

A Study of the Disadvantages of the Homeless in Tokyo in Disaster Situations

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DECLARATION

We, Paulito Elvrum, and Wei Yuet Wong, declare that this thesis is a result of our research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Paulito Elvrum, May 2012

Wei Yuet Wong, May 2012

Signature_____

Signature_____

Date_____

Date_____

DEDICATION

We would like to dedicate this work to the homeless people in Tokyo, Japan, and to all the families and individuals who suffered from the Tohoku Great East Japan Earthquake and Tsunami on March 11, 2011.

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どうもありがとうございました！

Domo arigatou gozaimashita!

ABSTRACT

Homelessness holds a number of challenges associated with vulnerability such as isolation, lack of access and lack of resources. This paper looks into the disaster vulnerability of the homeless in Tokyo, and discusses ways in which the homeless are particularly vulnerable and disadvantaged in the wake of a disaster. At present, the homeless are still not included in disaster mitigation plans. We therefore argue that efforts should be made to include the homeless in disaster mitigation plans and preparation policies in the near future.

The study uses information gathered from established secondary literature in addition to interview data from our fieldwork in Japan. The interviews include various respondents from non-governmental organizations (NGOs), community based organizations (CBOs), social workers, and local government officials among others. Furthermore, to complement our interview data, we conducted a survey that gathered data from seventy-three university students in Tokyo, about their personal and perceived attitude towards homeless people in Japan.

As a result of completing the above procedures, we found that:

1. Public services and disaster mitigation policies still exclude the homeless from having specific routines and measures to help them in such circumstances.
2. The lack of economical assets and capacity prevents the homeless from meeting the recommended and expected requirements for individual responsibilities to prepare for disaster emergencies.
3. Social stigmatization further excludes the homeless from "mainstream" communities; assets that can be helpful during disaster situations.

There is a need to recognize the necessity to include the homeless in disaster mitigation policies and routines. Further investigation and efforts should be made on how to strengthen the capacities of the homeless both in everyday life and in disaster situations.

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ABBREVIATIONS and ACRONYMS

CBO	Community Based Organization
CSO	Civil Society Organizations
DRM	Disaster Risk Management
KFB	Kobe Fire Bureau
MOFA	Ministry of Foreign Affairs of Japan
NGO	Non-Governmental Organization
NPO	Non-Profit Organization
OSUSG	Osaka City University Study Group of Urban Environmental Problem
SNA	Setagaya Neighborhood Association
SVA	Setagaya Volunteer Association
TFD	Tokyo Fire Department
TMG	Tokyo Metropolitan Government
UNDP	United Nations Development Programme
UNU-EHS	United Nations University - Institute for Environmental and Human Security

APPENDICES

Appendix 1 Survey Questions

I. INTRODUCTION

In the past decades, there has been a large demographic shift in the global population. We are now living in a predominantly (UNDP 2011) urban world. Historically, the frequency of natural hazards has been relatively stable (Burton et al. 1993; Shah 1995). However, the confluences of rapid urbanization and the growth of megacities have increased human exposure to natural and anthropogenic hazards (Wisner & Uitto 2009). It has been argued that there is no such thing as a natural disaster. Wisner (2001) points out that natural hazards such as earthquakes turn into catastrophes because of human action and inaction, especially in local and state administration. The devastating results of recent disasters such as the hurricane Katrina in 2005, the Indian Ocean earthquake and tsunami in 2004, and the Haitian and Chilean earthquakes in 2010, illustrates how poverty, neglect, discrimination, and other demographic and socio-economic factors, can amplify or diminish the effects of natural occurring hazards (Donner & Rodriguez 2008). Urban areas can increase disaster risk due to the accumulation of people and infrastructure in addition to uncontrolled urban expansion and inadequate management (World Bank 2011). In other words, to mitigate and prevent the effects of future disasters, there is a need to address related economic and political interactions (Wisner 2001).

One year before our research was carried out, in March 11, 2011, the world was shocked by an earthquake with a magnitude of 9.0 Richter scale that hit the Tohoku region east of Japan. As an effect of this major earthquake, and the tsunami that followed, large areas of infrastructure, including nuclear power plants in the region, was destroyed. According to the Funabashi and Kitazawa (2012), this incident claimed the lives of more than 15,000 people, and had an estimated economical loss of more than \$200 billion US dollars. Furthermore, more than 400,000 people were evacuated and displaced in temporary shelters (Cabinet Office 2011a). Massive earthquakes such as the Great Hanshin-Awaji Earthquake (Kobe earthquake) and Great East Japan Earthquake and Tsunami (Tohoku earthquake) have provided an opportunity to remind us about disaster risk and the importance of proactive countermeasures for disasters. As has been recognized by Matsuda and Okada (2006), one of the biggest threats facing Japan in the future may be the Tōkai and Tōnankai earthquakes. These earthquakes have had a tendency to occur along the Pacific coast from Tokyo to Osaka and further south-westwards. This area is also the most densely populated metropolitan

regions in Japan. It has been predicted that an earthquake is likely to occur within the next 40 years and is expected to have a magnitude of more than 8.0 on the Richter scale.

Megacities are often important political and economical centers of the world; they contain large concentrations of people, buildings and industry. This makes it likely that the potential consequences of disasters that occur in megacities (e.g. Tokyo) will have dramatic local, national, and global impacts (Uitto 1998). Despite imminent threats of disasters, and their potential impacts on a city's economical resources, livelihoods, and its functionality as an entity, disaster management actions from city governments have often been reactive rather than proactive (World Bank 2011). Urban hazards and disasters are a mix of natural, technological and social events. It is therefore important to have a holistic and comprehensive approach to these issues, and not look at these events separately. Accordingly, it is therefore important to understand how hazards issues interact with other urban problems such as marginalization, polarization and poverty (Mitchell 1995).

Marginalization, polarization and urban poverty are all complex, multi-dimensional and serious urban issues. They contribute to people's exposure and vulnerability to hazards in many ways. Vulnerability is a multifaceted phenomenon and is the result of numerous forms of social capital. Attempts to address issues of vulnerability should thereby be multifaceted in a similar manner (Donner & Rodriguez 2008). Among the most vulnerable and disadvantage groups in society, especially when it comes to disaster emergencies, are the homeless, the elderly, and the mentally and physically disabled. In many cases, foreign nationals and other minorities can also be considered part of vulnerable and disadvantaged groups of people in these situations. Some of the difficulties faced by foreigners in disaster situations often relates to language issues that can affect ones capacity to respond and recover (Wisner 1998). The concern about marginal groups in cities is increasing because the recent patterns of urbanization show that these urban dwellers that live in poverty are increasing (IFRC 2010).

Many of these groups, especially the homeless, are frequently neglected in disaster mitigation policies. Even in cases when they are included in these policies, they are often not part of the planning and the decision making of these guidelines (Uitto 1998). Because of their general lack of economic assets and limited access to basic and emergency services, the urban poor, especially those living in suburban areas and informal settlements, are particularly vulnerable because of their tendency of dwelling in high risk areas and unsafe shelters (World Bank 2011). As has been pointed out by Wisner and Uitto (2009), the poor may have very little to

lose, especially in terms of material and monetary resources, however, what little they have is also vital for their survival, and may be even more difficult for them to replace. Disaster management planners may become more effective by including vulnerable groups into the processes of the development and the making of new policies. Vulnerable groups such as the homeless, the elderly and the disabled themselves may have useful experiences and know-how that can add to the knowledge and understanding of the situation (Wisner 1998). For this reason, and as pointed out by Mitchell (1999), measures and efforts of inclusion at all levels, including policy and local community inclusion, should therefore be important priorities when it comes to disaster mitigation and preparation plans.

OBJECTIVES

Homelessness holds a number of challenges associated with vulnerability (i.e. isolation, lack of access, lack of resources etc.). This paper looks into the disaster vulnerability of the homeless in Tokyo and discusses ways in which the homeless can be, and why they should be, included in disaster mitigation plans and preparation policies. The study uses information gathered from established secondary literature in addition to interview data from Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs), social workers, and local government officials among others, as well as survey data gathered from seventy-three university students in Tokyo.

In chapter two we present some general concepts and theories of disaster vulnerability, urban risk, and disaster risk management, public attitude towards the homeless, common obstacles and issues, as well as concepts of disaster psychology. Chapter three presents more specific background information of Japan and Tokyo, our area of interest. Here we look briefly at the level of disaster preparation of the Tokyo Metropolitan Government (TMG) and the general history and situation of the homeless people in Japan/Tokyo. Chapter four is a presentation of our research methods, followed by a brief presentation of our main results in chapter five. Finally, we discuss our main findings in relation to key literature.

II. CONCEPTS and THEORIES

SOCIAL and DISASTER VULNERABILITY

Social Vulnerability, as defined by Blaikie et al. (1994), is the characteristic of individuals or groups of people that affects their capacity to anticipate, cope with, and recover from the impacts of natural and anthropogenic hazards. These characteristics or constraints include: lack of access to information, services and resources; such as income, social support and other assets (Wisner 1998). Andrew et al. (2008) also state that health is an important factor in determining social vulnerability. Vulnerability is conceptualized as a dynamic phenomenon that is often in a state of constant change in both socioeconomic and biophysical processes that influence conditions to cope, adapt and recover from exposure of hazards or stresses in multiple levels of scales (Leichenko & O'Brien 2002; O'Brien et al. 2004). As pointed out by Adger (2006), the measurement of vulnerability needs to reflect social processes together with material outcomes within systems that appear complicated and often have a number of linkages that are difficult to pin down. The complexity of vulnerability thus makes it difficult to quantify and measure.

Furthermore, Uitto (1998) points out that social vulnerability also include various dimensions of time and space due to peoples movements between different environments and life stages. It is therefore important to realize, and distinguish between short-term and long-term vulnerability. According to the United Nations Habitat Agenda (2003: 40);

"Vulnerability and disadvantage are often caused by marginalization in and exclusion from the socioeconomic mainstream and decision-making processes and the lack of access on an equal basis to resources and opportunities... It is understood that not all those belonging to vulnerable and disadvantaged groups are vulnerable and disadvantaged at all times. Vulnerability and disadvantage are mainly caused by circumstances, rather than inherent characteristics... Those belonging to vulnerable and disadvantaged groups are especially at risk when they have no security of tenure or where they lack basic services or face disproportionately adverse environmental and health impacts, or because they may be excluded, either inadvertently or deliberately, from the housing market and services."

Disaster vulnerability is created from the social and economic factors of daily life (Morrow 1999). Among society's most disadvantaged, especially with regards to disaster emergencies

are therefore the elderly, the disabled and the poor. For example, in the 1995 Kobe earthquake, Tanida (1996) found that more than 50% of the fatalities were people aged 60 and above. Furthermore, the majority of those who suffered significant losses were the elderly, disabled and the poor, who lived in the more unsafe areas of the city (Nakamura 2009). This pattern is also seen in disasters around the world, where the disadvantaged often suffer the most during disasters. For example, after Hurricane Andrew in 1992 (Morrow 1999), Hurricane Katrina (Myers et al. 2008), the Indian Ocean Tsunami in 2004 (Athukorala & Resosudarmo 2005; Rigg et al. 2005), and the Haiti Earthquake in 2010 (IFRC 2010). As a result of the various accumulated disadvantages and circumstances, the poor and other socioeconomically disadvantaged groups are often found relegated to the more vulnerable and exposed locations to hazards (Uitto 1998). According to the world risk assessment, published by World Bank (2011), there are various factors that contribute to why people settle in high risk areas. Some of these factors include: existing urbanization patterns, land use and zoning policies, immigration of rural or poor migrants as well as the availability of land for developing new settlements.

"If vulnerability and disadvantage are to be reduced, there is a need to improve and ensure access by those belonging to vulnerable and disadvantaged groups to shelter, finance, infrastructure, basic social services, safety nets and decision-making processes within national and international enabling environments." (The United Nations Habitat Agenda, 2003: 40)

URBAN RISK and CHALLENGES

There are many challenges and risks associated with urban areas. In addition to the looming threats from natural hazards, city dwellers are also challenged by a variety of anthropogenic and technological events (Mitchell 1999). According to Shaw (2008), urban poverty and health issues are among the greatest challenges and are often worse than those of their rural counterpart. Many cities also suffer from air pollution, civil unrest and terrorism, residential fires and industrial accidents, infectious disease epidemics, and violent crime (Mitchell 1999). These are all disruptive hazards that threaten human wellbeing. Some underlying factors that makes urban risk more critical, as suggested by Shaw (2008), include; high population density, poor urban planning and infrastructure, informal settlements, economic imbalances, high dependency on infrastructure service systems, and a concentration of a country's major

functions and assets. Urban management is thus a daunting task, and it is a challenge for governments to focus and coordinate their limited resources to address multiples of complex issues (UN/ISDR 2004). As has been pointed out by the World Bank (2006: 7) *“Mitigation, prevention, and disaster risk management often drop off the development agenda and may be neglected as attention returns to other pressing development priorities.”*

DISASTER PREVENTION and MITIGATION MEASURES

Proper disaster risk management (DRM) can drastically reduce the need for disaster relief (World Bank 2006). Actors involved in disaster risk management span from governmental bodies, non-governmental, public and private bodies, and to community organizations and more. O'Brien et al. (2006) states that the ultimate aim of planning is to reduce the risk of disasters, to decrease economic, structural and human losses, and make a swift return to normality. This can be done through developing effective and efficient policies and practices based on risk assessments and learning from experience. It has been argued that it is important for governments and communities alike, to realize the need to invest in disaster reduction policies. Civilians are often the ones who suffer the immediate effects of disasters (UN/ISDR 2004). Local understanding, commitment and participation are thus greatly needed reduction policies. However, as acknowledged by the United Nations International Strategy for Disaster Reduction (UN/ISDR 2004), governments and the higher levels of authority within a society need to take responsibility for providing with resource allocations and proper policy directions. Governments, who have done so already, need to focus on gaining a wide level of inclusive participation by its citizens. Communities cannot implement community-based disaster mitigation plans on their own. Government and institutional interventions often prove to be insufficient, especially when used alone. Tatsuki (2000) describes that during the Kobe earthquake, the local government also suffered, and was incapacitated, unable to respond.

As Yamamura (2010) points out, the accumulated social capital, particularly knowledge and experiences from past hazards, from local citizens can be important for communities, policy makers as well as other stakeholders when considering proper measures to prepare for, and respond to, the various regional hazards. Moreover, local communities can be a good source of manpower in times of emergency. They are the first ones on the scene and have great potential to save many lives during disasters, as has been observed and identified from the

1995 Kobe earthquake in Japan (Shaw & Goda 2004; Tanida 1996). People around the impact of a catastrophic disaster have the ability to exceed the capacities of the public services. Matsuda and Okada (2006) therefore suggests that citizens should have prepared and acquired proper knowledge prior to the emergency, as much as possible, rather than depending completely on public services such as the fire department. Nevertheless, and as stated by Ioka (1996), it is important to remember that professional social services are also needed to support, guide and enhance volunteers and the local communities. Professionals are particularly important when it comes to helping and addressing people with special needs. Further support and strengthening in this area of disaster mitigation is therefore highly desirable and should be pursued (Ioka 1996). To this end, systems of local planning and protection must be integrated into larger administrative and resource capabilities. As stated by O'Brien et al. (2006) an effective approach to disaster risk planning requires accountable, democratic government institutions, financial support, political will and the trust of civil society.

Other important actors in disaster emergencies are the humanitarian sector and other non-governmental organizations (NGOs). As has been pointed out by O'Brien et al. (2006), humanitarian involvements in disaster emergencies often deal with immediate relief efforts. Such organizations however, are often driven by the need to show results from their activities. This focus on results can consequently affect and worsen relief and development efforts due to the differences in agendas between other humanitarian and development actors (Wisner & Uitto 2009). Özerdem and Jacoby (2006) suggests possible roles that Civil Society Organizations (CSOs), NGOs, and other such organizations can provide following a disaster. Their functions have been divided into four main phases of disaster management:

(1) **Immediate Aftermath:** provide with technical skills in rescue work, develop relief strategies in cooperation with disaster-affected people, and help with the coordination of the various activities and tasks from different sectors.

(2) & (3) **Rehabilitation and Reconstruction:** provide an interface between the government and disaster-affected people through which the community's priorities can be communicated. A long-term commitment to dealing with such needs can be institutionalized.

(4) **Mitigation and Preparedness:** help transmit the lessons learned from post-disaster relief, rehabilitation and reconstruction to future generations. CSOs can also assist in the creation of

cooperative environment between the state and its citizens to ensure that disaster management processes remain motivated, flexible and sustainable.

Many NGOs and other private sector organizations realize that their efforts are secondary to those of the government (Battistoni 2010). Schwartz (2002) mention that the Japanese public can sometimes be skeptical and have a poor impression of NGOs. However, as Yamamura (2010) points out, a tighter bond and understanding between the different actors and stakeholders in disaster reduction management can increase people's social capital, which could further lead to reducing the damage and the social vulnerability of people to future hazards.

In addition to government and community commitments to disaster risk management, there is also a need to strengthen and maintain buildings and infrastructure. Examples of important physical assets can be: roads, water supply and sanitation networks, drainage canals, electricity and telephone lines, and hospitals (World Bank 2011). Furthermore, UN/ISDR (2004) points out that proper disaster risk management also relates to physical infrastructural assets. Protecting the built-up environment in which people live in, critical facilities, houses and other properties should be highlighted, and built as safely as possible. There are three distinctive contexts for introducing physical risk management measures in buildings or infrastructure, as has been recognized by the UN/ISDR (2004: 324): (1) reconstruction or repair of buildings, particularly following the losses or damage from a major hazardous event; (2) construction of new buildings in normal circumstances; and (3) retrofitting existing building stock through strengthening programs.

After World War II, Japanese disaster prevention policy was oriented towards investment in infrastructure and technology to alleviate future disaster damages. Although the policy was helpful in saving many lives and buildings from collapsing, Matsuda and Okada (2006) claims that such policy also made people unaware of and insensitive to disaster risks. Yamamura (2010) however suggests that in general, investing and improving physical equipments and infrastructure against natural hazards is perhaps more effective than cooperative behavior, but stresses that governments should also make efforts towards transmitting more information about natural hazards in order to stimulate and promote collective action by its citizens. The argument put forward in favor of improving infrastructure against natural hazards is that the positive effects on cooperative behavior often declines as time passes after the experience of a disaster. Hayami (2001) adds that the social

capital important for contributing to community disaster preparation is built up over long-term interpersonal interactions. As pointed out by Mitchell (1995), natural hazards only tend to become an important public issue or concern when there is a threat of a disaster, or when one have just recently occurred.

Unfortunately, however, and as noted earlier, informal settlements and poor housing standards are often placed in risk prone and exposed areas that are generally dominated by the impoverished and disadvantaged. This remains challenge remains to be properly addressed in order to improve the safety of all citizens in spite of their economic capacity and condition.

ATTITUDES TOWARDS THE HOMELESS

The poor, particularly the homeless, are often stigmatized and blamed for their situation. In contrast to other less visible forms of poverty, the inherent condition of homelessness (i.e. being publically visible, aesthetically unappealing due to cleaning and grooming accessibility etc.), and people's often limited objective information about homelessness, can lead to inaccurate associations, stereotyping and generalizations (Phelan et al. 1997). Common associations, or labeling of homeless people often find root in individual flaws or behavioral characteristics such as; being lazy, substance abuser, criminal, mental illness, a lack of personal thrift and lacking family relations (Toro & McDonell 1992). Previous studies in the United States suggest that people believed social and structural factors such as; low wages, job scarcity, poor education and racial discrimination among others, as the less important causes of poverty and homelessness (Feagin 1975; Kluegel & Smith 1986). Thus the narrative and belief that poverty is more of a self-inflicted situation rather than something that exists because of various social and structural inequalities stand to be the dominant discourse among the public.

In contrast, a series of polls carried out by Weaver et al. (1995) show a clear variation in the public attitudes towards individual versus structural causes of homelessness between 1982 and 1995. Link et al. (1995) point out the potential in which the media has in shaping public opinion, conceptions and attitudes about the homeless. He also refers to the front-page media coverage review of the New York Times conducted by Blasi (1994) that illustrates the differences in media coverage towards homelessness in the 80's and 90's. The study shows some correlation between the contemporary popular discourse about the homeless and the

type of support policies or programs endorsed by the public. Guzewicz and Takooshian (1992) suggests in their study that a typical American opinion about the homeless is that they only have themselves to blame for their situation. Studies by Schuman and Johnson (1976), and Ajzen and Fishbein (1980), show that people's attitudes and conceptions shape how they behave towards certain issues. In other words, how people conceive and understand the issues of homelessness will influence how they behave towards a homeless person. Public attitudes and opinions can influence policies affecting the homeless by providing direction and pressure to policy makers (Shinn 1992).

On the other hand, as shown in the study conducted by Link et al. (1995), is that it can be difficult for policy makers to decide on a direction following the public will when there are no clear-cut policy alternatives pointed out and clearly favored by the public themselves. There is an apparent agreement that something must be done, but there seems to be no definite idea on what, and how. As pointed out by Phelan et al. (1997), homeless people often face multiple hardships. These hardships include discrimination in social relations, employment and housing. Public stigma, in addition to its effects on people's psychological well-being and self-esteem, can also result in a lack of support on policies that would improve the situation of the homeless. Inadequate or a lack of shelter can contribute to a person's loss of dignity, security and health (UNH 2003). It is therefore important to recognize this, and promote values that will benefit collective good, and show compassion and inclusion towards others. Public opinion can make a change for the benefits of others, especially when united (Nakamura 2009).

COMMON OBSTACLES and ISSUES

Through their study on urban social vulnerability of four megacities located in the Pacific Rim (Los Angeles, Mexico City, Manila and Tokyo), Wisner and Uitto (2009) identified several issues and challenges faced by the municipal, metropolitan or higher levels of government. These challenges include: fragmented and uncoordinated responsibility for different at risk groups, shortage and lack of training of local municipal officers, limited use of community or neighborhood groups, limited planning at municipal level for longer term recovery issues, funding shortages and high income in NGO staff, political hostility toward NGOs, and finally, legal barriers to access social data. Local NGOs and CBOs can be

involved as a way to communicate with government agencies to provide vulnerable groups of people access to official risk reduction measures.

One of the missing ingredients in disaster prevention measures, as put forward by Ben Wisner (2001), is the kind of moral principal that can mobilize local political will. By this he means common agreements to standards of responsibility (e.g. treaties, covenants and other agreements) by nation states toward their citizens. Although hazards reduction measures must compete with a vast number of other priorities such as: replacement of jobs, changes in the global economy, multicultural tensions and conflicts, social pathologies like crime and drug addiction, renovation of old infrastructure and housing stocks etc. (Mitchell 1995). Many of these urban issues are directly or indirectly related to hazards mitigation and can contribute to a safer living environment for its citizens.

According to the UN/ISDR (2004: 386) review of disaster reduction initiatives, good governance and political commitment are key elements to effective disaster risk management. Other obstacles to disaster risk reduction practices recognized in this review are:

1. Competing priorities for funding and political attention such as other development needs and conflicts;
2. Limited visibility of disaster risk reduction compared to humanitarian assistance and basic development practices;
3. Lack of coherence and coordination of advocacy activities due to the varying priorities and characteristics of members of the disaster reduction community across multi-institutional and cross disciplinary boundaries;
4. Absence of accountability for systematic implementation and monitoring of progress.

Ioka (1996) draws attention to a different challenge, and that is to provide sufficient measures to support the post disaster lives of the surviving victims. This includes individual and family compensation, providing secure and low cost housing as well as employment. Post disaster victims who survived face a different kind of vulnerability at this stage; as disasters can cause great physical-, mental-, and economical stress to people. In addition, if people are not properly tended to, there is a danger that they might fall completely into social gaps that would make the recovery process from the experience of a disaster even more problematic.

Moreover, if governments have limited resources for addressing proactive and reactive measures to natural hazards, so too is the same for individuals and families. Awareness, age

and economical determinants are some factors that has been identified by Ishikawa and Fukushige (2010) with regards to peoples priorities involving housing improvement for increased seismic safety. The study shows that the elderly have a tendency to prioritize the installment of barrier-free facilities rather than to retrofit their house against unexpected disasters. Further on, the study shows that the improvement of houses correlates with the household's level of income. Households have a tendency to improve their houses as their savings increase. Sawada and Shimizutani (2008) also reveal that households are sometimes not motivated to prepare for disasters because on the whole, a catastrophic one is relatively rare, and everyday concerns often take precedence.

DISASTER PSYCHOLOGY & BEHAVIOR DURING DISASTERS

Many disaster preparation activities depend on people's ability to stay calm enough to repeat what they have practiced during drills (Matsuda & Okada 2006). It is therefore vital to understand how people react during disasters (McEntire 2006). More recently, Vorst (2010) calls disaster psychology the Human Factor. The human factor can cause, worsen, or alternatively defuse emergency situations. Vorst (2010) adds that in each stage of the disaster, the specific psychological response of people can be reasonably predicted, and the response is quite similar for all types of disasters.

Raphael (1986) points out that panic and stress can negatively affect how people behave during disasters. He calls this the disaster syndrome. Tyhurst (1951) noticed that although many individuals react in many ways during disasters, the reactions could be classified according to stress, stage of disaster, and type of psychological response. A review of 155 empirical studies by Rubonis and Bickman (1991) has also revealed a positive relationship between disaster and stress during, and after disasters. About 20-25% of people caught in a disaster are said to be overwhelmed by the experience and become stunned, dazed, and unable to respond (Vorst 2010).

Disasters and emergencies situations can bring the worst or the best from people; people can be cooperative and help each other, or take advantage of the situation (e.g. looting) (McEntire 2006). According to Tierney et al. (2006), the media can have a big influence on how people perceive disasters Reports of people panicking, looting, and professional rescue workers abandoning their posts contribute to myths of people's behavior in disasters. McEntire (2006)

argues that many of these myths are unfounded and are closer to being exaggerations of the event rather than the truth. In addition, he also suggests that disasters simply reveal underlying and existing trends that are already present in society. Furthermore, Quarantelli (2008) points out that people who often remain calm and rational under emergency situations, often know what to do before emergency rescue services arrive, and behave cooperatively. On the other hand, (Makoto 1999) says that, “given the traditions of Japanese society, people might ask about safety of friends, teachers or acquaintances, but beyond that, the norm is to take care of one’s own situation.” (86) It is possible for people to react selflessly or selfishly during disasters. As such, it is important to apply knowledge from disaster psychology in disaster preparation and response. Fritz and Williams (1957) suggest that broader, overall disaster plans need to coordinate the population and formal agencies, otherwise, the reaction of unpracticed communities tend to be too segmented and disorganized.

A recent review study by Vorst (2010) provides a summary of how disaster psychology affects the behavior of people during the different phases of a disaster:

1. During evacuation, grouping evacuees based on characteristics is important for effective evacuations. For example, elderly people typically move at 0.6 times the speed of young people, and they should be put in a different group and given assistance.
2. Based on the stage of disaster, the behavior of victims can be realistically anticipated. In the early stages 20% of people will refuse to evacuate. In the Impact stage, about 10% of people will be alert and calm.
3. Emotions like stress, anxiety, and depression negatively affects attention, and consequently negatively affects evacuation.
4. About 5% of bystanders will help victims of disaster, even when risking their own lives.

Disaster psychology also reveals some incidences of disaster myopia, where people forget quickly and do not prioritize disaster preparation (Mitchell 1995; Rubonis & Bickman 1991). This idea is related to the theory of man-made disasters as proposed by Turner (1978) who explains disasters as “organizational accidents” with complex interactions between human and technological aspects. This is similar to Mitchell’s (1995) proposal that many disasters in modern times are a combination of natural, man-made, and technological factors. Even then, Pidgeon and O’Leary (2000) alleged that organizations do not fully learn from past lessons

and mistakes in preparation because of lack of correct information, and blame politics within organizations.

Many survivors from a disaster might also suffer from psychological stress that can affect their recovery (Rubonis & Bickman 1991). The subject of post disaster stress is a relatively new area in Asia and has only been recently studied in more detail (Kokai et al. 2004).

STIGMA AND MARGINAL GROUPS

There is a seemingly universal idea of outcasts and stigma. Discrimination has been documented in the subjects of AIDS, crime, failure, caregivers to Alzheimer's patients, homosexuals, and even to infertile women (Burchell & Hughes 2006; Niehaus 2007; Roschelle & Kaufman 2004). In the context of marginal groups, stigmas have been linked to disability, homelessness, mental illness, and old age (Gilmore & Somerville 1994; Verbrugge & Jette 1994). There are two components to stigma according to Goffman (1963): (1) stigma involves extreme negative perceptions; and (2) stigma involves rejecting individuals from the mainstream. Stigma thus greatly shames and affects individuals identity, and at the same time results in exclusion from society.

Kurzban and Leary (2001) discussed the function of social exclusion through the perspective of evolution, and that stigma is present in all cultures, and all stigmas are consensually defined (both the population and the outcasts recognize the exclusion). The stigmatized population also recognizes that they are excluded and behave accordingly. Stigma can increase people's distress and is a barrier that often prevents people from asking for help, and from effective readjustment into society (Griffiths et al. 2006; Kurihara et al. 2000). The concepts of stigma can be applied to other discriminated groups such as the homeless. Kurihara et al. (2000) explored the differences in stigma towards mental health patients between Bali and Tokyo. The study wanted to uncover some insights into the different nature of stigma to mental health patients between Bali and Tokyo. In particular, the results supported the contact-hypothesis, meaning that when there is increased contact between the population and the target group, the amount of stigma decreases (Lee et al. 2004). In addition, how the illness is explained, whether through external or internal causes, also affects the perceptions of the target group, i.e. whether or not they are personally responsible for their condition or not.

Griffiths et al. (2006) did a comparison of stigma toward mental health patients between Australia and Japan. They wanted to compare the nature and extent of stigma among the public in the two countries. In their study, they compared the personal and perceived attitudes of the Australian and Japanese public toward mental illness. Personal attitudes are the personal views of the individuals, while perceived attitudes are the perception of the attitudes of others. Their results suggest that perceived stigma is high for both countries. Perceived stigma is also higher than personal stigma in both countries (i.e. more people in both countries were likely to say that others held stigmatizing beliefs). However, in most cases, the Japanese tended to have the more negative attitudes. Griffiths et al. (2006) suggest that the differences in personal and perceived stigma could be due to conformity or social desirability. Respondents could be overestimating stigma in the community, or they could be responding in a manner that puts them in a more positive light. Fielding (2004) point out that in Japan, social behavior is strongly determined by *tatemae* (meaning socially acceptable responses, rather than what one really thinks).

Roschelle and Kaufman (2004) did an ethnographic study about street kids in the San Francisco Bay Area and how they manage stigma. The strategies for managing stigma have two objectives, inclusion or exclusion. Some of the actions successfully protect the sense of self for the kids, but others had the unintended effect of reinforce the negative image of the homeless kids. This creates a cycle of stigma and discrimination. The nature of stigma affects the marginal groups, and their place in society, leading to exclusion in jobs, and in services like disaster preparation (Wisner 1998).

III. BACKGROUND: TOKYO CASE STUDY

JAPAN (TOKYO)

According to the Japanese Ministry of Foreign Affairs (2012), because of the country's climate, topography and geographic location, Japan is particularly prone to natural hazards and has experienced countless numbers of earthquakes, tsunamis, typhoons, and other such hazards in the past. For instance, Japan is located in the Pacific earthquake belt, causing the frequency of earthquake incidents in the country, as well as increasing the risk of tsunamis. Moreover, its location is also near the circum-Pacific zone, where a significant number of the world's volcanoes are concentrated. Although Japan is but a small percentage of the world's total landmass, it has been estimated that over 21% of the world's earthquakes of magnitude 6 or more have occurred in Japan (Yamamura 2010). According to the Cabinet Office Government of Japan (2011a), major disasters caused by natural hazards that have occurred in Japan the last 120 years include:

- 1896 Meiji Sanroku Earthquake and Tsunami 21 959 (casualties)
- 1923 Great Kanto Earthquake 142 807 (casualties)
- 1959 Ise-Wan Typhoon 5 098 (casualties)
- 1991 Unzendake Volcanic Eruption 44 (casualties)
- 1995 Great Hanshin-Awaji Earthquake 6 435 (casualties)
- 2011 Great East Japan Earthquake and Tsunami 15 270 (casualties)

Because of the constant threat of a possible massive earthquake, and its long history and experience with such hazards, particularly due to its geographical location, Japan, in particular the Tokyo Metropolitan Government (TMG), have developed various techniques for natural disaster risk and is often viewed by others as a highly prepared nation against earthquakes. However, should a hazard turn out to be disastrous in a city like Tokyo the consequences would not only affect Japan; serious economic consequences would most likely be suffered in other parts of the world as well (Shaw 2008).

For many years, Japan has been recognized as one of the global financial powerhouses in the world. Tokyo, one of the largest and most populated megacities in the world, is also considered to be an important metropolis in terms of global finance. However, in recent years, the Japanese economy has been showing some signs of stagnation and has been bypassed by

China as the second largest economy in the world (IMF 2011). The increased number of Japanese unemployed in recent years can to some extent reflect this downward economical trend. According to the 2010 reports from the Japanese Ministry of Internal Affairs and Communications (2010), unemployment rate in Japan was estimated at around 5.1%. The report also shows that the number of persons employed on a temporary or daily basis has increased as well. Similarly, the number of non-regular workers (i.e. people working less than 30 hours per week) who previously had a fulltime job has also increased (MHLW 2009). These recent economic and employment trends stand in contrast to the past economic prosperity that was experienced by Japan during the rebuilding of the nation after World War II (more on this later).

Furthermore, Japan has one of the highest proportions of older adults in the world, second only to Italy (Hirayama 2010a; Ishikawa & Fukushige 2010). The 1995 Kobe earthquake and the more recent Tohoku earthquake and tsunami in 2011, has both highlighted contemporary issues of an aging society (Muramatsu & Akiyama 2011). The need for both pre- and post disaster support systems, especially community based approaches, has been called for yet again. The elderly and the frail need extra care and support in order to cope with extreme events. Even though this was one of the key lessons learned from the Kobe earthquake (Ioka 1996), evidence from the Tohoku earthquake shows that there are still a lot of work to be done and improve on to support the elderly and other vulnerable groups (Cabinet Office 2011a).

POST WORLD WAR II: THE REBUILDING OF JAPAN

After World War II, the welfare system in Japan developed through a mix of the state, the market, the family, and occupational welfare (Kennett & Iwata 2003). This system depended on a balance of the traditional family (a traditional nuclear family consisted of a male-breadwinner living together with his partner and children), full employment and increasing economic growth. Because of the minimal state role in social welfare, private home ownership and household savings are the foundation of social security in Japan (Hirayama & Ronald 2008; Okamoto 2007). Full employment and equitable income distribution were also important for sustaining that social structure (Kennett & Iwata 2003). According to (Hirayama 2010b) many people followed what was called a “conventional life course” of education, employment for life, getting married and home ownership. The Japanese mainstream society

can therefore be defined as a mix of occupation status, marriage, family and home ownership (Hirayama 2003). In the post-war period, although the conditions of economic and daily life were severe, there appeared to be little evidence of poverty and homelessness. Ono (2004) stated that having a common goal of rebuilding after the War helped to foster a sense of values that were essential to working together. However, he cautions that because of the importance of that common goal, people who could not contribute (e.g. health or age) were deemed useless. (Hirayama 2000) calls this the principle of “self-reliance”. (Garon 1997) mentions that people were equally poor, so there was not much discrimination after the War. Hirayama (2010b) agreed that not being conscious of inequalities is an important element in maintaining stability in Japanese society.

With regards to the unskilled laborers, the high demand for construction jobs during the 1960s, and 70s meant that the lives of the day laborers in the *yoseba* was stable, because they were a ready source of cheap labor (Fowler 1996). According to Okamoto (2007), a *yoseba* is a type of rundown residential area in Japan. It is an area built around the day laborer job centers that offers cheap hostels and dormitories for day laborers, as well as shops and entertainment. The Sanya area in Tokyo is an example of a *yoseba*. It is located between the Taito and Arakawa Wards near the Sumida River in the northeast part of Tokyo (Hasegawa 2005). At its peak, there were as many as 15,000 day laborers (Fowler 1996).

The post-war economic development led to an image of a homogenous Japan (Fielding 2004). Okamoto (2007) maintains that despite the image of equality, minorities such as the Ainu, Okinawans, and Koreans do exist, and have been isolated. Recently, with the economic pressures, marginal groups such as the day laborers, the unemployed, and even the elderly over 65, became increasingly isolated (Fielding 2004; Okamoto 2007; Wisner 1998). In recent years, the unstable economy, aging population, and changing family relations have contributed to eroding the traditional welfare system (Hirayama & Ronald 2008; Izuhara 2000). Okamoto (2007) explains that the long economic recession in the 1990s resulted in a surplus of construction workers, and it became more difficult for older day laborers to compete for jobs, especially with younger, healthy workers. As a result, unskilled workers between 50 and 64, who do not have savings or family support, are ending up homeless. Besides the unskilled day laborers, younger workers are also affected by changes in the employment structure. Kennett and Iwata (2003) point out that lifetime employment practices are being eroded, and the proportion of young graduates finding secure work is decreasing. Izuhara (2000) mentions that the family structures are changing in Japan, with decreasing

family sizes, more elderly member households, and also more single member households. The combination of the unstable economy, aging population, and changing family relations means that the current system of welfare is becoming insufficient to meet the risks in the current moment (Okamoto 2007).

The economic indicators also show that inequality is increasing in Japan, especially in the last 20 years since the asset bubble collapsed (OECD 2011). In addition, Hirayama and Ronald (2008) argued that because people cannot follow the “conventional life path” of employment, housing ownership and welfare, there are widening gaps in society. The traditional nuclear family is changing; people are not getting married, not having children (Izuhara 2000; Okamoto 2007). Chen et al. (2011) suggest that the trend of the aging population will continue, and the total population of Japan will decrease. By 2030, the population will decrease to 90% of the current number, but the proportion of 65 year olds will be 30%. This continued shift in the demography would impact social and disaster preparation policies.

DISASTER PREPAREDNESS IN TOKYO

For the purpose of protecting and guaranteeing the human rights of their citizens, local and national governments are responsible for disaster preparedness against natural hazards (UNU-EHS 2011). The Tokyo Metropolitan Government (TMG 2012) has developed a comprehensive disaster mitigation policies for its citizens. TMG classifies hazards in four main categories: (1) earthquakes, (2) wind and water-related hazards, (3) volcanoes, and (4) large-scale accidents (e.g. nuclear disaster).

Japan, together with many other countries worldwide, suffered considerable losses as a consequence of World War II. However, in accordance with MOFA (2012), because of huge damages, for instance in infrastructure, caused in this tragic era, Japan's exposure to natural hazards was greatly increased. During this period of exposure, more than 1000 human casualties were claimed nearly every year, and subsequently, in 1961, the Disaster Countermeasures Basic Act was enacted. In the years that followed, Japan developed and implemented measures to strengthen physical and institutional safeguards to prevent disasters. According to MOFA (2012), these countermeasures can be broadly classified into:

1. Research into scientific and technical aspects of disaster prevention
2. Reinforcement of facilities, equipment, and other preventative measures

3. Construction projects to enhance the country's ability to defend against disasters
4. Emergency measures and recovery operations
5. Improvement of information and communication systems

The regional disaster prevention plans is created by each the Ward, City, Town, and Village. The Disaster Countermeasures Basic Law emphasizes the importance of community disaster prevention activities, and recommends communities to set up voluntary organizations by residents for disaster prevention and management. This approach to disaster mitigation is based on the concept of self-help and mutual assistance. These community based civil organizations are usually called Chonai-kai or Jichi-kai. The purpose of these organizations is to; (1) do outreach of information on disaster prevention and management; (2) to map disaster vulnerable areas; (3) to plan and carry out evacuation drills; and (4) to build, manage and store equipment useful during disaster emergencies (Bajek et al. 2008). In addition to these disaster prevention activities, local civic organizations are also responsible for organizing seasonal festivals and other social community activities. After the Tohoku earthquake on March 11, 2011, the TMG recommended neighborhood groups that were responsible for disaster prevention activities, within the Jichi-kai or Chonai-kai, to make increased efforts for disaster prevention and management. In disaster emergency situations, it is desired to have neighborhoods where people know each other and are aware of where people live, of special needs that people might eventually need in certain situations, in addition to possess proper knowledge, and information about risk prone areas and evacuation routes (Bajek et al. 2008; Ikeda et al. 2008).

HOMELESSNESS IN JAPAN (TOKYO)

The number of homeless people in Japan has been increasing ever since the beginning of the 1980s (Wisner 1998). People started to take more notice of the homeless in the mid 90s when homelessness became a publically visible issue, especially in the larger cities in Japan such as Osaka and Tokyo (Hasegawa 2005; Kennett & Iwata 2003). According to estimations made by the Japanese Ministry of Health, Labor and Welfare (2003), there are slightly more than 25 000 homeless people in Japan. More than 80% of the homeless are male and 40% of the homeless live in urban parks. A rough estimation of the average age among the Japanese homeless is somewhere between 50 and 60 years old (Kakita 2004). Although the number of homeless people in Japan is relatively small in comparison to many other countries around the

world, urban homelessness has become a frequent topic of discussion and has seen an increase in both media coverage as well as studies conducted by researchers and city authorities to determine the extent of the problem (Takahashi 1998).

In Japan, the homeless are often referred to as rough sleepers or people sleeping in public places (Hasegawa 2005; Okamoto 2007). These definitions are often regarded as narrow and include only the visible forms of homelessness while the increasing number of hidden and invisible homeless is left in the silence from both the public and the government (Aoki 2003). Okamoto (2007) explained that the Japanese language did not have a word for “homeless”. The word was imported, and contained a lot of embedded concepts. Takahashi (1998) suggests that the government of Tokyo deliberately uses the term *people living on the street* in order to distinguish the *act* of living homeless rather than a *condition* and therefore avoid negative associations of isolation and poverty that is usually related to the word *homeless* in Japan. Living homeless thus becomes a matter of individual choice.

According to Tsumaki (2004), the Homeless Problem Liaison Council issued a set of countermeasures in the late 1990s to address the growing issue of homelessness in Japan. These countermeasures functioned as guidelines for principles that were to be followed by support programs attempting to get homeless people out of the streets. Support programs were to provide the homeless with access to work and social welfare, but only to those who were willing and able to work, or, to those who were too old or unable to work because of illness. People who refused to accept this kind of support were then labeled as "people who refuse social life", and were consequently excluded from the support programs.

People hold a wide variety of values. A value that often remains, even after becoming homeless, according to Tsumaki (2004), is the value that people should support themselves economically through working. This value is referred to as independence by labor (Tsumaki 2004), or self-support by employment (MHLW 2009). This relates to the values of self-reliance and self-sufficiency. Tsumaki (2004) further explains that many homeless people often choose to abide by the principles of self-reliance and of not depending on others for survival. He further explains that in the eyes of many of the "normal" citizens, homelessness is considered to be the result of choosing a lazy life. For the homeless, who are well aware of this opinion, life as a homeless is still an honorable life as long as the value of self-sufficiency is respected. This means that for many of the homeless, who cannot support themselves

economically through work, often declines to accept social support because it means abandoning the value of self-sufficiency, and consequently some of their dignity.

Iwata and Karato (2011) studied the geographical distribution of the homeless in Osaka city and discovered that the homeless people usually gather in places where work, food and public medical care facilities are located. Suzuki (2008) suggests that the spatial distribution of the homeless shows that they are looking for work.

As stated by Ono (2004), the Japanese, in general, have a tendency to persist and keep trying to accomplish a set goal. Ono refers to this trait as being methodical perfectionists and relates it to the Japanese post war reconstruction and economic prosperity. In this period, the Japanese had a huge common goal to recover from the war, and to catch up with the Western democracies. Furthermore, Ono (2004) also suggests that people, who cannot work because of physical disabilities, illness, or lost employment for other reasons, are often regarded by themselves or others as *worthless*. This is especially an issue among the elderly and middle-aged persons. According to Okamoto (2007) and Hirayama (2008), in the post-war rise to affluence, many of these unskilled construction workers could still be absorbed by the demand for construction work, but the severe economic recession since the 1990s greatly reduced the number of construction work available. Accompanied by a shift to an industrial and service economy, many of the unskilled workers thus found it difficult to find employment.

The middle-aged unskilled construction workers are associated with the decline of the *yosebas* (Aoki 2003; Hasegawa 2005). According to Fowler (1996), besides being a center for jobs among the day laborers, the *yosebas* also functioned as places to absorb people who fall out of mainstream society for various reasons. This could include crime, loss of jobs, or simply shame. The *yoseba* was a place where people could hide and become anonymous.

Wisner (1998) mentioned that marginal groups often cause some level of discomfort to local residents. The character of the *yosebas* partly contribute to the stigma and discrimination directed to the homeless. Fowler (1996) pointed out that since the Sanya *yoseba* is an area associated with crime, ordinary people tend to avoid this area. Suzuki (2008) revealed that when the number of park-living homeless increased considerably, local residents nearby started feeling some uneasiness and often stirred some conflicts.

Other reasons for the attitudes can be traced to urban development and gentrification in Tokyo. Recent development projects in Tokyo had a tendency to be large scale up-market projects, reflecting the mass consumption lifestyle that is in the capital city (Cybriwsky 2011). As has been pointed out by Murakami Wood and Abe (2011), when these projects are completed, the public spaces around them are also altered. Security guards patrol the area to drive out unwanted people. Among these unwanted people are the homeless. This concern for urban aesthetic can also be seen in the case when the police removed the homeless who usually reside in Ueno Park in Tokyo when the Japanese Emperor visited the Tokyo National Museum located in the park (Aoki 2010). Further cases of the homeless being a target for urban aesthetics can be seen in other events such as the 11th IAAF World Athletics Championship in Osaka 2007. During the preparation of the event, the local government tried to “clean up” the public spaces where the homeless were living (Kariya 2006; Nishizawa 2010; Sasanuma 2008)

THE PROCESS OF BECOMING HOMELESS

According to surveys (Kakita 2004; OCUSG 2001) the homeless say that job loss as the most serious reason for leading a person into homelessness. Due to the long economic recession in the 1990s, many laborers went out of work and could not get other jobs. People who could not rely on family, savings, or pension became homeless. For those who were still hoping to get work, old age and physical handicap limited their opportunities for work. The respondents in those surveys indicated that they used their savings until they ran out, and ended on the streets (Kakita 2004).

Just losing a job will not cause a person to be homeless straightaway. The poor support from the Japanese welfare system is also a factor (Okamoto 2007). The OCUSG (2001) survey found that people who lost their jobs and finished their savings turned to the government for help. However, many of the requests were turned down, and people ended on the street. Many of these vulnerable people were already excluded from the Japanese welfare system a long time before ending up homeless (OCUSG 2001).

Besides the economic recession, wider demographic and policy changes are also important to understand the rise of homelessness in Japan (Okamoto, 2007). Aoki (2003) and Hasegawa

(2005) point out that globalization and de-yosebazation are important structural changes that contributed to the conditions leading people to become homeless.

Hirayama and Ronald (2008) report that ever since the economic recession of the early 1990s, younger people have not been able to afford housing, which has been an important part of the social security mix in Japan. This resulted in that younger people have become more vulnerable in Japan. In recent years, researchers have noted a new demographic of younger people who are vulnerable and could become homeless. This includes people in unstable contract-based employment or the invisible homeless who spend the nights in manga cafes (Okamoto 2007). Kakita (2004) mentioned that many of these young people report no prior experience in the *yosebas*, indicating that the other structural economic reasons could be causing this trend.

SUPPORT NETWORKS FOR THE HOMELESS

The welfare policy in Japan is characterized by small state involvement, reliance on corporate-based welfare, reciprocal welfare within families and private ownership of housing (Hirayama & Ronald, 2008). However, due to the nature of day laborer work and the end of the lifetime employment system, many of these structural support systems are being eroded.

According to Okamoto (2007), the market based welfare policy provides very poor support for people who become homeless. When institutions are set up to assist the homeless, they are usually located too far away and thus become inconvenient for the homeless to access. The Osaka City University Study Group of Urban Environmental Problem (OSUSG 2001) survey revealed that even when a person finally seeks help from the local government office; the requests are often rejected, forcing the person into the street. Okamoto (2007) argue that once a person is trapped in the cycle of unemployment and poor state support with no family assistance, the road to homelessness thus becomes short, and the way back becomes long.

Kennett and Iwata (2003) argue that the Welfare system in Japan is very inadequate for people who need help. According to Kakita (2004), this malfunctioning public assistance system must be viewed as a cause for sending people into homelessness.

The homeless people form networks and communities to help themselves (Wolch et al. 1993). Firstly, the homeless sometimes gather to share information about work and food (Yamakita

2007). According to the OSUSG (2001) survey, about 80% of homeless keep company with one another, and about 20% share food with another. Secondly, homeless people gather together for safety and protection (Okamoto 2007). The OSUSG (2001) survey showed that 25% of the homeless had been harassed by pedestrians and children. Guzewicz and Takooshian (1992) reported that a group of students attacked and killed three homeless people in 1983. Thirdly, the gathering of homeless people may lead to people establishing volunteer groups to support them (Okamoto 2007).

Lastly, because the homeless are usually middle-aged (between 50 – 60 years old), their health is a concern for support. A study by Kuroki et al. (2006) found that the homeless in Osaka were usually in a poor state of health. The study looked at the deaths reported in Osaka city between 2000 and 2004 found that among the homeless deaths, 69% died of disease, 12% by suicide, 3% by homicide, and 10% by accidents (including starvation 4% and cold 7%).

IV. RESEARCH METHODS

INTRODUCTION and OBJECTIVES

This project is a descriptive and exploratory case study on the vulnerabilities of the homeless population in Tokyo. We wanted to find out the opinions, stories, experiences, and challenges of the various stakeholders working with the homeless, and disaster preparation. We used two main data collection methods to obtain the primary data, in two phases of data collection (interviews and survey). Qualitative data and quantitative data were collected. In addition, we volunteered to work on an unpaid basis together with some NGOs during the field research.

INTERVIEWS

We focused on conducting interviews during the field research. The interviews were made between October and December 2011. We used unstructured interviews with a set of topics to be covered, with no fixed order of questions, with open-ended answers, and allowed the interview to be guided by responses. The set of topics to be covered is referred to as an *aide memoire* or agenda (Briggs 2000; McCann & Clark 2005; Minichiello et al. 1990). Using this method, we made the interviews open-ended, and flexible (Burgess 1984). This is an appropriate method to uncover opinions, experiences, stories and realities because the respondents were not restricted and might give more unexpected responses (Bryman 2008).

We conducted all interviews together, and we used interpreters whenever needed. The interviews were often conducted in the offices of the respective organizations, but sometimes in a less formal setting such as a café. We recorded the interviews when respondents gave their consent.

We interviewed 8 NGOs/NPOs, the Tokyo Metropolitan Government, Setagaya Ward Office, the Setagaya Neighborhood Association, a representative from the National Institute of Public Health and two fire departments (Tokyo Fire Department and Kobe Fire Bureau). We selected the NGOs, NPOs, public services, local government, and individual conversations based on the relevance of their work to the topics of homelessness, and disaster preparation. As such, purposive sampling method was used to gather respondents for the interviews. In addition, we held conversations with social workers, academics, volunteers, an architect, and some ex-homeless, disabled people. These additional people were identified through referrals from our

interviewees, and some personal contacts. This convenient snowball sampling allowed us to obtain additional contacts that were relevant and added to our data.

We analyzed the interview data by looking for common themes, and patterns among the answers. (Boyce & Neale 2006) call this content analysis. The themes that we identified were further categorized and regrouped into issues that can be discussed (Taylor-Powell & Renner 2003).

VOLUNTEERING

We volunteered to work with three of the NGOs whom we interviewed, supporting their food distribution activities. We wanted to gain a better understanding and insight into the situation of the homeless through volunteering. At the same time, we were also able to talk to our respondents outside of an interview setting. In particular, meeting experienced social workers, and listening to their stories was very helpful to help us understand the homeless situation.

SURVEY

The survey was conducted during February to March 2012. We used the survey to find more information about the attitudes that emerged from our interviews. As attitudes cannot be directly observed, a survey is a suitable tool (McIntyre 1999).

We adapted the survey questions from Griffiths et al. (2006), who did a study on attitudes toward mental illness. The questions were made in English, and translated by a native Japanese speaker to Japanese. The Japanese questions were then checked by a third person to ensure that the meaning was the same. Respondents could add any optional comments after each question.

The survey was made online, and distributed through contacts and friends. The sampling was a non-random, convenient snowball sample (Bryman 2008). We wanted to use our contacts to obtain more people who were readily available to answer the survey. The target respondents were university students studying in Tokyo. The survey was open from 26 February 2012 to 8 March 2012. The total number of respondents was 73.

LIMITATIONS

Apart from our limitations of being inexperienced student researchers and untrained interviewers, we want to highlight a few study limitations.

Unstructured interviews can provide with a good level of internal validity, by giving the respondents more control of the range of topics addressed in the interview. However, the disadvantage of this research method is the general lack of reliability and low level of external validity. The lack of reliability can be explained in several points (Bryman 2008). (1) Unstructured interviews can take up a lot of time, which might lead to few, but in-depth, interviews. (2) In the case of this study, the sampling method for the interviews was non-random. (3) There is little control over the nature of the questions which makes the research difficult to replicate. (4) The data becomes much more complicated and complex to analyze. Choosing a more structured method of interview would have helped address some of these study limitations.

In addition, the reliability of our survey data might also depend on several factors (Bryman 2008). (1) There might be some variances in the respondents' motivation, honesty, memory and ability to respond. (2) In the case of this study, the sampling method for the survey was also non-random. (3) Some of the survey questions and answer choices could have been understood or interpreted differently by respondents. These limitations, in addition to a relatively low number of respondents (73 in total), contributes to that we cannot generalize the results to a broader population outside of the survey respondents. However, the perceived responses from the respondents can give some indicators of tendencies outside the survey population.

Language, and to some extent low financial budget, has also been a huge limitation for this study. Large amount of information (especially from existing literature and data) has been inaccessible for us because of our inability to read Japanese. We also felt that it would have been a lot easier to get appointments for interviews if language was not an issue. Although we did receive some help from interpreters who volunteered to help us, it would have been a lot easier and better if we had access to an interpreter or translator when needed. We had to cancel a few appointments due to a lack of an interpreter.

Furthermore, the fact that we were students and foreigners might have limited our credibility, thus access to certain possible respondents. For example, we found it hard to get an

appointment for interviews with representatives from the Tokyo Metropolitan Government. We were told that we needed recommendation from the embassy. We were also advised to approach homeless people with caution, and should only be done with proper experience and understanding of the homeless. Since we could not be accompanied by someone with that kind of qualification in most cases, our interaction with homeless persons during our stay in Tokyo was highly limited. On the other hand, we also felt that there were some positives of being both students and foreigners. For example, we felt that we were “given” more room for error. People showed a lot of patience and understanding to us. This might have influenced their decision to participate in our interviews and to offer us their help and hospitality.

V. RESULTS

INTERVIEW RESULTS (Disaster Vulnerability of the Homeless)

Unstructured interviews with various local NGOs, NPOs, CBOs, local government officers and ward offices in Tokyo, pointed out the following issues concerning the situation of the homeless in disaster emergencies:

(1) **Public services do not have any specific measures targeting the homeless in times of disaster emergencies.** Interviews with the Tokyo Fire Department (TFD) and the Kobe Fire Bureau (KFB) states that during an emergency such as the Tohoku earthquake and tsunami, everyone, homeless or not, are affected. Therefore they would try to help people, who were in need of their assistance, regardless of whether or not they are homeless. Thus, no plan has been made targeting specifically the homeless in these circumstances. However, they do have policies and disaster mitigation measures for the elderly and disabled.

(2) **The topic of disaster vulnerability, and the disaster preparedness of homeless people in Tokyo, was regarded by many as quite trivial.** Several respondents had the opinion that homelessness is not a huge issue in Tokyo in the first place. Others pointed out that the homeless had other and more urgent concerns to worry about, and therefore did not concern themselves much about disasters and the consequences that such hazards might have on them. A social worker, who has been working with the homeless for many years, provided us with the following statement when we asked about her opinion regarding our topic of interest: *"Your studying theme doesn't seem to go with homelessness. Homeless people do not think about natural disasters"*. Other respondents mentioned that finding motivation to prepare for possible future events is often difficult when there are other urgent priorities that need to be taken care of.

(3) **Using the most out of local communities in disaster response seems to be a common and greatly valued strategy for disaster mitigation.** Interviews informed us of the important role of communities, which was one of the lessons learned from previous disasters, such as the Great Hanshin Earthquake in 1995. It was pointed out that a large percentage of people rescued and saved during the 1995 Kobe earthquake, was helped by local civilians. Some of the respondents stressed the importance of the value of togetherness in communities and how local communities can be of great asset to the near-by people and public services in times of emergencies. However, it was also pointed out that the value of such communities

often depends on the assumption that people behave heroically and unselfishly during disaster emergencies

(4) Self-reliance, not be a burden to others, and helping others in need, were suggested as important values, especially during emergencies. Interviews with 3rd sector organizations pointed out that it is important for people to learn how to respond to emergencies and not depend on the public sector for help. Activities that help build community ties have therefore been identified as a priority. These community ties would then be important during emergencies because people would know where their neighbors are, who they are, and what kind of help they need. People are often better motivated to help people they already know. A common description, provided by several of our respondents, of typical Japanese behavior during emergencies is that they uphold order; they do not panic, and stand in queues, which make it easier for supporters to help. However, some of these values can sometimes be double-edged and result in self-sacrifice. Various help-organizations, who offered their assistance for the Tohoku earthquake and tsunami victims, found it problematic to identify people who needed attention when people were reluctant to share and voice their needs. Stories were told that there were cases where people resisted help.

(5) The existence of public stigma and a general lack of understanding towards homeless people can be problematic, even in emergency situations. Stories were told that some homeless persons did not get access to emergency shelters during the Great East-Japan Earthquake and Tsunami. Furthermore, the homeless often have issues communicating and receiving proper help from ward officers, who are responsible for accepting applications for welfare support. These officers often lack the training and understanding to interact with the homeless. In addition, many of the homeless do not know about their rights when speaking with a ward officer. It therefore becomes very difficult to apply for public assistance. Moreover, it was pointed out that issues related to residency of the homeless were a big problem. One of the requirements to receive welfare support is that you need to have a fixed address, if not, many ward officers will often decline the applications, as per definition, the ward are not responsible for providing non-residence applicants with assistance.

A non-Japanese respondent, who has been living in Japan for more than twenty years, and has experienced living as a homeless person in Japan, believes that Japanese people commonly see the homeless as “*dirty, dangerous, and deserve what they got*”. The homeless is often a

taboo topic in conversations among the Japanese. “*The best way to end a conversation with a Japanese person would be to start talking about the homeless*”, he explained.

(6) Suggestions were made to increase support-capacity and assets through better cooperation and coordination between the various stakeholders. Interviews with various NGOs/NPOs and other stakeholders working with the homeless in Tokyo, revealed that there is a desire to improve the level of cooperation and coordination between them. The respondents identified the potential for growth and an increase of support capacity through cooperation with other NGOs/NPOs, local businesses and the local wards. It was pointed out that although the increasing number of NGOs and other support groups who are interested in helping the homeless in Tokyo (or Japan) is something positive, the type of support that is offered to the homeless are mostly the same. Respondents mentioned that they were hoping that cooperation and coordination of support activities could lead to greater capacity and ability to help people.

SURVEY RESULT (Personal and Perceived Attitudes towards the Homeless)

Table 1.
Shows a comparison of the respondents’ personal and perceived (anticipated for others) responses regarding their opinion concerning five given statements about the homeless. Respondents were to provide their personal opinion, as well as their perceived opinion about what other people think. The percentages shown in this table, is the summed responses of *strongly agree/disagree* and *somewhat agree/disagree* by a total of 73 respondents. The missing percentages represent the number of *no opinion* responses.

	Personal		Perceived	
	Disagree	Agree	Disagree	Agree
A homeless person is lazy	36%	37%	13%	48%
A homeless person have alcohol problems	36%	17%	22%	29%
A homeless person have gambling problems	32%	17%	23%	33%
A homeless person is low educated	35%	31%	15%	51%
A homeless person have problems managing personal money	25%	45%	12%	52%

(1) The survey revealed a clear difference in the respondents’ personal and perceived answers. If we look at the results shown in Table 1, we can see that the majority of the respondents are of the opinion that others would *agree* to all of the five given statements about the homeless. The only statement that is agreed to, by the majority of the respondents themselves, is the one concerning managing personal money. The survey thus suggests that the respondents do not, generally believe these statements regarding the homeless, with the exception of managing personal money. However, there are a couple of evenly matched

responses. These are in particular, as seen in table 1, the statement about a homeless person being lazy, and low educated. For instance, there is only 1 percent separating the respondents' personal opinion about the statement that a homeless person is lazy.

Table 2.
Shows a comparison of the respondents' personal and perceived (anticipated for others) responses regarding their opinion concerning *five* given scenarios concerning the homeless. Respondents were to provide their personal opinion, as well as their perceived opinion about what other people think. The percentages shown in this table, is the summed responses of *strongly agree/disagree* and *somewhat agree/disagree* by a total of 73 respondents. The missing percentages represent the number of *no opinion* responses.

	Personal		Perceived	
	Disagree	Agree	Disagree	Agree
Would you/others volunteer to help a homeless person in your local community?	35%	33%	30%	25%
If a homeless person approached you/others, would you/others take time to talk?	38%	42%	68%	11%
If you/others were an employer, would you/others hire a homeless person?	34%	30%	74%	4%
If you/others saw an injured homeless person on the street, would you/others help?	21%	44%	49%	25%
Would you/others approach and talk to a homeless person on the street?	74%	8%	83%	1%

If we look at Table 2, we can see that the majority of respondents have the opinion that others would *disagree* to all of the five given scenarios about the homeless, whereas the respondents themselves were clearly more divided in their answers. For example, we can see that the majority of the respondents clearly do not think that others would provide work for a homeless person. In addition, almost half of the respondents do not think that others would help an injured homeless person in the streets. With regards to their personal answers, two points stands out in particular: (1) the majority of respondents would try to help a homeless person if injured, and (2) it is apparent that the majority of respondents would not take the initiative and approach a homeless person on the street to talk.

VI. DISCUSSION and CONCLUSION

This chapter will discuss the identified issues related to the disaster vulnerability of the homeless in Tokyo. The discussion will be based on findings from our field experience and survey, and will be discussed in relation to relevant literature and studies.

Main Findings

- Public services do not have any specific measures targeting the homeless in times of disaster emergencies.
- The topic of disaster vulnerability, and the disaster preparedness of homeless people in Tokyo, was regarded by many as quite trivial.
- Using the most out of local communities in disaster response seems to be a common and greatly valued strategy for disaster mitigation.
- Self-reliance, not be a burden to others, and helping others in need, were suggested as important values, especially during emergencies.
- The existence of public stigma and a general lack of understanding towards homeless people can be problematic, even in emergency situations.
- Suggestions were made to increase support-capacity and assets through better cooperation and coordination between the various stakeholders.
- The survey revealed a clear difference in the respondents' personal and perceived answers in their attitudes towards the homeless.

We will approach this discussion using two important discoveries from our main findings. They are:

- The homeless lack the community asset associated with disaster preparation
- The stigma towards the homeless by the Japanese public could be a barrier for better inclusion

After the discussion, we will reflect on some of the study limitations, before presenting some possible ideas for future research and some concluding remarks.

Disaster Vulnerabilities of the Homeless in Tokyo

Not Sufficient to Just React

In 1998, a group of researchers pointed out the exclusion of the homeless in Tokyo to the disaster preparation plans (Wisner 1998; Uitto 1998; Takahashi 1998). In addition, Wisner (1998) also reflects that there should be no “obvious” reasons why the homeless are not better included into disaster risk mitigation policies. Even today, this situation is still not addressed. During our field research in Tokyo, the TFD, and Setagaya Ward mentioned no specific plans to provide for the homeless, despite providing with efforts and mitigation policies for other vulnerable and disadvantaged groups such as the elderly, disabled and foreigners. The TFD states that they follow the “equity principle” and therefore tries to help everyone in need of their services. However, it has been recognized that public rescue services often fall short during large-scale catastrophic events; partly due to resource shortages and manpower. To compensate for this shortage of manpower, they are engaging in education for students, house visits for safety check for the elderly and collating information on the location of the households with elderly to improve everyday preparation for disasters. During times of disaster, the TFD mention that their objective is for the people to help themselves first, and not depend on the fire department or other rescue services. Even then, this is only just a change in operating mindset from daily operations to emergency operations. There are no additional measures to help the homeless prepare.

When a disaster happens, many individuals, groups and teams are engaging in help activities, and the scene appears chaotic, but each group are working with some level of organization. Fritz and Williams (1957) explained that the important issue during emergencies is to try to coordinate many diverse groups of people trying to help in their own capacities. According to O'Brien et al. (2006) the purpose of disaster preparation is to foresee problems so that methods can be devised to address the problems effectively, and that resources that are needed can be put in place beforehand. As such, when discussing about disaster preparation, it is not sufficient to only have a good emergency operations plan, but also proper routines built from proper disaster preparation plans. In that way, these help activities may be coordinated better. Given this situation, why are the homeless still overlooked in disaster preparation plans?

First we would like to point out some disadvantages that the homeless might face during disasters. As has been presented in previous chapters, it is well documented in the subject of vulnerability that poverty significantly restricts one’s capacities to respond to, and cope with

hazards. Moreover, factors such as age, physical and mental disabilities, lack of information, economical assets and safety networks also contribute to one's vulnerability and coping capacity. Homelessness packs most of these challenges and issues together, making homeless people among the most exposed, vulnerable and disadvantaged people in society (Takahashi 1998). Their challenges are magnified because of a combination of many issues that interact with one another.

Urban Risk

The homeless may be marginalized, but they do not exist in isolation in Tokyo; they are still a part of the wider Tokyo metropolis. The homeless in Japan are almost exclusively concentrated in big cities (Kakita, 2004). Although the estimated number of homeless is still a small percentage of the total population of the entire Tokyo Metropolis (6,000 vs. 13,000,000) (Kakita 2004), there is no denying that hazards, and consequently disasters, affects the homeless as well. Policies and disaster risk management should therefore be applied accordingly. Interviews revealed that many of the homeless in Tokyo felt afraid and unsure because of the lack of information and understanding they had of the current situation. They did not know what to do and where to go. There is currently not so much documented knowledge about the experiences of being homeless under these conditions and circumstances. With regards to the Kobe earthquake, the KFB informed us that the homeless were given access to relief food, and medicine, but had difficulties accessing emergency shelters. On the other hand, one informant alerted us to a few Japanese news articles reporting that the homeless were discriminated in the Kobe earthquake, and that led to some people forming NGOs to cater for their needs (Maeda 1996).

Hirayama (2000) suggests that the economic globalization in Japan caused some socioeconomic polarization and geographical disparity. Many of the houses that were destroyed by the Great Hanshin Earthquake were also located in the older and less developed part of the city. Many of societies more disadvantaged groups of people were also located in these areas at that time (Nakamura 2009). Although the term homeless implies a physical lack of a home, many of the homeless live in temporary and cheap accommodations. If one considers the definition of *homeless* in a literal sense, then these groups can be referred to as *seasonal homeless*. These are people who rent a place to stay as long as they have savings and the budget to do so; they then live on the streets when they cannot afford to rent (Hasegawa

2005; Okamoto 2007; Uitto 1998). The urban development of Tokyo did not occur in a uniform manner. Some places were neglected which lead to the creation of areas that are more risky and prone to certain dangers (Takahashi 1998). As mentioned in previous chapters, these areas have often been identified and considered risk prone areas that are susceptible to serious damage caused by earthquakes. A location in Tokyo that can be categorized in this manner is Sanya area in Tokyo, covering the Taito and Arakawa Wards. There are numerous flophouses of temporary hostels and job centers for the day laborers (Hasegawa 2005). Besides Sanya, the TMG has already identified the areas with old wooden housing in urgent need of improvements, and these areas overlap with where the elderly, and the homeless are living (Takahashi 1998; Wisner 1998).

Economic Disadvantages

Lack of economical assets can for instance restrict a homeless person's capacity to store food in disaster emergency situations. The homeless are often cited as being one of the poorest and most disadvantaged in urban cities (Donner & Rodriguez 2008). Government recommendations and guidelines for disasters advise that individuals, families and households are responsible for storing and preparing emergency food supplies for at least three days. According to Kakita (2004), the majority of homeless people do not take meals regularly. The OCUSG (2001) survey shows that many homeless often eat food collected from household waste or food thrown out by the supermarkets and convenience stores. From our volunteering experience at the food distribution points, we noticed that the homeless usually queue for second helpings. We observed that some store the food in plastic bags. They might be keeping it for themselves later, or they might be bringing food for a friend. Whatever the reason, these food items cannot be kept and stored for consumption much longer than a few days before becoming spoiled. Unless the homeless have stocks of canned food, it can therefore be difficult for them to meet the recommendation to stock up on food for at least three days in case of a catastrophic event.

Certainly, there is a degree of individual responsibility to prepare oneself for future risks. Finding the motivation and incentives to prepare for such events are more difficult for someone who has enough struggles acquiring food for everyday consumption. Because of the limited amount of resources, people need to make a choice on how, and what, to prioritize.

For the homeless, individual responsibility for disaster mitigation and preparation becomes even more problematic. Sometimes, it is not even a matter of choice.

Before the Kobe earthquake, only a small fraction of the houses had earthquake insurance, as such people had to resort to other forms of borrowing after the earthquake (Sawada & Shimizutani 2008). The nature of day laborer work excludes them from having these backups. As pointed out by Okamoto (2007), day laborers are usually excluded from social welfare. In addition, it is difficult for them to obtain government help. Once they are outside the social security system and are faced with a series of misfortunes, and without family or friends to help, it becomes very difficult to recover.

The poor have little to lose, but that little is much more critical to their survival, and also harder to replace (Wisner & Uitto 2009).

Health Related Issues

Andrew et al. (2008) also state that health is an important in determining social vulnerability. One concern about the elderly in emergency shelters is their health. In our interviews, we heard stories about easily communicable diseases such as tuberculosis spreading easily within emergency shelters. Besides the risk of spreading diseases, the elderly are also more susceptible to falling sick in tightly cramped shelters, and thus require more attention from aid workers. They also need more medical attention as they need certain medicines on a regular basis. A story that was told to us by a respondent was about the unfriendly-access of the emergency shelters for disabled people. We have been told that most of the emergency shelters are designed by able-bodied people, and the design has not been accounted for people with disabilities. This leads to unnecessary stress for the disabled people. In addition, interviews revealed stories of people with disabilities dependency on electricity. Some people died because their breathing ventilator batteries ran out while waiting for public rescue services because they were isolated at home. These stories demonstrate the dependencies associated with health related issues.

As has been pointed out in the background chapter, the majority of homeless people in Japan are in their 50s, 60s and older. In addition, they are often faced with physical disabilities, mental disabilities, and other health related issues in various degrees. A street survey about the mortality of the homeless also found that the homeless are in a generally poor state of

health (Kuroki et al. 2006). Although the homeless face issues of daily hazards and survival every day, these issues are also important during emergencies. Taking them into consideration should therefore be necessary and important for disaster emergency planners and policy makers.

The Role of the State

The role of the government in disaster preparation is important. The Government of Japan has a Central Disaster Management Council within the Cabinet Office responsible for planning and coordinating disaster policies (Cabinet Office 2011b). The government also says that

“protecting the lives, persons, and property of the people from such disasters is the government's most important task, the Cabinet Office closely collaborates with relevant ministries and agencies to prevent, respond to, and recover from disasters and works to ensure that the nation prepares strongly for such events.” (Cabinet Office 2011b: 9).

How about the homeless? The government still has a responsibility toward the homeless because they are still citizens. The government of Japan takes disaster preparation seriously. However, past events have revealed some shortcomings that can occur during large-scale disasters. For example, it was reported that the public rescue services were overwhelmed and shorthanded during the Kobe earthquake (Matsuda & Okada 2006). In an urban earthquake with many collapsed buildings, it can be difficult for the firemen to reach trapped people. At the same time, the bureaucracy in Japan can be slow to respond, wasting valuable time on decisions of what to do (Nakamura 2009). More recently, the Great East Japan Earthquake and tsunami of March 2011 was another reminder of a complex, multi-faceted disaster, where a lot was happening at the same time, and where the slow response of the Japanese bureaucracy was exposed (Funabashi & Kitazawa 2012).

Another lesson from the 1995 Kobe earthquake is that the local city office was an earthquake victim as well. People realized that they could not always count on the government authorities during times of emergency (Tatsuki 2000). In the Tohoku earthquake and tsunami, many local city offices were also destroyed (ADRC 2011). As such, many residents were left to fend for themselves. Tatsuki (2000) points out that the Kobe earthquake changed some parts of the social reality of the Japanese people. Before the Kobe earthquake, the prevailing

mentality was that the government was responsible for public services, while the people were responsible for private interests. Public services are related to the provision of goods and services to all citizens, not just to certain groups in particular. These two areas were separate. Disaster preparation was solely viewed as a public interest to be provided by the government. There was no link between the people providing public search and rescue services during disasters by volunteering. Hence, the Kobe earthquake changed the social reality of people, in the sense that the community activism and volunteering were revived. This led to the focus on the local communities as a vital tool in disaster preparation (Matsuda & Okada 2006). Wisner & Uitto (2009) suggest that the NGOs could be a link between vulnerable groups and the municipal government. Özerdem and Jacoby (2006) also suggest some important roles that the NGOs could play in times of emergencies, such as relief during the aftermath, coordination between government during rebuilding, and preparation and mitigation. However, through our interviews, we found that most NGOs were still focused on immediate relief. Some of this is quite reasonable as some of the NGOs we interviewed admitted that they realize their capabilities and their area of expertise, and therefore try to contribute where they can make a difference. The NGOs cannot do everything that is expected of them.

Sawada & Shimizutani (2008) point out that the government should account for the diverse groups of people who need help after a disaster. However, this can be a difficult challenge in large disasters, especially when the numbers of victims are many, and the funds available for each are small. This supports the idea of better preparation, insurance, self-help as well as mutual aid or assistance can drastically reduce the need for relief. Moreover, disaster preparation can also contribute to easier estimate the amount and type of relief that may be needed. Nevertheless, community based disaster preparation can be hard to implement because it is relatively rare that earthquakes causes huge catastrophes, although earthquakes in various scales are very common in Japan (Cabinet Office 2011b). Thus, people's motivations to prepare for such events are often found to be low (Sawada & Shimizutani 2008). Matsuda and Okada (2006) found three categories of households within communities (very optimistic, neutral, and very pessimistic). Optimistic households tend to under-prepare, and pessimistic households tend to over-prepare. There are still some motivation issues to address in the communities. Although the importance of disaster preparation is well documented by disaster scientists; it is not well addressed at the policy and practice level of disaster management (Matsuda & Okada 2006).

One approach to disaster preparation after the Second World War was to focus on building strong and resilient infrastructure. Our interview with the Construction Department at the Tokyo Metropolitan Government revealed that public construction projects are required to be able to withstand the strongest possible earthquakes. The design objective is to allow the building to remain standing long enough for the people to be evacuated. An architect we spoke to in Tokyo also supported this story. This infrastructure approach to disaster preparation is important, as good infrastructure has the potential to save the lives of many (Yamamura 2010). However, it has been argued that the mentality of depending on infrastructure can lead to a culture of under-preparedness in Japan (Okada & Matsuda 2006). The symptom of under-preparedness can also undermine efforts during other disasters such as the nuclear disaster at Fukushima in the aftermath of March 11, 2011. Funabashi & Kitazawa (2012) reflected that being too reliant and confident in its technical abilities could lead to a deteriorating culture of preparedness. In Tokyo, disaster preparation was seen to be quite trivial by the people we spoke with. We were sometimes told, “Tokyo has no natural disasters”. This trivial attitude toward earthquake risk could undermine motivation and preparation efforts.

The government has an important role to address its citizen's level of motivation and culture of preparedness. Matsuda and Okada (2006) reason that hazards information is important for disaster preparation and that this information needs to be provided by the government. People cannot be motivated to prepare for an event if they are unaware of the risk. Matsuda and Okada (2006) found through their workshops with local communities that constant posters and reminders set up by the local government office help them be mindful of the risks, and to be ready and alert. This is helpful for disaster preparation. Makoto (2002) presents the dilemma that a country alone is too small to solve global problems, but is too large to take care of individuals. However, sometimes a public good cannot be realized unless both the government and the private sector work together. The government needs to play a bigger overall role in disaster mitigation policies as well as the disaster risk assessments. However, the question still remains; what about the homeless?

As the government has an obligation to provide for its citizens, the discussion about disaster vulnerability of the homeless can perhaps be viewed through the perspective of Human Security. Governments have an obligation to provide security for its citizens. From the human security viewpoint, the situation is human centered and the feeling of fear and want is experienced in all situations of emergencies, whether armed conflicts or disasters, (UNDP

2011). By adopting a human centered approach, the argument for including the homeless in disaster mitigation can be viewed from another perspective.

Role of the NGOs

While arguments can be made that public services, such as fire departments, may not offer a relevant type of service for people living on the streets, perhaps the responsibility or the support services should come from elsewhere? NGOs and other interest groups, such as neighborhood associations, are currently working on issues concerning disaster preparedness and responses for their local communities. Other special needs groups in the community such as the elderly, disabled and other community minorities are also being highly considered. Most NGOs working with the homeless in Tokyo however, is for the most part working on every day relief and advocacy efforts in order to get the homeless self-sustained through employment. Although these matters are very important for the homeless, arguments to mitigate the potential consequences of natural hazards for the homeless are still valid. Little academic knowledge is known with regards to homelessness and disaster risks. Deeper understanding about their needs in these situations could give further ideas on the type of support they require. Furthermore, information about their *street-knowledge* and *know-how* might be interesting and useful for community preparation measures in the future.

Several authors have endorsed focusing support and policy measures to address the root causes of homelessness and disaster vulnerability in the past (Mitchell 1995; Mitchell 1999). Not only does the attention towards these root causes offer a more sustainable and long-term solution to the risks, they also provide a more proactive response to urban hazards as well as the natural hazards. Proactive and reactive responses to disaster vulnerability and emergencies are both equally important and needed (Yamamura 2010). By addressing urban issues such as unemployment, and providing proper social support networks that are inclusive rather than restrictive, might help prevent people from becoming homeless in the first place. This would lead to people being part of a neighborhood community, and gain access to its assets under disaster emergencies. Reinforcing structural weaknesses, especially in the identified risk prone areas in the city, would benefit the people who are located in those areas. This includes bridges, parks and other areas where the homeless often gather or stay.

Past disasters have shown that civil society movements do spring up and make a difference to marginal groups. The Kobe earthquake is a very often-cited example, where people set up

NGOs to help the disabled people during and after the earthquake (Nakamura 2009). Unfortunately these movements seem to be reactionary, and they disappear once their original objective has been met. The NGOs return to solving immediate problems or completely cease operations (Schwartz 2002).

The Role of Civil Society and Communities

Shaw & Goda (2004) pointed out that there was an increase in the community directed disaster preparation plans after the Kobe earthquake. The time after Kobe was also called the *return of volunteerism* due to the huge numbers of people who went to Kobe to volunteer (Nakamura 2009). Matsuda and Okada (2006) proposed that there are three types of knowledge that are important for disaster preparation: (1) knowledge of the risk (provided by government risk assessments); (2) expert knowledge (how to secure houses, prepare emergency kits, build makeshift toilets); and (3) local knowledge (residents' knowledge of area and neighbors). The local knowledge such as questions, opinions and the needs of local residents has been recognized as important for disaster preparation. Vorst (2010) points out that for evacuations to be effective, the people should be grouped according to certain physical characteristics (e.g. the elderly, young, or children). Elderly people typically move at about 0.6 times the speed of younger people, this means that the elderly would need a longer time to evacuate, and should not be grouped together with younger people. Local knowledge from neighbors can help group people more efficiently for evacuation. Local knowledge is also important for knowing the best routes for evacuation. However, this type of knowledge is not easily seen and shared. To obtain this knowledge, we need to ask the community to share what they know, what they need, and what they want for disaster preparation.

During our interviews, many of the actors involved in disaster preparation in Tokyo are greatly focused on local communities and their potential to save lives in disaster emergency situations. The TFD explained that their aim is for people to be able to help themselves and other nearby people. Similarly, the Setagaya Neighborhood Association (SNA) and the Setagaya Volunteer Association (SVA) want people in their community to be prepared, especially for earthquakes. The state and the public rescue services can sometimes be overwhelmed (Matsuda & Okada 2006). The KFB said that many fires broke out soon after the 1995 Kobe earthquake, and the firemen were not able to reach the people because of collapsed buildings. Instead many people were rescued by their neighbors and other civilians

nearby. Although Vorst (2010) reports that in a review of disaster psychology studies, only about 5% of bystanders will help people, even at the risk of their own lives, the people around are the closest to each other to offer assistance during a disaster. Indeed, Quarantelli (2008) reported that people mostly could remain calm and offer assistance to those injured. Fritz and Williams (1957) added that the overwhelming emotions of people during disasters is an empathy to help those affected and concerned for loved ones who might be caught within the disaster.

The responsibility for the preparation and response to disasters seem to be increasingly pointed towards individuals, households and local communities. This enforces the existing values of self-help and mutual assistance. Naturally, public support services have their own limitations, especially during extreme situations where their attention are greatly needed everywhere. The homeless however, are lacking these kinds of community assets under such events. The homeless do not usually gather in residential areas; instead, they draw together in commercial and industrial areas, or other more neglected parts of the city (Fielding 2004; Murakami Wood & Abe 2011). These places are not the typically associated with neighborhood communities. The community based civil organizations *Chonai-kai*, *jichi-kai*, (translated as citizens' associations, or neighborhood associations) and other neighborhood associations that are used for disaster preparation and mitigation efforts in the communities, are often absent in these areas in the city.

The community approach to disaster mitigation and preparation depends on people living together, developing community ties, and helping each other under stressful and catastrophic situations. This implies that community based approaches are better suited for some places than others. In addition, there is the underlying assumption that people will help others under such conditions. To increase the likelihood of mutual assistance and self-help, the various neighborhood associations are creating a wide variety of activities for the purpose of developing social bonds. The sustainability of the community approach to disaster preparation also depends on the many groups within the community participating, and repeating the activities Matsuda and Okada (2006). One of the Setagaya Ward Neighborhood Association (SNA) leaders said that they are using festivities, other social events and tasks such as area cleaning in their local communities to build social bonds. When we interviewed the volunteer community leaders, they expressed their pride and motivation in doing something positive for their local community. They believe that they are doing an important job, and the satisfaction comes from knowing that the community appreciates their work. Yamamura (2010) says that

social capital is important for community disaster preparation. Previous experiences of disasters, and sharing of information generally helps. However, a more homogeneous society makes it easier for collective action to take place because people trust each other (Yamamura 2010). A good social capital can be defined by norms and social networks, these norms and social capital are formed through long-term and intensive interpersonal interactions (Hayami 2001). Matsuda and Okada (2006) suggest that social community activities can help improve the social environment within local communities.

Regarding the homeless, many often move around between several places. According to Suzuki (2008), there are more than twice as many street-living homeless than the tent living. The street-living homeless usually move around more than their tent-living counterparts. A respondent informed us that the tent-living homeless tend to not move around. An NGO respondent also mentioned that once people build blue plastic shelters or cardboard shelters, means that they have resigned themselves as “homeless”. Data from Suzuki’s (2008) study suggest that the street-living homeless are moving around more actively searching for work. Thus, the community approach to disaster mitigation can be difficult to apply to the homeless because it relies on a certain relationship with neighbors, families and other people around the community to help each other.

This leads to the discussion of the types of communities that the homeless have, and how they can be included into disaster preparation activities. The current literature on the homeless is focused on the causes and the rates of homelessness (Roschelle & Kaufman 2004). Not very many studies focus on the story of the homeless people themselves. Not much is known from their point of view. During times of disasters, what do they want? What are they afraid of? More needs to be known about their communities and how can they be included in disaster preparation.

The homeless do have organized communities of their own (OCUSG, 2001; Wolch et al. 1993; Yamakita 2007). The homeless sometimes share food and information with each other. They also gather for the sake of company and security. For instance, there have been several reports of homeless persons harassed and vandalized by street thugs and teenagers who show no sympathy towards the homeless in Tokyo (Kakita 2004; Guzewicz & Takooshian 1992). Nevertheless, homeless communities are separated from communities led by neighborhood associations. More knowledge about homeless communities, in order to find information about their strengths and weaknesses in the context of disaster emergencies as well as how

they can be better included into community based approach to disasters, is needed and should be considered in future research. The homeless might have unexplored knowledge and experiences of survival that may prove valuable for many in desperate times (Wisner 1998). Studies are done with the interest of learning about the needs of the disabled on the events of disaster emergencies (Shaw & Goda 2004; Nakamura 2009). Perhaps the same approach can be made towards the homeless, to learn about their needs and opinions about disaster preparation. The NGOs could learn how to use these homeless networks to further develop their support activities.

Little is known about whether or not homeless people want to be included in mainstream communities and organization. Phelan et al. (2001) explained that stigma is usually consensual, where the population and the stigmatized group recognize this stigma and exclusion. Fowler (1996) points out that many homeless people want to retreat into the world of homelessness because of crime or shame. There are still practical issues to consider when including the homeless in mainstream communities. As Uitto (1998) put it, marginal groups are not given a say in the planning process. However, Wisner (2004) also added that governments cannot ensure safety unless their citizens demand it.

Matsuda and Okada (2006) argue that although the community is a vital tool in disaster preparation, the community cannot direct this task by itself. They require expert help provided from the government and other external experts.

Stigma and Community Inclusion

It has been identified that stigma is a barrier to understanding, interaction, and readjustment (Wisner 1998; Griffiths et al. 2006; Kurihara 2000). When stigma affects the helping behavior of people in disasters toward marginal groups, then understanding and removing stigma is required to reduce this exclusion of the homeless.

(Shorten and make relevant). Unlike the elderly or disabled citizens, who are also regarded as vulnerable, the homeless are not currently included in disaster mitigation policies and support that public services can offer. For instance, the Tokyo Fire Department have special programs, routines and policies addressing the various needs of the elderly and disabled, both in everyday emergencies, such as fire, and in potentially larger emergencies such as earthquakes. Long-term considerations for the safety and well being of the elderly, the

disabled and foreign citizens or visitors, with regards to potential future emergencies, are currently being issued in policy agendas by government sectors (TMG 2010). Yet, no such planning is being done with a consideration for the homeless. When the homeless are excluded from disaster mitigation support, the impact on them could be potentially catastrophic when a large natural hazard occurs. While the safety and special needs of most other citizens are being considered in these events, the homeless are often not. It is the responsibility of the government to take care of the safety of their citizens. The human centered approach gives a compelling argument that everyone should be treated equally. Indeed, this is also the TFD's guide on their operations during emergencies, that everyone is equal. From Wisner's (2001) moral and political imperative argument, governments should take care of all their citizens.

Questions can be asked about the various definitions of homelessness, and how the choice of definition and terminology can affect perceptions, attitudes and policies that concern the homeless. A narrow definition of homelessness affects the number of homeless people estimated in Japan. As a result, governments and people who follow these definitions will tend to underestimate the issue (Kakita 2004). Further questions can be asked whether or not this is done intentionally by the government, as has been pointed out by Takahashi (1998) in the past. If we follow numbers estimated by NGOs and other interest organizations working with homeless issues, the amount becomes significantly higher (Okamoto 2007). Naturally, their agenda is to emphasize the importance of *their* interests. Several people we spoke with during our stay in Tokyo had the opinion that homelessness was not a major concern, and that there were almost no homeless people in Japan. Results from the survey we conducted revealed that 32% of the respondents estimated the number of homeless people in Tokyo somewhere between 5000-1000, which is close to the official estimation by government in Japan. Still, 40% of the respondents also indicated that they were "somewhat concerned" about the homeless situation in Tokyo. However, it might be a case here that many of the respondents only chose the middle option rather than their true estimation. Perhaps it would have been better if this question were answered open-ended. This might give a better indication of the awareness of the respondents to the homeless issue in Tokyo. This casual attitude of the public toward the seriousness of the homeless problem perhaps implies that the political will and moral obligation to solve this problem needs to be addressed.

The public opinion and civil society could be one area where policy can be changed. In one of our interviews, a respondent told us about the angry reaction of the public to the TMG's

forced eviction of the homeless around Shinjuku station in 1996. This caused the government to back down. As a result, the government also started to provide some relief efforts for the homeless. The visibility of this homeless issue around Shinjuku station was one reason why our respondent, in this case, decided to start up an NGO to help the homeless. Furthermore, due to the slow response of the authorities during the Kobe earthquake, many members of the public decided to take matters into their own hands by volunteering to help the victims (Nakamura 2009). These stories show how public opinion and civil society can influence the response, and impact the response of authorities and policies.

The majority of vulnerability studies in Tokyo are still, by and large, focused on the mainstream population (citizen homeowners) (Uitto 1998). We argue however, that governments should be responsible for all their citizens, even when they are homeless.

Self-Help and Mutual Assistance during Disasters

During disasters, the values may cause people to behave selfishly, or selflessly. Vorst (2010) indicates that in a disaster, only about 10% of people will remain calm, and only 5% of bystanders will help strangers, even when their own lives are in danger. However, Quarantelli (2008) and Fritz and Williams (1957) report that most people stay calm during disaster, and that is important for remembering the preparation routines of what do during disasters. They are able to engage in self-help, and helping those around them until public rescue services arrive. In addition, the overwhelming concern is about their personal safety, and also empathy for the people affected by the disaster around them. This is aligned with the TFD's goal of getting the people to help themselves, and not depend on the fire department to rescue them.

According to some of our respondents, the Japanese mentality appears to be important in explaining how the Japanese respond during an emergency, such as an earthquake. During the 11 March, Great East Japan earthquake and tsunami, our respondents noticed that the people were calm, did not panic, followed instructions, and even formed queues at convenience stores even though the stores were empty of food and daily items. In addition, there were stories from volunteers in the newspapers about the self-sacrificing attitudes of even Japanese children. As the situation in the Fukushima Daiichi Power Plant became clearer, a team of retired engineers volunteered to take charge to manage the crisis, saying that the radiation would not affect older people so much (Buerk 2011). These stories, although factual but not

representative, point to the influence of Japanese mentality with regards to their response and behavior during emergencies.

The community leaders we interviewed in Setagaya Ward also think that mentality is a big reason for Japan's preparedness and response to emergencies. They reflected that the mentality was formed going through numerous and constant hardships during Japan's developmental history. This helped the Japanese to focus together on common goals such as nation building after the Second World War (Ono, 2004). As a result, values of not being a burden, endurance and helping others in hard times were formed. These can be thought of as values arising from the virtue of diligence (Makoto 2002). These values are important for Japanese, even among the homeless (Tsumaki 2004).

We observed some examples where the Japanese mentality conflicts with how people respond during emergencies. The stress in disasters may cause different behavior in disaster/emergency situations compared to in everyday situations (Vorst 2010). As such, some of the values that are desirable in one situation may become undesirable in another. The value of not being a burden to others, and self-sacrificing could be related to stories of "resistance to aid" or "stoicism". Resistance to aid causes people to behave in seemingly irrational ways. They often refuse help or do not ask for help even when they need it. For example, one respondent who was doing food distribution gave a hypothetical example about a shelter rejecting a package of 90 rice balls, because there were 100 people in the shelter. In addition to an example of resistance to aid, he reflected that the incident also reflected the importance of "equity", of having enough to share equally.

We also heard stories about resistance to aid among other vulnerable groups such as the elderly, who were neglected by their families and were the last to receive food. Tanida (1996) mentioned the neglect of the elderly in the emergency shelters during the 1995 Kobe earthquake. He mentioned that the elderly suffered through a combination of not being able to escape because mobility issues and they did not complain in the emergency shelters, so the aid workers did not know they needed help. Nakamura (2005) also pointed out that the poor, the elderly, and disabled were also hit the hardest in Kobe. Some of these people later became activists for their own cause, with the help of the huge outpouring of volunteerism, and became one of the most active NGOs in Japan (Nakamura 2005). Values that were desirable during nation building caused some conflicting results during disasters. The flipside of Kobe

was that the slow response from the Japanese authorities sparked the people into taking action themselves (Nakamura 2009; Shaw & Goda 2004).

The stories about the experiences of the homeless during Kobe show a mixed situation. The KFB told us that the homeless had access to relief food, and medicine during the 1995 Kobe earthquake, but had problems accessing the emergency shelters. Several authors also wrote about the many volunteers who gave a lot of assistance to the victims, both marginal groups and neighbors, in Kobe (Nakamura 2009; Shaw & Goda 2004). However, we were also told of local Japanese news reports about the homeless being discriminated from emergency shelters, and were not able to access food. Another respondent also told us that the YWCA in Kobe supported the rough sleepers.

An example of how stigma can lead to conflicting values towards marginal groups can be seen in one reported incident during the Great Kanto earthquake of 1923. There were reports of discrimination against Korean residents in Tokyo (because of some rumors of looting). However, in the Kobe earthquake 1995, there were no reports of such incidences. The Japanese and the foreign residents shared the same rice balls from the volunteers. “Suspicious of people of a different nationality were overridden by the empathy for fellow human beings caught up in the same calamity.” (Makoto 1999: 92). Studies in disaster psychology and anti-social behavior show that while the stories of looting may be factual, they are usually exaggerations from the media, playing on the chaos of the situation (Fritz & Williams 1957; McEntire 2006). From the stories our respondents told us of the Tohoku earthquake, the Japanese responded in a composed manner. This is rather reflective of the Japanese response and mentality from daily life. Quarantelli (2008) mention that anti-social behaviors during disasters are often indicative of the prevailing trends already present in society prior to the disaster. The disaster simply highlights them. However, that then points to a bad situation for the homeless because they are already marginalized in everyday situations, and a disaster will only isolate them further.

Stigma toward marginal groups may also lead to the difficulties recovering from disasters. Kokai et al. (2004) have also identified that the pervasive and traditional stigma against mental health in Asia was a barrier in post-disaster psychiatric support for many years in the past. The situation has only been improving recently.

Hirayama (2000) point out that the values of “self reliance” make it very difficult to justify getting outside help. In times of disaster, the victims selected for welfare would be socio-

spatially segregated, which could be accompanied by stigmatization. The Disaster Relief Act requires self-help. Temporary housing is limited to those households who are unable to help themselves. Welfare housing requires justification (Hirayama 2000). These conflicting values have often been a barrier for marginal groups to receive help. In particular, the homeless could face big difficulties to rebuild their lives; they have no access to emergency shelters as well as poor access to insurance and credit.

Our respondents recommend that one possible way to work around this issue of conflicting values is to have aid workers who have the correct expertise to identify people in need of help. In our interviews, organizations identified that staff having the right expertise was one important area to improve. SVA mentioned this skill for volunteers who need to check on the elderly or disabled during regular visits, as the elderly or disabled people may not say they need help, even though they do. Similarly, the aid workers and volunteers need to know how to relate to the people who need help in disaster; this includes the homeless (Wisner 1998; Takahashi 1998; Uitto 1998). It can be difficult to identify people in need of assistance due to their stoic nature, and when they do not want attention. During our field research we were advised that it was difficult to approach a homeless person, especially since we were strangers that they did not trust. It would be better to have an experienced social worker that they trust to act as an intermediary. This reflects the communication is a problem and the barrier between the mainstream society and the homeless.

Griffiths et al. (2006) mentioned a component of stigma called social distance. It is the willingness of people to interact with a particular group of people. In our survey, respondents indicated that they would consider helping an injured homeless person. 44% said that they would help if they saw an injured homeless person on the street. However, in other questions about volunteering to help, hiring, and to talk, the respondents were reluctant to interact with a homeless person. One possible implication is that empathy towards a hurt human being is stronger than the stigma. This suggests that there is a boundary where stigma does not matter. However, there is an additional element of disaster stress that is not addressed in those studies. According to Vorst (2010), that in times of disasters, about 5% of bystanders would help strangers, even at the risk of their own lives. Perhaps the basis of TFD's equity principle might be based on altruistic behavior, that people can help each other, even strangers. However, the homeless cannot depend on altruistic behavior by strangers during emergencies.

A further component to the helping behavior is the perceived attitude (i.e. the perception about the attitude of others). In our survey, the perceived attitude differs from the personal attitude. Although respondents themselves say that they are likely to help, they say that others are not likely to help. The pattern of stigma is different, similar to the study by Griffiths et al. (2006). We are not certain why there is a difference between the personal attitude and the perceived attitude in our respondents. One explanation could be socially desirable responses, where respondents tend to answer more positively about themselves. Griffiths et al. (2006) suggests that this socially desirable response effect could be present in their results as well. Another possible explanation is the lack of knowledge of the homeless issue among the respondents. Some authors have suggested that the Japanese people are not well informed about the situation of the homeless because they do not go to the areas that homeless gather (Guzewicz & Takooshian 1992). From our own observations and volunteering experiences, we also heard stories that some fellow volunteers were surprised at the situation of the homeless in Shinjuku, and they did not know about the situation, even though their office is in Shinjuku.

The difference between the personal and perceived attitude cannot be explained due to the limitations of our survey. Griffiths et al. (2006) also reflect that more investigation needs to be carried out to determine the reasons for the differences in the personal and perceived attitude. In particular, which is the more accurate reflection of stigma in the Japanese public, the personal attitude, or the perceived attitude? Within our survey respondents, respondents appear to be more certain when reporting about perceived behavior in the numbers of their “no opinion” answers. The differences between the social distances could be because of altruistic behavior or socially desirable behaviors, but we cannot conclude from our survey. Another explanation could be the respondents might be under-reporting for personal attitudes, and over-reporting perceived attitudes. It is important to understand this nature of stigma better because activities and programs to destigmatize need to be catered both to the prevailing nature of stigma and to the homeless people. This can have implications on the approach to destigmatization and inclusion. For example, with the big difference between the personal stigma and the perceived stigma, then activities could be targeted at revealing the more realistic level of public stigma. In addition, some measures could be undertaken to reduce the high personal stigma on some stereotypes (for e.g. lazy, problems managing personal money).

Lee et al. (2004) reports that increased contact and interaction with the stigmatized group can lead to better understanding and decreased stigma. This is called the contact hypothesis. Kurihara (2000) suggested that more contact between the public and mental health patients in Bali could be a reason for the lower levels of stigma compared to Tokyo. In addition, Griffiths et al. (2006) suggest that the approach to the mental health patients might influence the level of stigma in the public. For example, in Australia, the approach to mental health is currently deinstitutionalization, and getting the patients back to their family and society. This increases the contact between them and society. Kurihara (2000) also report a similar approach in Bali, with lower levels of stigma in the public. With regards to the homeless issue, the NGOs we interviewed report that they agree that more contact and interaction is important in decreasing the level of stigma between the homeless and the public in Japan. Some of their recent activities like creating a forum for discussion and advocacy are aimed at creating more awareness and interaction between the public and the homeless population. One NGO is using theater as a tool to engage the public with the homeless. They try to use homeless people as staff as much as possible. They hold a large public performance every two years, and reflect that many members of the public attend because they know it is a show made by the homeless for the homeless. In another example, one of the NGOs we interviewed had started a self-study program for the homeless to help themselves. The program appears to be progressing well, and they currently have about 20 people self-studying on a regular basis. Relating this to the Japanese principle of self-reliance (Hirayama 2000), this seems to be a suitable approach to help the homeless. This approach is also not against some of the values held by the Japanese and could be more easily implemented, and perhaps be more effective than other support activities that might conflict with certain cultural values. The program is still new, and more needs to be evaluated again after some time to determine its success.

Goffman's (1963) components of stigma also provide some support for the step-wise approach to reduce stigma. First, the extreme negative perceptions have to be changed, then comes the challenge of getting the individuals back into the mainstream. However, to make these activities and interactions effective, more knowledge about the nature of stigma that the Japanese public has toward the homeless is needed.

Lee et al. (2004) report that information from out-groups (NGOs, experts, government) about the homeless through lectures, presentations, and media coverage has a big influence on how the public perceives the homeless. This implies that accurate information by authorities is important and suggests one role that the state and NGOs could play in changing perceptions.

During our field research in Tokyo, we were invited to a presentation conducted by an NGO. They presented their progress on a project for the homeless in Tokyo. During that presentation, some of the homeless who benefitted in that project were invited to share their stories on the stage. This could be one of the steps to provide a good forum for contact and accurate information between the homeless and the public. One difficulty for widening the scope of more interaction of the homeless population with the public is the relatively small number of homeless and difficulty in setting up such arenas for interaction.

As discussed previously in the need to understand the wants and needs of the homeless, Kakita (2004) points out that in the National Survey of the Homeless conducted in 2003, 49.7% of the homeless indicate that they want to be employed as a regular employee. Furthermore, Suzuki (2008) report that the homeless tend to gather in places where work is available, suggesting that they were looking for work. Perhaps, work should be viewed as one of the important underlying issues that need to be addressed urgently to bring the homeless back in to the mainstream society. We note that in our survey, 34% of respondents thought that they would not hire a homeless person, while 74% of the respondents thought that others would not hire a homeless person. There is a barrier between what the homeless desire and the society. Further understanding of the nature of the stigma could help find better ways to include the homeless in the society.

FINAL REMARKS

Japan is regarded as one of the advanced and leading countries in terms of disaster preparedness. Throughout its history of destructive natural hazards, the country has developed complex systems, policies and routines to address these threats (MOFA 2012). However, even though almost 15 years have passed since it was pointed out that the homeless are excluded in disaster mitigation policies in Tokyo (Uitto 1998; Wisner 1998), still very little development, if any at all, has been issued to address this concern. Public services such as fire and police departments, which are responsible for immediate rescue and relief services following emergency situations, may not have a particular relevance to specifically focus on the homeless population. It is still worth to take note that the homeless, perhaps societies' most disadvantaged people, also have needs under extreme circumstances.

The homeless lack economical assets that could be used to invest in mitigation measures, adaptation and recovering from a disastrous event. Moreover, with their limited amount of resources and their day-to-day struggles to make ends meet, incentives and motivations for future preparations will probably not be top priority. It may not even be an option.

Furthermore, our survey revealed indications that there are some level of stigma among the survey respondents towards the homeless, and that their perceived stigma is higher than their personal. Social stigmatization further excludes the homeless from "mainstream" communities. The potential and importance of good community assets following catastrophic events have been identified and recognized by experts and governments alike (Ikeda 2008; Matsuda & Okada 2006; UN/ISDR 2004). The lack of assets or the exclusion from assets further increases the disadvantages and vulnerabilities of the homeless.

It appears to be that some aspects of Japanese mentality and values may come into conflict with the response to disasters. The value of self-help may be important in terms of disaster preparation and response, while at the same time also function as a barrier for recovery, if it leads to people showing reluctance to receiving aid and assistance. Government bodies, NGOs and the private sector, as well as civil society and local communities, all have their roles and responsibilities to prepare, respond and recover from a disaster. The mitigation of the consequences of hazards requires commitment and will from all actors involved (O'Brien et al. 2006; UN/ISDR 2004).

Further investigation is needed on the effects of social stigma and exclusion of the homeless in community, policy, and other mitigation measures, both in everyday situations as well as in emergencies. Very little in-depth knowledge about the specific needs and capacities of the homeless during extreme events has been obtained. The current pool of knowledge in this subject is for the most part based on vulnerability factors of the lack of various capacities and assets to cope and recover from shocks. However, little is known about the behavior, skills, needs and social exclusion experienced by the homeless in disaster situations. Further research in this subject is therefore needed in order to fully grasp their situation. Detailed hazards risk assessments and vulnerability assessments of the homeless communities in various areas in the city could be useful in this regard.

FINAL REMARKS ADDITIONAL

**Better cooperation: mentioned by our respondents, and also Fritz & Williams (1957).
Way forward etc..**

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Appendix 1

Survey Questions

東京都内の大学生の意見調査 Survey of university students in Tokyo.

こんにちは、

私たちはノルウェー生命科学大学の研究者として、東京都内における大学生に向けた調査を行っています。

このアンケート結果は私たちの卒業論文のデータの一部として使用されます。

アンケートへの参加は任意で、全ての回答は匿名ですが、多くの皆様のご協力が私たちの研究にとって不可欠となります。

質問をよく読んでうえで、正直に全ての質問に回答した上、2012年3月8日までに提出してください。

回答にはおよそ5分程要します。

この調査への疑問・質問等は wewo@student.umb.no もしくは pael@student.umb.no までご遠慮なくお送りください。

ご協力誠にありがとうございます。

Hello,

We are researchers from the Norwegian University of Life Sciences (UMB) who are conducting a survey targeting university students in Tokyo.

The survey will be a part of the data collection for a masters thesis.

It is therefore important for us that as many as possible participate and answer the questions on this survey.

Participation on this survey is completely voluntary and all responses are anonymous.

The last date for answering the survey is due on March 8, 2012

Please, take your time and read the questions carefully before answering them.

It takes about 5 minutes to complete the survey.

For questions about the survey, please contact us at wewo@student.umb.no (or) pael@student.umb.no

We appreciate all contributions.

Thank you for your time and participation.

Continue »

東京都内の大学生の意見調査 Survey of university students in Tokyo.

Section 1

1a. 年齢 (Age)

- 14歳以下 (14 and below)
- 15-19歳 (15 - 19 years)
- 20-24歳 (20 - 24 years)
- 25-29歳 (25 - 29)
- 30-34歳 (30 - 34)
- 35-39歳 (35 - 39)
- 40歳以上 (40 and above)

1b. 性別 (Gender)

- 女性 (Female)
- 男性 (Male)

1c. 東京都在住歴 (How long have you lived in Tokyo?)

- 1年以下 (Less than 1 year)
- 1 - 3年 (1 - 3 years)
- 3 - 5年 (3 - 5 years)
- 5 - 10年 (5 - 10 years)
- 10 - 15年 (10 - 15 years)
- 15年以上 (More than 15 years)

1d. 現在東京都に住んでいますか？ (Do you live in Tokyo now?)

- はい (Yes)
- いいえ (No)

1e. 人生の大半を都市または郊外のどちらで過ごしましたか？ (Where have you spent most of your life?)

- 都市 (Urban)
- 郊外 (Rural)

1f. 現在大学生ですか？ (Are you a university student now?)

- はい (Yes)
- いいえ (No)

1g. あなたは日本人ですか？ (Are you Japanese?)

- はい (Yes)
- いいえ (No)

1h. 専門分野は何ですか？ (What is your field of study?)

Choose the closest answer.

- 社会科学 (経済、心理、人類文化、法、国際関係、教育、言語学等) [Social Science (Economics, Psychology, Anthropology, International Relations, Education, Linguistics, etc...)]
- 自然科学 (物理、化学、生物、地学等) [Natural Science (Physics, Chemistry, Biology, Earth Science etc...)]
- 形式科学 (数学、統計、理論計算機科学等) [Formal Sciences (Mathematics, Statistics, Theoretical Computer Science, etc...)]
- 応用科学 (医薬、工・機械、応用数学、応用物理学等) [Applied Sciences (Medicine, Engineering, Applied Mathematics, Applied Physics, Applied Computer Science, etc...)]
- 人文科学 (芸術、音楽、演劇、歴史、文学等) [Humanities (Arts, Music, Theater, History, Literature, etc...)]

1i. コメント (任意) Any additional comments? (Optional)

東京都内の大学生の意見調査 Survey of university students in Tokyo.

Section 2

このアンケートはあなたの東京におけるホームレスに対する考えを調査するもので、人間性、社会性などを問うものではありません。

以下の質問に対し、あなたの考えに一番近いものにマークしてください。

この調査において、“ホームレス”とは公共の場（道端、公園、川辺、駅など）に住んでいる路上生活者を意味します。

In this survey, homelessness means sleeping in public places, such as streets, parks, riversides, and train stations.

2a. 以下の文を読んだ上で、あなたの意見に最も近いものを選んでください。 (Imagine the following sentences, and choose the response closest to your opinion.)

	大いに反対 (Strongly disagree)	やや反対 (Somewhat disagree)	どちらでもない (No opinion)	やや賛成 (Somewhat agree)	大いに賛成 (Strongly agree)
ホームレスは怠惰である。(A homeless person is lazy.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ホームレスはアルコール依存の問題がある。(A homeless person has alcohol problems.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ホームレスは賭博依存の問題がある。(A homeless person has gambling problems.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ホームレスは低学歴である。(A homeless person has a low level of education.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ホームレスは金銭管理の問題がある。(A homeless person has problems managing personal money.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2c. 以下の文を読んだ上で、あなたの意見に最も近いものを選んでください。 (Imagine the following sentences, and choose the response closest to your opinion.)

大いに反
対
(Strongly
disagree)

やや反対
(Somewhat
disagree)

どちらでも
ない (No
opinion)

やや賛成
(Somewhat
agree)

大いに賛
成
(Strongly
agree)

あなたの地域共同体によるホームレスを助けるボランティア活動に参加したいと思いますか？ (Would you volunteer to help a homeless person in your local community?)

もしもホームレスが話しかけてきたら、あなたは時間を取って話をすると思いますか？ (If a homeless person approached you, would you take time to talk?)

もしもあなたが経営者であるとしたら、あなたはホームレスを雇うと思いますか？ (If you are an employer, would you hire a homeless person?)

もしも怪我をしたホームレスを道端で見かけたら、あなたは助けると思いますか？ (If you saw an injured homeless person on the street, would you help?)

ホームレスにあなたから近寄って話しかけると思いますか？ (Would you approach and talk to a homeless person on the street?)

3a. 以下の文を読んだ上で、あなたの意見に最も近いものを選んでください。 (Imagine the following sentences, and choose the response closest to your opinion.)

大いに反
対
(Strongly
disagree) やや反対
(Somewhat
disagree) どちらでも
ない (No
opinion) やや賛成
(Somewhat
agree) 大いに賛
成
(Strongly
agree)

周りの人は「ホームレスは怠惰である」と思っている。(Other people think that a homeless person is lazy.)

周りの人は「ホームレスはアルコール依存の問題がある」と思っている。(Other people think that a homeless person has alcohol problems.)

周りの人は「ホームレスは賭博依存の問題がある」と思っている。(Other people think that a homeless person has gambling problems.)

周りの人は「ホームレスは低学歴である」と思っている。(Other people think that a homeless person has a low level of education.)

周りの人は「ホームレスは金銭管理の問題がある」と思っている。(Other people think that a homeless person has problems managing personal money.)

3b. コメント (任意) Any additional comments? (Optional)

3c. 以下の文を読んだ上で、あなたの意見に最も近いものを選んでください。 (Imagine the following sentences, and choose the response closest to your opinion.)

大いに反
対
(Strongly
disagree) やや反対
(Somewhat
disagree) どちらでも
ない (No
opinion) やや賛成
(Somewhat
agree) 大いに賛
成
(Strongly
agree)

周りの人はホームレスを雇用すると思いますか？ (Do you think other people would hire a homeless person?)

周りの人は怪我をしたホームレスを助けると思いますか？ (Do you think other people would help if they saw an injured homeless person on the street?)

周りの人はホームレスが話しかけてきたら立ち止まって話すと思いますか？ (Do you think other people would stop and talk if a homeless person approached them?)

周りの人は地域共同体のホームレスを助けるボランティアに参加すると思いますか？ (Do you think other people would volunteer to help a homeless person in their local community?)

周りの人はホームレスの近寄って話しかけると思いますか？ (Do you think other people would approach and talk to a homeless person on the street?)

3d. コメント (任意) Any additional comments? (Optional)

Section 4

このアンケートはあなたの東京におけるホームレスに対する考えを調査するもので、人間性、社会性などを問うものではありません。

以下の質問に対し、あなたの考えに一番近いものにマークしてください。

この調査において、“ホームレス”とは公共の場（道端、公園、川辺、駅など）に住んでいる路上生活者を意味します。

In this survey, homelessness means sleeping in public places, such as streets, parks, riversides, and train stations.

4a. どのくらいの頻度でホームレスの人を見かけますか？ (How often do you see a homeless person?)

- 一度もない (Never)
- ほとんどない (Almost never)
- 年に一度か二度 (Once or twice per year)
- ほぼ毎月 (Almost every month)
- 少なくとも週に一度 (At least once per week)

4b. コメント (任意) Any additional comments? (Optional)

4c. 東京にはホームレスが何人位いると思いますか？ (How many homeless people are there in Tokyo?)

- 0 - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 20,000
- 20,000 - 30,000

4d. コメント (任意) Any additional comments? (Optional)

4e. 東京におけるホームレス化についてあなたは懸念していますか？ (How concerned are you about people becoming homeless in Tokyo?)

非常に懸念 念 (Very concerned)	やや懸念 (Somewhat concerned)	どちらでも ない (No opinion)	あまり懸念 していな い (Somewhat not concerned)	全く懸念し ていない (Not concerned)
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Item 1

4f. コメント (任意) Any additional comments? (Optional)

4g. ホームレスについての報道・記事 (新聞・テレビ・ラジオ・雑誌) をどの程度目にしますか？
[How often have you read media reports (newspapers, TV, radio, magazines) about the homeless?]

- 全く目にしない (Never)
- ほとんど目にしない (Almost never)
- 年に一度か二度 (Once or twice per year)
- ほぼ毎月 (Almost every month)
- 少なくとも週に一度 (At least once per week)

4h. コメント (任意) Any additional comments? (Optional)

4i. ホームレスになる理由として重要度順に番号を付けてください。 (Causes of homelessness, please rank according to the importance)

	1. 最重要 (Very important)	2. 2番目に重要	3. 3番目に重要	4. 4番目に重要	5. 重要でない (Not important)
社会保障 (Social help / social security)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
経済・失業率 (Economy / unemployment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
家族のサポート・家族関係 (Family support / relations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
個人 (Personal)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
教育 (Education)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4j. コメント (任意) Any additional comments? (Optional)

5. 最終コメント (任意) Final feedback, or comments regarding the survey. (Optional)

ご協力ありがとうございました。この調査に関して、調査員に対する何か意見等があればご記入ください。Thank you for your time, and for participating in this survey. We will appreciate any feedback or comments you have about this whole survey.