded after participants' oral consent was obtained. Because many older people and women could only speak the local dialect, which researchers could not completely understand, a research assistant who had a master's degree in social work and spoke the dialect was recruited and trained to help organise group meetings and to conduct individual interviews.

Data analysis

The transcripts of both focus group meetings and interviews were read and analyzed in Chinese, the researchers' first language, to avoid losing any meaning of the dialogue. The transcripts were coded by highlighting key words upon which the themes were determined. Quotes representing the major themes were selected from the transcripts and translated from Chinese to English. Investigator triangulation involving two researchers and one research assistant was applied in the data analysis process.

Results

Group of older people

With respect to the life experiences before joining the group, most of the older participants said that they used to stay at home thinking about the events related to the earthquake and felt distressed or listless. For example, Madame He (No. 1.4) said:

I stayed at home all the time thinking about the future of my family, the earthquake, and the children. I always thought about the earthquake and felt very distressed.

Madame Shu (No. 1.5) expressed the same feeling:

I stayed at home all the time then, thinking about the earthquake and the victims and feeling bad.

Madame Zhu (No.1.12) concurred:

I lost my son and son-in-law in the earthquake and was always thinking about them until I had a headache.

Madame Tan (No. 1.9) said:

More than 20 people in my family died in the earthquake. I was very depressed. I lost a lot of weight and weighed only 36 kg.

Madame Zhou (No. 1.3) also told us that:

in those days I stayed at home and felt lifeless ... I got sick due to spending too much time sitting at home.

Mr. Qiao (No. 1.2) pointed out, *I stayed at home and felt listless*. Mr. Liu (No. 1.11) also stated that he felt listless at home and hoped to participate in some activities. Only one respondent (No. 1.10) told us that she spent most of the time doing farm work. However, she said that she felt relaxed being with other older people.

The participation in group activities had positive effects on older people's lives. Most of them indicated that they did not indulge in thinking about the earthquake, and life became meaningful after joining the group. They also mentioned that they liked to stay with other older people and felt better both physically and psychologically. For instance, Madame He (No. 1.4) said:

We not only get exercise but also talk and laugh together. We thus forget the distress and become open.

Madame Han (No. 1.7) mentioned:

The participation in the waist drum group benefited our physical health and psychological well-being. When we have activities to do, we naturally don't think about other things and don't feel bored ... we feel good if we do some activities together.

Madame Zhu (No.1.12) told us:

I feel my health has improved. I felt bad and I had many illnesses before. I've felt much better in the past 2 years.

Madame Shu (No. 1.5) concurred:

I slowly forget those events related to the earthquake since participating in the activities ... yesterday I had dinner with my nephew and he told me my health is better now ... we aren't anxious but feel happy now.

Madame Tan (No. 1.9) pointed out:

I've liked these recreational activities since I was a child. Since participating in them, my health has improved.

Mr. Qiao (No. 1.2) expressed a similar feeling:

Social worker taught us waist drumming, which makes us happy ... we come together to sing and dance and we forget our worries. We also do exercise and our health has improved.

Older people's social networks were also broadened and strengthened after joining the group. They recognised the importance of mutual understanding and developed a sense of cooperation. For example, Madame Shu (No. 1.5) said:

At the beginning, people would be angry if others said that they couldn't beat the drum well. Now we know it's important to build good relationships and understand each other despite beating the drum well or badly.

Madame Tan (No. 1.9) pointed out that:

We feel happy to come and play together. Our relationships have become increasingly close. Now we're like sisters.

Madame Huang (No. 1.10) told us:

We've become better acquainted with each other since participating in group activities.

Madame Zhu (No. 1.12) indicated:

My family suggested me not care too much about the quality of beating the drum. What is important is our participation. I took my family's suggestion, and now I try to build good relations with others.

In short, participating in group activities freed older people from thinking about the earthquake and contributed to their meaningful life. Older informants also reported that their psychical health and psychological well-being were improved and their social network was broadened and strengthened.

Group of women

The findings showed that women felt bored or depressed before participating in the group. When asked what they generally did before participating in the group, Madame Tan (No. 2.6) said, *I stayed at home watching TV or sleeping*. Madame Wang (No. 2.2) told us that she *had nothing interesting to do, felt bored, and could only keep cleaning*. Madame Chen (2.12) expressed the same feeling:

Before the social workers came, I just went around and stayed idle. Sometime I played mahjong but felt it was not meaningful.

Some also mentioned that they were depressed or even desperate before participating in the group. For instance, Madame Yu (No. 2.1) told us:

Before participating in group activities, I did not know what I could do ... in those days, many people were depressed, not just me. People did not have confidence ... most people did not have plans for the future and felt homeless.

After participating in group activities, women generally felt happier or that life became meaningful. For instance, Madame Wang (No. 2.2) said, *I felt happy. I had a lot of exercise and felt rejuvenated*. Madame Chen (No. 2.12) told us: *I felt empty after the earthquake. In group activities, I felt more comfortable*.

Madame Yu (No. 2.1) concurred: *I felt happy ... I felt I had a big change. I easily became angry. I am different and open now*. Madame Duan (No. 2.11) mentioned the show that the group did on National Day and said: *We danced on the stage and people applauded. It was my first experience on the stage and I felt so happy*. Madame Zhao (No. 2.8) said: *I felt that I was back in childhood and happy*. Madame Chuan (No. 2.7) held a similar view: *I felt happy ... I became healthier and happier*.

Many women mentioned that their physical health had also improved. Madame Tan (No. 2.6) also said, *I learned fitness exercises when the group was formed. My health has improved. I keep exercising*. Madame Lin (No. 2.10) told us:

My health was poor. I was always sick and stayed at home. Participating in group activities benefits my health.

Madame Xia (No. 2.5) concurred: *My health has improved since participating in group activities*.

Some members pointed out that participating in group activities provided them an opportunity to understand group life. For example, Madame Qiao (No. 2.9) said:

I never participated in such activities, but I like them now. They're interesting and I like them more and more.

Madame Lin (No. 2.10) told us:

I did not participate in group activities at the beginning. I was shy and felt we were too old to sing and dance ... later I thought that other people could do it, so why couldn't I? So I joined and now I participate in all kinds of group activities.

Furthermore, some members indicated that their social network was strengthened and broadened since joining the group. Madame Duan (No. 2.11) said: *I have more friends now... when we were together, our relationship improved*. Madame Chen (No. 2.12) told us that

We knew each other before, but our relationship was more harmonious after we joined the dance group ... we're now like sisters. We can talk about our worries with others.

Madame Yu (No. 2.1) concurred:

Since joining the group, we have more contacts and our relationship is better. She added that As more and more people join the group, our relationship with our neighbors is also better.

In addition, some members mentioned having more confidence. They pointed out that they dared to play for people on the stage. For instance, Madame Chen (No. 2.12) said:

I was nervous when I went to play at the first time, but one sister encouraged me. Through continuous practice, we had confidence and were not nervous on the stage.

Madame Yang (No. 2.4) concurred: *I like to participate in group activities ... now I dare to sing on the stage.* Madame Yu (No. 2.1) made a similar point:

In the beginning, I lacked confidence because I never performed on the stage ... as more and more people participated in the activities, we gradually had confidence and interest in dance. She further indicated, I've changed a lot since I joined in the group. My confidence and the capacity to organize activities have also been strengthened.

In short, the women generally felt bored and depressed before joining the group. After participating in group activities, most felt happy or that life became more meaningful. Many indicated that their health improved. Some mentioned that participation broadened and strengthened their social network and gave them an opportunity to enjoy group activities. Some said that their confidence increased and they dared to perform on stage.

One thing to note is that group recreational activities were rarely organised for older people and women in their original villages and the transitional community. For instance, Mr. Qiao (No. 1.2) said: *We never did these kinds of activities.* Madame Zhou (No. 1.3) stated: *I never thought that I could lead an active lifestyle like this. Now I dance, play, and take exercise.* Madame Huo (No. 2.3) told us:

The government never interfered and the Secretary of the Communist Party and the head of our village never cared about our cultural and recreational life.

Discussion

The findings of this study suggest that, before joining groups, older people and women generally felt bored and depressed. Older people also reported indulging in thinking about the events related to the earthquake. After joining the groups, both women and older people said that they felt better physically and psychologically and enjoyed being with other group members. Their lives also became meaningful and their social network was broadened and strengthened. Furthermore, older people reported that they freed themselves from repeatedly thinking about the events related to the earthquake. Women indicated that their confidence improved. The findings are consistent with previous findings that suggest group work is effective in helping vulnerable people in non-disaster settings (Halperin 2001, Baird 2005, Drumm 2006, Rose 2009) as well as in disaster settings (Richman 1993, Saylor & Gillis 1993, Zotti *et al.* 2006).

The finding, that members of both groups reported their social network was broadened and strengthened, indicates that fostering recreational groups can be an effective way to help disaster survivors connect with and use social networks as a survival mechanism, a source for self-help, and a chance for personal growth. This is consistent with previous research findings that bonding and bridging social capital contribute to the development of resiliency of people or community (Luthans *et al.* 2006, Mathbor 2007, Hawkins & Maurer 2010). The finding, that older members are happier and their life becomes more meaningful after participation in group activities, also supports the activity theory, which suggests a positive relationship between social activity participation and life satisfaction of older people (Atchley 2001).

The above findings also resonate with the argument that most people have resilience to loss and trauma and can recover by a variety of different pathways (Bonanno *et al.* 2001, Bonanno 2004). Social workers can foster disaster survivors' own recovery through organising activity groups for them. It seems that through participating in recreational activity groups, disaster survivors not only overcome psychosocial problems themselves, but also promote personal resilience and growth by broadening and strengthening their social network, engaging in social activities and enhancing self-confidence. Previous research indicates that the availability of psychosocial resources, such as social network, social support, social engagement and positive beliefs about adversity may counteract or moderate the potentially disruptive influence of adversity (Cleary & Houts 1984, Glass *et al.* 1999, Brewin *et al.* 2000, Yip *et al.* 2007, Phillips 2009, Ke *et al.* 2010, Huang & Wu 2012).

This research reveals that the Wenchuan earthquake led to substantial impairment and distress for older people and women, even 11 months after the quake. The finding is consonant with previous studies (e.g. Bland *et al.* 1996, Lazarus *et al.* 2002). This is understandable because older people and women lost their homes, and many lost family members and/or friends in the earthquake, while the distress and depression related to loss of life and the devastation of a familiar environment can be long-lasting ones (Erikson 1976, Green 1995, Norris *et al.* 2002a,b).

This study extends current literature on social workers' involvement in disaster recovery in China, which has been largely constrained by investigating social workers' roles and functions in recovery work (e.g. Bian *et al.* 2009, Chen 2009, Zhang *et al.* 2009). The findings support social workers' involvement in disaster recovery having positive effects on survivors and

group work being an effective way of working with disaster survivors in China. To develop solid evidence upon which social work with disaster survivors is practiced, more research on social workers' involvement in disaster recovery in China is warranted.

This study found little evidence of negative effects of participating in group activities. Both groups in the study were open, and members could join and leave freely at any time. If group participation did not help them, they could leave. However, this study did not include members who joined but later left groups and accordingly could not obtain the effects of group work with these people. Further research is necessary to investigate their experiences and feelings about group participation.

The limitations of this study should be noted. First, this study included only two groups and 12 members of each group. Of the 12 older people, only two were men. Thus, the generalisability of the findings is limited. Further studies may use random sampling and quantitative research to improve it. Second, this study applied self-reported measures, which might reflect patterns of reporting bias or personal bias, such as that related to self-representation and social desirability. Studies with other kinds of measures, such as the reports of respondents' family members and friends, may be conducted to validate the findings with triangulation. Despite the limitations, this study can be regarded as pioneering and stimulating, given that, to date, few studies examined both group work with disaster survivors and the effects of social workers' involvement in disaster recovery in China.

Implications and conclusion

The positive effects of group work with disaster survivors in this study imply that disaster survivors have capacities of self recovery. Social workers and other professionals could foster their self recovery through organising activity groups for them. To better facilitate their self recovery, research on their resilience is imperative to design more appropriate practice. It is also important that the survivors should participate in practice design and practice execution. The positive effects of group work further imply that group work may be effective in working with older people and women who are not disaster survivors, but are left behind because many young people and male adults in China go to urban areas for jobs (Xiang 2007). These people are likely to have psychosocial problems too. Group work may bring positive psychosocial benefits to them. To improve their well-being, social workers and other professionals should actively try to practice group work.

The findings also suggest that social workers should pay more attention to the power of group work with disaster survivors. Although group work has been a traditional social work practice method (Cohen 1994, Garvin *et al.* 2004), its visibility and presence in social work curricula have decreased recently (Cohen 1995, Drumm 2006). Such a tendency may mean fewer social workers try and foster group work practice. Further studies on group work with disaster survivors are crucial, for the following reasons. First, working with disaster survivors in groups seems an efficient use of the resources of social workers. Second, disasters may raise uncomfortable issues for survivors. Many may be comfortable discussing the issues with other survivors. Third, working with disaster survivors in groups may foster an understanding that one is not suffering alone and thus bring relief and hope to survivors (Northen 1987, Shaffer & Galinsky 1989). And fourth, working with disaster survivors in groups is useful to strengthen and broaden their social network and provide a base of empowerment, as was found in this study.

The finding that disaster resulted in long-term psychosocial harm to the survivors implies that social work with disaster survivors should be long term. However, the limited available literature (e.g. Department of Civil Affairs of Sichuan Province & Southwestern University of Finance & Economics (2009) suggests that most NGOs did not have long-term plans to work with the Wenchuan earthquake survivors. Social workers should collaborate with other stakeholders to advocate the importance of providing long-term services for disaster survivors in China. In addition, the important roles that social workers could play in disaster recovery (Chou 2003, Pyles 2007, Tan 2009) and the effects of group work with disaster survivors in this study imply that social workers in China should make efforts to advocate the importance of social recovery and promote government to pay attention to social recovery.

In conclusion, disaster survivors have the resilience of self recovery and participation in social groups could lead to positive changes in their daily life, physical health, emotions and social network. Because this research focused on only two groups, more group work with disaster survivors should be explored. Nevertheless, the findings have enriched the knowledge of the effects of group work with disaster survivors.

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