The Predisposition to Help of Filipino and Chinese-Filipino Firefighters

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Abstract
The concept of predisposition to help was studied using Filipino traits among Filipino and Chinese-Filipino firefighters. A scale was constructed that measures predisposition to help using Filipino psychology models. Five factors were extracted after conducting an exploratory factor analysis: Heroism (pagkabayani), sensitivity (pakikiramdam), relational kinship (makapamilya), reciprocity (utang-na-loob), and social justice (pananagutan). The overall scale obtained a Cronbach's alpha of .93 and alpha coefficients of .87, .93, .91, 84, and .72, respectively for each factor. Convergent validity was also evidenced where the five factors are all significantly correlated. Discriminant validity was only evident for the factor on heroism (pagkabayani) where significant difference was found for Filipino and Chinese-Filipino firefighters. The final items were calibrated using the Partial Credit Rasch Model. Person and item reliabilities were high (.93 and .97 respectively) using the IRT approach. There is high probability of observance for the 5-point scale with step functions: 3.14, .1.94, .68, 1.11, and 2.90. Majority of the items were responsive which attained adequate fit (MNSQ within 0.8 to 1.2) to the Partial Credit Model.

Keywords: Predisposition to help, Chinese-Filipino, Firefighters

Introduction
The most dangerous act of helping happens in the scene of firefighting. It is common that firemen were trapped and died in situations to save people, or the local firefighters in communities doing everything they can to the point of endangering their own safety just to save and help others. Reasons for doing these acts are often vague and are assumed that they are just good people offering to lend a hand. The real causes of helping are almost always never questioned. Oftentimes it is speculated that these acts are actually “altruism” or something else. One characteristic manifesting this behavior among firefighters is their predisposition to help. Firefighters vary in their helping behavior based on individual differences. Helping is done as a function of one's cultural orientation.

The concept of altruism is very western since it is explained by models that does not fully reflect the Filipino behavior of helping. Most commonly, altruistic behavior is explained by foreign models such as the social exchange theory, relational theory, and social norms theory (Aronson, Wilson, & Ackert, 1999; Harrison, 1976; Brehm, Kasin, & Fein, 1999). These theories are typically western explanations of why people help. The current study addresses the need to contextualize predisposition to help among the Filipinos since they have a different way of manifesting the characteristic. One of the advancement proposed in this study is the construction of a
measure of predisposition to help that is appropriate for Filipino and Chinese-Filipino firefighters. The measure is composed of factors derived from studies on Filipino psychology. The items were further analyzed using the item response theory specifically a Partial Credit Rasch Model. The factor structure, convergence, divergence, and internal consistency of the scale were also obtained.

**Firefighting in the Philippines**

In the Philippines, there are volunteers and government employed Chinese-Filipino and Filipinos firefighters. This combination had a long history which started as life in the Philippines became urbanized. As the country is slowly developing, the need for basic government services became a necessity, aside from the policemen and the military, firefighters were also important to ensure public safety. Eventually, the Filipino government hired local Filipinos to serve as firefighters. During the 60’s and 70’s the frequent occurrence of unexpected fire events triggered the formation of volunteer fire brigades, originally created to help fellow Chinese-Filipino from fires and other disasters. From the 1960’s to the 1970’s, groups of civic-minded Chinese-Filipino established their own fire prevention associations, usually segregated only by geographic location. Since then, the volunteer brigades improved, its members started becoming more proficient in firefighting and rescue operations, upgrading their skills and capabilities through self-education, training and actual experience (Businessworl, 1997). Eventually, Filipinos also started volunteering for these brigades, that presently, there is a good mixture of Chinese-Filipino and Filipinos in volunteer brigades around the country. Volunteer firefighters are ordinary people who are willing to give a portion of their time to the community (Brevern, 1988).

**Constructs of Helping**

Based on existing Filipino values, a number of hypothetical factors can be arrived at and can be used as possible factors of predispositions to help among Filipino and Chinese-Filipino firefighters. Helping behavior among Filipinos is considered as a trait of interpersonal characteristic. This was shown ub the study by Katigbak, Church, Guanzon-Lapena, Carlotta, & DelPilar (2002) where they conducted a factor analysis of a personality measure for Filipinos and helpfulness was clustered under interpersonal characteristics. The present study came up with specific behavioral manifestations of helping that describes firefighters to measure their predisposition to help. The factors of helping are also studied in line with the social exchange, kin selection, and social norms theory to fully explain the construction of one’s predisposition to help. The factors derived in the present study is based on what is culturally present and Filipino psychology taking
into consideration its western counterparts to establish a more solid basis in explaining the construct of helping behavior.

Typically, helping is explained in a three part process: First, the potential aide has to perceive the help seeker to be “trapped” in an emergency situation and could not possibly solve the whole situation. Next is for the aid to view himself or herself as having the ability to provide assistance to the victim. Lastly, if the aide happens to have a lot of helping options to choose from, he or she has to make a decision on which one to use (Valentine & Ehrlichman, 1979).

Helping can be due to intrinsic reasons and neither because of rewards being offered nor some threat imposed on the person if he or she did not do a certain task. This kind of intrinsic motivation could be due to avoidance of feeling some guilt of not doing something, or for the sake of increasing one's self-esteem. Experiments were conducted and the results showed that individuals are likely to become helpful when they are able to put themselves on the shoes of other people (Declerck & Bogaert, 2008). They would also view themselves as being helped whenever they are put into that same problematic situation.

Another possible cause for a person to become helpful towards others is when he witnessed a person voluntarily helping another person (Reeve, Reeve, Townsend, & Poulson, 2007). Thus, this would reinforce his or her likelihood to offer help to those who are in need. Aside from exhibiting one's volunteerism to lend a hand due to imitation, helping would also be elicited if a person has already experienced the problem of the victim. Since he or she already has full knowledge of the problem at hand and thus, knows, more or less, how to surpass the problematic situation (Corsini, 1994).

In the Philippine context, helping is known as “pagtulong.” The Filipino people are known for being helpful people because it is part of their value system (Magno, 2010). According to Andres and Ilada-Andres (1986) the Filipino people are naturally born to be tender and loving, companion-oriented, sympathetic or kindhearted, “utang-na-loob” oriented (reciprocity), bayani-oriented (heroic), hospitable, “makatao” (humane) and harmony-oriented. They are said to be sensitive and loving because they are overprotective to those people who are close to their heart. They worry when their family members are in trouble and they find ways to help. These traits and values explain why Filipinos are helpful.

Helping behavior for Filipinos is usually associated with the kinship structure or relationship within the family. Filipinos give a lot of importance to filial piety as part if their values (Magno, 2010). Aganon and David (1985) explained that the Filipino children learn to become helpful at an early age because they have been brought up to give importance and show their respects to their nuclear-family members like helping out in the farm work. The children still help out willingly even if they are not paid by their parents to do farm work. Aside from the nuclear-family, this kinship relationship is
also extended to include the grandparents of the children, siblings of the children’s parents, the children’s own siblings, godparents at marriages and confirmations as well as neighbors. The neighbors are also included in the circle of kinsmen that strengthens the worth of social relationships. Helping behaviors were always exhibited during the planting and harvesting periods of the year because they all voluntarily help out in these activities to be part of the kinship (in provinces). And in return, the kinsmen who were offered assistance during these two seasons were also expected to reciprocate the favor in the future.

Another reason for the kinship relation as a helping behavior is the hope of maintaining the interpersonal relationships of the people with one another (Aganon & David, 1985). This was proven in the study by Kaut (1961) where he found that the Tagalog society’s criteria of maintaining social interaction is to be able to fulfill their needs, be it economic issues, political issues, or social issues. By social interaction, it means that helping one another and returning the favor depending on the needs of each person would definitely prolong the interpersonal relationships. This reciprocal helping behavior is the result of the value of pakikipag-kapwa (mutual trust). According to Enriquez (1994) pakikipag-kapwa is illustrated in the following statement:

The value commitment which emerges from the interpersonal context of the kinship structure is that of kapwa. Pakikipag-kapwa incorporates these prescribed rules of reciprocal privileges and obligations between kindred members. Kapwa (shared identity) is the cognitive image of these relationships, and becomes generalized in experience to include all acceptable forms of social relationships.

The “acceptable forms of social relationships” mentioned by Enriquez (1994) are based on two concepts which are principles of reciprocal obligation and hiya (propriety) is considered as the emotional accompaniment of kapwa (shared identity). The reciprocal obligation states that each person should be sensitive enough to maintain the fulfillment of the interests of each other (Aganon & David, 1985). On the other hand, if one’s reciprocal obligation is not accomplished, then the person will automatically feel hiya (propriety), which, according to Bulatao (1979), is a “painful emotion” expressed in interpersonal situations perceived as “dangerous to one’s ego” resulting to the withdrawal behavior of the person experiencing it.

**Volunteerism**

One of the manifestations of helping is volunteerism. The concept also carries the manifestations responsible for helping. Volunteerism is the act of doing a favor for other people who are in need without expecting anything in return (Pilliavin, 2009). Self-interest is still the heart of volunteering. This is because through volunteering, a person gains full knowledge of what he or
she wants and who he or she is; therefore, giving more meaning to ones’ life (Wilson & Janoski, 1995). According to Kushner (2004), a number of people engage themselves in volunteer work because their interests were not satisfied by their working hours. Jamison (2003) further explains that in order for people to enjoy their job in the workplace, it should have the factors of achievement, recognition, job fulfillment, responsibility, creativity and growth, economic benefits, companionship, supervision, and good working conditions. On the other hand, according to Burns (1974), the characteristics of a volunteer who does not ask for incentives are distinct from those who do volunteer and expects to have incentives, as well as, from those who do not volunteer. Individuals who volunteer without asking anything in return are those who are already independent in their lives. He or she views one’s self as not a perfect being; therefore, the person is more willing to accept flaws in their lives. As compared to the non-volunteers and those who volunteer for incentives, volunteers are an extravert type of people who are more out-going and confident.

Volunterism occurs in different settings. It can be join an organization, such as Red Cross to give aid. This is known as “formal volunteer work” (Zweigenhaft, Armstrong & Quintis, 1996). On the other hand, there are also other volunteers who do volunteer work without joining organizations, such as people who donate goods for instance to an orphanage, or people who help the elderly cross the street. This simple act of volunteering is referred to as informal volunteer work (Zweigenhaft et al., 1996).

In the Philippines, volunteerism could easily be seen in the different non-government organizations (Montelibano, 2010). An example is the volunteer firefighters’ associations that were organized by the Chinese-Filipino people a few years back.

**Chinese-Filipino Fire Brigades**

A long time ago in the Binondo area, a fire broke out and not one of the local firefighters in the area wanted to take action unless they first get paid. The property of the person who bids the highest amount will be saved immediately and if you happened to have no money then you would have to pray that the fire stops before it reaches your house (Brevren, 1988). In the early 1900’s, it was common to hear about people bribing firemen in order to save their properties during fires. Despite these incidents, nobody did anything about it. In 1963, when a big fire almost destroyed the whole of Gandara Street in Manila, the community suddenly became aware of the importance of fire prevention. Since then, several volunteer fire brigades and associations were formed and have been in existence up to this day.

Volunteer firefighters are those that are (1) retired and have the extra time, (2) have full-time job and only be able to respond at night or on
weekends, (3) self-employed and have some flexibility in the time they commit, or (4) students, who can only respond when there are no classes. The reasons for wanting to be a volunteer fireman can vary from the thrill of it, a desire to give something back to the community, as a hobby, or as an assurance for their own home’s safety (Perkins & Metz, 1988).

From being small fire prevention organizations, volunteer firefighters rose to become the best fire fighting groups in the Philippines (Brevern, 1988). These brigades are civic organizations that are mostly financed or sponsored by businessmen and several other organizations (Brevern, 1988). They are considered to be non-traditional, modern “Chinese” organizations because its membership is composed mainly of people with Chinese background, language and unifying principles that refer to the Chinese society because it is based upon models of modern organizations, where there is a democratic internal environment, and functions are more specific and limited. It also provides social service to non-members, and actively serves neighborhoods that include both Filipinos and Chinese (Wickerberg, 1992).

These brigades help increase the interaction with non-Chinese people and act as bridges from the traditional Chinese organizations, which may lead to the transcendence of the Chinese community (Wickerberg, 1992).

As a volunteer organization, volunteer firefighting is also an association of people organized to meet the needs of a section or of the whole of that community. It originates in the spontaneous, altruistic, humanitarian feelings of a few leaders in the community, who are concerned for the welfare of the disadvantaged among their fellow human beings (Pathak, 1979).

Knowing that the volunteer brigades also help out the non-Chinese community, the members of these associations are also not exclusively of Chinese descents. There are also Filipino people who are members of these brigades (Cordon, 2010).

**The Chinese-Filipino**

The Chinese people are said to be the most ethnocentric, clannish and traditional people among others (Ang-See, 1997). They believe in sayings like “fallen leaves return to their roots,” “when drinking water remember its source” as well as disapproval of the saying “denying your roots and forgetting your ancestors”. All of these sayings explain why the Chinese people wanted to preserve the purity of their bloodlines as well as their customs and traditions. Due to several reasons, this group of people started to migrate to the Philippines and other parts of the world. Most of the common reason was to be able to find jobs abroad and earn more money through their hardwork and perseverance. Eventually, due to the favorable environment that they have lived in, these Chinese people began to love the new country that has “taken good care” of them. According to Ang-See (1997), these Chinese people began to “drink the water of their new countries...
and thought of their new sources” and eventually evolved into “new roots planted into new grounds.” Thus, the Chinese people living here in the Philippines gradually began to identify with the Filipinos but not intentionally. This was made possible by several reasons. One was because of the diplomatic recognition of the People’s Republic of China where it does not recognize the Chinese people as part of the country if they have dual citizenship. Second reason was because of the mass naturalization decree passed into law by former President Marcos allowing the Chinese living in the Philippines to acquire Filipino citizenship (Ang-See, 1997; Cooper, Baker, Polichar, & Welsh, 1983).

Filipino Personality and Values

Filipinos are known as lovers of peace and order, courteous and kind. Admires the Christian values and is a God-fearing person. Filipino population is predominantly Catholic (Osteria & Sullivan, 1991). They tend to exclaim the philosophy of “bahala na” (determination) in moments of stress, anger or difficulty. It is like trusting God will help them do the last step or “God will take care” or “Let fate have its way” (San Juan, 2006). One of the greatest assets of the Philippines is the institution of the family or filial piety (Magno, 2010). The Filipino’s concept of home is more of peace and neighborhood. Foreign writers and observers have always noted the Filipino’s hospitality (Church & Loner, 1998).

In many crisis and emergencies, Filipinos respond to the needs of people who have become afflicted by the injury of disease, fire, earthquake, typhoon, or other great calamity (Osias, 1940). Despite of the so many years that Philippines was under regime, Filipinos have very well developed a strength of solidity, and has achieved it’s independence in the greatest of Philippine Revolution during 1896 (Osias, 1940). The idea of close family ties, friendship, fellowship, and neighborhood, warm and care has been Filipinos’ way of life (Osias, 1940). These traits or values do not only apply to the Filipino people exclusively. Although according to See (1997) the characteristics mentioned do also apply to the Chinese-Filipino population, which is a result of the integration of the Filipino and the Chinese cultures. The Filipino-Chinese people are also being thought of as Filipino people based on their citizenship.

Constructs that Shape Helping Behavior of Filipinos

Heroism (Pagka-bayani). One value that Filipino people give importance to is pagka-bayani (heroism) (Andres & Ilada-Andres, 1986). The term pagka-bayani (heroism) is derived from the root word bayani (hero) which means hero or a person who freely contributes his or her labor or effort to another (Chua & Nazareno, 1992). From this root word comes the term
bayanihan which is defined as engaging oneself in services without asking any payments in return (Andres & Ilada-Andres, 1987; Chua & Nazareno, 1992). Based on these two terms, this study uses the concept pagka-bayani (heroism) which also signifies the essence of being a hero in terms of offering assistance to help seekers without asking anything in return either in material form or service form. This value became incorporated in the value system of the Filipinos because they give a lot of importance to establishing personal relationships (Andres & Ilada-Andres, 1987). In pagka-bayani (heroism) people ignores the social hierarchy, structures, leadership roles and authority relationships towards the elders (Andres & Ilada-Andres, 1987). If the person felt that he or she has the right decision, he or she can act immediately even if it meant that his or her elders have to follow or agree with the decision also (Andres & Ilada-Andres, 1987). This also made the Filipinos patient and tolerant people but still do not accept defeat (Andres & Ilada-Andres, 1986). They are ready to defend the weak no matter what could be the consequence of it (Andres & Ilada-Andres, 1986). Thus, this shows the meaning of camaraderie and cooperation that Filipinos exhibit when they are set to do a certain task (Church & Katigbak, 2000).

Sensitivity (Pakikiramdam). One of the values that Filipinos give importance to is the value of pakikiramdam (sensitivity) which refers to the high level of awareness and sensitivity of a person towards another’s feeling or situation. It is characterized as “feeling for another” (Mataragnon, 1987). It is also an act wherein great care is shown and reflection or thoughts were exhibited in hesitation to react, inattention to cues, and non-verbal behavior in mental role-playing “if I were in the other’s situation, how would I feel” (Mataragnon, 1987). Related to this would be paghaum (assistance), which is the Visayan term for the Tagalog term “alalay” (assistance) that means “moving together with another person.” This refers to the ability of a person to empathize and guide another without owning the other person’s problem (Decenteceo, 1999). This showed the caring ability of the Filipino people to their fellow Filipinos whenever they have problems.

Relational kindship (Pagiging makapamilya). One important values of the Filipinos is their sense of pagiging maka-pamilya (family-centered). It has been stated by Andres and Ilada-Andres (1986) that Filipinos are family-oriented people. Each Filipino has a childlike connection to his or her parents even if he or she was already married, he or she will still visit his or her parents every now and then. Also, it has been said that the terms nanay (mother), tatay (father), ama (father), itay (father), ina (mother) all have cultural connotations which actually made it possible to bind the children and parents together (Andres & Ilada-Andres, 1986). Kinship originated from the agricultural socioeconomic structure of their livelihood before the industrial revolution (Torres, 1985). The Filipinos live their lives through
farming and the parents always require their children to help them out during harvest seasons. Aside from their own family working together, their extended family members also help out. Therefore, they were able to develop a sense of kindred relationship (Torres, 1985). This ensures psychological security among its members by means of giving love, showing affection, and intimacy, and companionship. Thus, the family usually serves as the main source of emotional support. The sense of security given by the family comes from the mutual help and support it renders. Whenever there are crises and emergencies that arise, such as typhoons, fires and other disasters, other relatives would also run to and seek for help even before asking agencies, like red cross and the like (Medina, 1991). But as time had passed, outsiders were also included in the circle of kinship by the Filipinos. For example, their neighborhood that was once an acquaintance only with the family became close to its members. This is because he or she was able to develop a sense of deep social relationship with each member and their outlook in life – the way they do things, the way they judge certain situations and the like was the same (Torres, 1985). Even the ninongs (god father) and ninangs (god mother) as well as kinakapatid (brothers/sisters) were also considered as part of the family because of the spiritual relationship (Andres & Ilada-Andres, 1986).

Reciprocity (Pagtanaw ng utang-na-loob). Pagtanaw ng Utang-na-loob is also a Filipino value. It is a term that is usually translated as debt of gratitude in many Western oriented studies. However, if taken in its Filipino context, the meaning is much deeper wherein there is no certain English word that could put into words its real meaning (Tiandis, & Suh, 2002). It actually involves an emotional component when viewed together with the Filipino concept of loob (shared inner self). This concept also promotes an image of colonizer and benefactor, hence, it continues to be “perpetuated as an important aspect of the Filipino national self-image” (Enriquez, 1994).

According to Andres and Ilada-Andres (1986), this is a behavior being exhibited by people whenever assistance was offered to them and they would always automatically have to return those favors. Also, since Filipinos do not want to be identified as walang utang-na-loob, this value becomes a relationship that may have no end. Upon returning these favors, they could actually show it in different ways. Some people would offer gifts or tokens, offer services, and many more in return for the helper’s good-heartedness. Aside from this casual every day life exchange of favors, the value of utang-na-loob also plays a role in the world of politics. If, for example, the person who offered a helping hand to a Filipino happened to be running for a position in the government office, this Filipino would definitely vote him or her for that certain position regardless of whether or not this person has good credentials. A lot of times, the reason for voting a person into office was because of payment for their gratitude. Thus, the Filipinos’ sense of utang-
na-loob could actually result to a bad outcome if it defeats other factors that should be the ones important and that should be taken into consideration when certain decisions have to be made where the helper is involved. On the other hand, if utang-na-loob was taken into consideration in a more positive way, it could actually reveal the beauty of this Filipino value.

Social Justice (Pagtugon sa pananagutan). Pagtugon sa pananagutan was defined by Chua and Nazareno (1992) as a duty that a person has towards another and is considered as a Filipino value (Ang-See, 1997). It is said to be a duty in a sense that a person is simply obliged to do something for the good of the other. This is usually evident in the larger community setting (Ang-See, 1997). According to Ang-See (1997), the person views their obligations not only in the personal level or in the smaller society level but in the larger scale like the whole Filipino society. Example, in the case of building bridges and houses by some wealthy Chinese-Filipino people, they are contributing it to the Philippine society and not just the small Chinese community (Ang-See, 1997). These people have come to realized that they are also part of the larger society and thus they have a responsibility to contribute something in terms of infrastructures or businesses for improving the society and economy.

Western Conceptualizations of Helping

Social exchange theory. The theory formulated by Thibaut and Kelley is called the social exchange theory. It shares the view that altruistic behavior is exhibited due to self-interest (Aronson, et al., 1999). The social exchange theory states that people weigh the costs and benefits that they will acquire whenever they decide to help other people who are in need (Aronson, et al., 1999). It also states that people will base their helping decision on the maximum benefit that they can possibly get from the situation (Brehm et al., 1999). In this theory, egoism and empathy altruism are the factors of altruism.

Egoism points out that there is no such thing as helping other people without even thinking about one’s own welfare or benefit from the situation. It also illustrates that when a person helps another who is in need and it made him or her feel good then, that feeling automatically becomes a gain (Brehm et al., 1999; Sober & Wilson, 1999). It can be noticed that egoism argues in the psychological level regarding why human beings help other people who are in need (Sober & Wilson, 1999). It refers to the helping attitude of people based on what they can get in return with that simple act of volunteerism (Guenther et al., 1995). Empathy altruism, on the other hand, was proposed by Batson (1997). It was formulated to explain how altruism is elicited by empathy. This model states that empathy is made up of two components, which are the cognitive component and emotional
component. It explains that the helper will first view himself or herself in the situation of the help seeker – cognitive perspective taking – then, he or she will feel the way the victim is feeling in that problematic situation – emotional perspective taking. As a result, the aide will voluntarily provide assistance to the victim (Brehm et al., 1999).

**Evolutionary psychology.** Another perspective is the evolutionary psychology that explains helping as relational altruism. It follows the principles of evolution proposed by Charles Darwin. This theory suggests that evolution favors those who are naturally selfish, in that this person will only help in order to ensure the survival of his own genes (Brehm, et al., 1999). Under this theory are kin selection or inclusive fitness and reciprocal helping (Brehm, 1999).

Kin selection or inclusive fitness states that help is given more to genetic relatives so that even if one is to risk his life, his line will still continue through that of the genetic relative they saved (Aronson, et al., 1999). According to Brehm et al. (1999), this factor prefers people who share the same genes so that the genes will survive. It actually contributes to the reproductive success and that on the outside it might seem as self-sacrificing but in reality it is a way to spread the genes so it becomes immortal. Some researchers also suggest that the past and current conflicts between ethnic groups might have started out from this idea, that there might be a genetic basis for this because people only help those who can pass on their genes.

Another concept under evolutionary psychology is reciprocal helping formulated by Trivers (1971). This explains that people expect each and every member of a society to return the favor of helping one another in times of crisis (Franzoi, 1996). This sub-factor explains that people do something good like helping other people if they perceive themselves being helped in the near future (Harrison, 1976; Aronson et al., 1999; Brehm et al., 1999). Trivers (1971) states that in order for this reciprocal helping to occur, a certain situation should be present. This means that the advantage that the help seeker will acquire from the helper should be high and the cost that the helper will exert when he or she offers assistance will be low. This is in preparation for the future in case it is the helper who will need help (Franzoi, 1996).

An experiment was conducted by Burnstein, Crandall, and Kitayama (1994) based on evolutionary psychology theory. In this study he used both American and Japanese students and assessed whether the students would help people who were closer to them when there are emergencies and when it is a simple helping need. He found out that students in both cultures were most likely to help those who were closer to them rather than those who were not related to them and more help is given when it is a life-threatening situation. Another finding was that they helped more based on the
reproductive capacity of the person to be helped. If the one who needs help is younger and more capable of reproducing then more help is given.

**Social norms.** Social norms as proposed by Herbert Simon, states that the helping behavior of a person is exhibited because it is taught and expected by society (Aronson et al., 1999). Therefore, whenever a person perceives another person as having trouble, he or she will automatically offer assistance to that person (Aronson et al., 1999; Brehm et al., 1999; Gintis, Bowles, Boyd, & Fehr, 2003). Under this theory are the social justice and social responsibility norm (Harrison, 1974).

The expectation in a social norm is explained by social justice. According to Lerner and Meindl (1981), social justice is the time that the helper will offer assistance to the victim if and only if the victim deserves it. Lerner (1982) also pointed out that in order for the help seeker to be worthy of help he or she should do good deeds to other people or possess good and favorable personalities. A study conducted by Oswald (1996) demonstrated helping using social norms theory. In the study, a number of participants 65 working adults, 55 women, and 10 men were asked to view videotapes. The subjects were asked to observe the thoughts and emotions of the character in the videotape while the rest will observe other irrelevant details of the videotape aside from the character. Results showed that those subjects who observed the character in the videotape using their cognitive and affective perspective taking of analysis offered more help when compared to those participants who only observed the irrelevant details.

The individual helps within the norm because they have social responsibility. It is the rule stated by the society that each and every citizen should and is obligated to help other people who are in need of assistance (Harrison, 1974; Brehm et al., 1999). The results in the study of Taylor, Deane, and Podd (2007) showed that once a person perceived that another individual is dependent and in need of assistance, he or she will be more determined to help out.

Social responsibility in helping was studied using a cross-cultural perspective by Levine et al. (2001) and Bern (1999).

Levine et al. (2001) conducted a study to find out the answers to three main issues on helping. The first main issue was that if helping people, especially strangers, vary from culture to culture. The second main issue was about whether or not helping is important across different cultures. The last issue was to find out what are the community characteristics that different cultures have that contribute to the social behavior of helping strangers. The results yielded from the sample of large cities in each of twenty-three countries that were elected, showed that the countries that have residents earning high income have lesser possibilities of helping strangers. The results also showed that those countries having friendly cultures tend to have citizens who are willing to help strangers. The traditional view that
individualistic-cultured people are less helpful and collectivistic-cultured people are more willing to help was not fully supported by the results of the research conducted. Therefore, the researchers of the study concluded that there are some individualistic-cultured people who are more willing to help and there are also some collectivistic-cultured people who are less likely to help out.

Another study was conducted in Amato (1983), in Switzerland. The researchers wanted to test if the participants in Bern would be more willing to offer some help to heterosexual males than homosexual males. They also wanted to see if the results that will be obtained in the first hypothesis would be affected by the gender or sexuality of the participants themselves. And they also wanted to find out if the help offered to female homosexuals would be different from those offered to male homosexuals. The researchers got a confederate who’s going to make the phone calls and record the responses of the participants to the request. The results obtained showed that whether or not the caller is a homosexual male or female who’s seeking help, the participants still helped him or her out. The explanation behind this could either be because of the social norms that all Bernese are obliged to help other people who are in need or it is simply because of the attitude of Bernese to help people who are in need (Gabriel et. al., 2001).

Several Filipino values were described that are somewhat related to the Western concepts of helping. The literature showed that there are several factors that influence the helping behaviors that people exhibit. However, there are few studies where volunteer firefighters have been used as participants. There has also been little research done on proposed Filipino constructs as factors that constitute their predisposition to help. The present study first constructed a measure to determine predisposition to help using concepts of Filipino values and traits. The factor structure and item calibration of the instrument is established. This measure is then administered among Filipino and Chinese Filipino to determine if the derived factors can be discriminated.

Method

Participants

There were two sets of samples used in the present study. The first set of participants was composed of 150 firefighters from the National Capital Region (NCR) in the Philippines. These participants were gathered using convenient sampling. These participants all agreed to participate in the study through informed consent. This sample was used to establish the scales initial factor structure.

The second set of participants was composed of 200 firefighters also from the NCR in the Philippines. In this sample 75 were Chinese-Filipino
volunteer firefighters and 125 Filipino firefighters that were conveniently sampled. This sample was used to determine the discrimination of the factors of the predisposition to help scale.

**Instrument**

A predisposition to help scale was constructed in the present study. The factors were established based on Filipino personality theories including the Filipino and Chinese-Filipino cultural values. The items were based on an initial interview with volunteer forefights. The responses were used as a guide in the construction of the items for the test on predisposition to help for the general population. Additional items were also constructed based on the review of related literature. Certain statements mentioned by the participants such as, “It makes me feel good when I help,” were extracted and were placed on certain hypothesized factors. The items in the scale were written in Filipino language since a great number of the participants could understand items better that are stated in the local language.

The responses of the participants were measured using a Likert scale. The responses were based on their agreement and disagreement of the ideas or situations presented. The scales include strongly agree (lubos na sumsangayon), agree (sumasangayon), neutral (di-tiyak), disagree (di-sumasangayon), and strongly disagree (lubos na di-sumasangayon).

Three experts checked and reviewed the items that were constructed where they all have backgrounds in teaching a course in scale development. After retrieving the questionnaires, the necessary corrections were made and the final draft of the items was reconstructed. A total of 115 items were constructed and was reduced to 111 after item review: Heroism (25 items), sensitivity (21 items), reciprocity (22 items), relational kinship (22 items), and social justice (21 items).

**Procedure**

During the pretesting of the instrument, the participants were asked to choose a comfortable place to answer the scale. They were also given five-minutes briefing on what the scale is all about. Then, the directions on how to go about in answering the questionnaires was provided. Verbal instructions were given to the respondents upon administration. The respondents are instructed to take their time in answering each item and there were no right or wrong answers. There is no time limit in answering the scale. The respondents were reminded to answer the test as honestly as possible based on how they would really respond when they are placed in the situation as presented for each item. The first part of the questionnaire includes instructions that were provided for the respondents to read and follow. Participants were asked to encircle the corresponding number for their answer. They were told that they will answer a test composed of 111 items.
Lastly, they were asked if they are able to understand the instructions given. Once there are no questions and the participants are able to settle themselves, the questionnaires were distributed for them to answer.

**Data Analysis**

Both the classical test theory and the item response theory were used to establish the scale in the present study. In the classical test theory, the measurement error of the test predisposition to help will be obtained through the difference of the true score and observed test score. The standard deviation of the distribution of random errors for each individual tells about the magnitude of measurement error. The standard deviation of the observed score and the reliability of the test are used to estimate the standard error of measurement. The accuracy of predisposition to help being measured is determined by the amount of the standard error of measurement. In applying the item response theory, an item’s characteristic is determined through its curve that described the probability of getting an extreme score in the test predisposition to help. The Rasch model is used to arrive at the logistic item characteristic curve which is a function of possessing the characteristic helping. It forms the boundary between the probability areas of answering an item in high and low extremes.

**Reliability analysis.** The internal consistency of the items was determined using the Cronbach’s alpha. The score of each item was also intercorrelated to determine its internal consistency and to see the items that are highly correlated. Item and person reliability estimates using the Rasch model was as obtained.

**Construct validity.** To determine the factor structure of the scale, the items have undergone factors analysis by reducing the number of subscales from the initial five factors hypothesized to new common factors where the items highly load on. The number of factors was determined using the eigenvalues extracted. The eigenvalues are the sum of squared correlations between a factor variate and the number of original variables. It reflects the overall relationship between that factor and the original variables. The scree test was used to assess the eigenvalues where the factors with eigenvalues of 1.0 and above are considered to be stable.

The factorial composition of the test was established whether the items that belong in one cluster would measure the same characteristic. Items having a value of .30 and above were the ones accepted in the pool of items for the final form of the test. The factors extracted were also rotated using varimax raw to show all strong and weak loadings. The varimax rotation was conducted to minimize the number of variables that load strongly on a factor.
and a low loading of other factors. In the process, the factors extracted tend to equalize the proportion of variances explained by each factor.

**Discriminant validity.** To establish the scale’s discriminant validity, the scores on the predisposition to help among the Filipino and Chinese-Filipino firefighters were categorized and they were compared. The differences in their overall scale score for each factor were tested for significance using the t-test for two independent samples. Factors that have significant differences on means show that the factor has the ability to discriminate. But when no significant difference is found, it means that the factor converge across the groups.

**Partial credit Rasch model.** To establish a uniform sample free scale of measurement for the predisposition to help that is applicable to individuals and groups of widely varying characteristics, the Graded Response Rasch model is used. The method incorporates item performance in the standard-setting process by graphically presenting item difficulties in this case the extreme scores. The process involves item mapping where all the items ordered in columns, with each column in the graph representing a different item difficulty/extreme scores. The columns of items are ordered from easy to difficult (extreme low scores to extreme high scores in this study) on a histogram-type graph, with very easy items toward the left end of the graph, and very hard items toward the right end of the graph. Item difficulties in log odds unit are estimated through application of the Rasch IRT model (Wright & Stone, 1979). Logit difficulties are computed to obtain a characteristic curve for each item. The abscissa of the graph represents the rescaled item difficulty. Any one column has items within two points of each other. The goal of this item mapping procedure is to locate a column of items on the histogram where the researcher can reach consensus that the predisposition to help measure has a 50% chance answering the items correctly.

**Results**

**Reliability**

Based on the item analysis done on the test instrument’s descriptive profile, the total item mean was 396.94, and the standard deviation was 32.56. The analysis also showed that the distribution of scores tends to be normal and symmetrical based on its skewness since the value obtained was 0.1907, which is a score close to 0. The value of kurtosis that was obtained was 0.171, which indicates that the distribution of the scores is normal since the value is close to 0. The minimum value of the scores was 317 and the maximum was 498.
For the reliability analysis, the Cronbach’s alpha obtained is .93 indicating high internal consistency among the 111 items. The average inter-item correlation resulted to a value of .32. The item total correlation and the mean and standard deviation for each item were also obtained.

**Factor Structure**

To test the homogeneity of the items in the scale, the raw data was analyzed using the factor analysis. The principal components or eigenvalues, which indicate the amount of common variance accounted for by the respective number of factors that were obtained. A five factor structure explains 38.63 percent of the total variance.

The varimax rotation was used to analyze the raw data in order to maximize the variances of the squared raw factor loadings across variables for each factor. Lastly, the analysis of factor loadings for the whole scale showed that 71 items had factor loadings above .30. Five of the original factors were retained: Social justice (29 items), heroism (13 items), reciprocity (12 items), sensitivity (6 items), and relational kinship (12 items).

The 71 items were administered to 200 firefighters. The confidence interval for means for each factor was used to determine the region of the scores where it approximates the true score that is free of error.

**Table 1**

<table>
<thead>
<tr>
<th>Mean and Standard Deviation for the Factors Predisposition to Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
</tr>
<tr>
<td>Heroism (Pagka-bayan)</td>
</tr>
<tr>
<td>Sensitivity (Pakikiramdam)</td>
</tr>
<tr>
<td>Relational kinship (Pagiging Maka-pamilya)</td>
</tr>
<tr>
<td>Reciprocity (Pagtanaw ng utang-ng-loob)</td>
</tr>
<tr>
<td>Social justice (Pagtugon sa pananagutan)</td>
</tr>
</tbody>
</table>

The factors on pakikiramdam, pagiging maka-pamilya, and pagtanaw ng utang ng lobb shows more accurate means since constricted intervals were obtained.

**Discriminant and Convergent Validity**

The data is obtained from 75 Chinese-Filipino Volunteer Firefighters and another set of 125 Filipino Firefighters on their predisposition to help.
Table 2

Comparing Filipino and Chinese Filipino Firefighters

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>M Filipino</th>
<th>M Chinese-Filipino</th>
<th>t value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroism (Pagka-bayani)</td>
<td>3.57</td>
<td>3.86</td>
<td>2.94*</td>
<td>19</td>
<td>.004</td>
</tr>
<tr>
<td>Sensitivity (Pakikiramdam)</td>
<td>3.95</td>
<td>4.04</td>
<td>1.06</td>
<td>8</td>
<td>.291</td>
</tr>
<tr>
<td>Relational kinship (Pagifying Maka-pamilya)</td>
<td>3.40</td>
<td>3.55</td>
<td>1.89</td>
<td>19</td>
<td>.060</td>
</tr>
<tr>
<td>Reciprocity (Pagtanaw ng utang-ng-loob)</td>
<td>3.26</td>
<td>3.29</td>
<td>0.66</td>
<td>8</td>
<td>.508</td>
</tr>
<tr>
<td>Social justice (Pagtugon sa pananagutan)</td>
<td>3.76</td>
<td>3.77</td>
<td>-.022</td>
<td>19</td>
<td>.825</td>
</tr>
</tbody>
</table>

* p< .05

In comparing between Filipino and Chinese-Filipino firefighters on the five factors of predisposition to help, significant difference was only found for heroism. Mean scores for the Chinese-Filipino on heroism was significantly higher than the Filipino firefighters. All other factors were not significantly different for the two groups.

Correlation among the Factors

The intercorrelations among the factors of heroism, sensitivity, relational kinship, reciprocity, and social justice are established to determine whether they converge with each other. The results show that all the factors have significant relationship. The magnitude of the relationship is positive providing evidence that the test have attained convergent validity. This means that as the score form one factors increases, the scores on other factors also increases.

Table 3

Correlation Matrix For the Factors of Predisposition to Help

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) pagkabayani</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) pakikiramdam</td>
<td>.61*</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) makapamilya</td>
<td>.18*</td>
<td>.33*</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) utang-na-loob</td>
<td>.18*</td>
<td>.27*</td>
<td>.16*</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>(5) pananagutan</td>
<td>.72*</td>
<td>.73*</td>
<td>.39*</td>
<td>.28*</td>
<td>---</td>
</tr>
</tbody>
</table>

* p< .05
The correlation coefficients obtained range from moderate to high. This shows that the factors are not multicollinear with each other. It further supports that the measure on predisposition to help is truly composed of the five factors.

**Rasch Model**

In performing the Rasch Model, the scores of 200 respondents from the 71 item were included in the analysis for the Rasch model. The person reliability for the entire scale was .93 and the item reliability was .97. High internal consistencies were obtained for both person and item responses.

The scale categories (5-point scale) were first analyzed in the process to determine the threshold. Higher scale categories must reflect higher measures and low values for lower scales, thereby producing a monotonic increase in threshold values. The average step calibrations are, -3.14, -1.94, -0.68, 1.11, and 2.90. All average step functions are increasing monotonically indicating that a 5-point scale for each factor attained “scale ordering” where there is a high probability of observance of certain scale categories.

To determine if the items under each domain has a unidimensional structure, item fit mean square (MNSQ) was computed. MNSQ INFIT values within 1.2 and 0.8 are acceptable. High values of item MNSQ indicate a “lack of construct homogeneity” with other items in a scale, whereas low values indicate “redundancy” with other items (Linacre & Wright 1998). Two Rasch analyses were conducted separately for each rating provided by the primary and secondary raters.

For the heroism, four items lacks constructs homogeneity which means that they are not measuring the same construct as to other factors. On the other hand, five items are redundant with other items. For sensitivity, two items lacks constructs homogeneity while two items are redundant with other items. For relational kinship only 2 items lacks construct homogeneity and none of the items are redundant. For reciprocity, none of the items lacks construct homogeneity and only are redundant. For social justice, only one item lacks construct homogeneity and two items are redundant. The fit indices shows that there are several misfitting items for heroism and sensitivity.
Figure 1
*Item and Person Map of the 111 items of the Predisposition to Help Scale*

The person and item map showed that there is appropriate ematching of person characteristics and item difficulty especially at higher logits (above 0). High characteristics of predisposition to help are characterized firefighters high on this trait. This indicates the appropriateness of the scale for the study’s sample.

**Discussion**

In the factor analysis with 150 cases, the measure was able to yield five factors that include social justice, heroism, reciprocity, sensitivity, and relational kinship. The content of the factors were maintained in the exploratory factor analysis with reduction of some items. In the correlation matrix, sensitivity was highly correlated with all the factors. This explains that the items for this factor are immersed in all other factors especially with heroism and social justice. In the concept of helping, one is able to help because he/she is sensitive to others needs. The predisposition to help in
general requires the feeling of sensitivity in order to execute the process of helping (Andres & Ilada-Andres, 1986). Enriquez (1994) explains that sensitivity is an interpersonal pivotal value. The nature of sensitivity as a central behavior provides evidence that runs through every value structure of the Filipinos especially in helping others. In another perspective, Mataragnon (1987) and Decenteceo (1999) explains that sensitivity is helping in itself since its Tagalog correspondence is captured in the concept of “alalay” (assistance). This entails the ability of the person to empathize and guide another without owing the other persons problem which is typical of helping.

Social justice as a factor is not highly correlated with reciprocity, heroism, and relational kinship, although the items for this measure formed separately with the rest in the factor analysis creating a factor on its own. Social justice does not capture the rest of the factors such as reciprocity, heroism, and relational kinship because it is conceptualized as duty. Being heroic, reciprocal, and centering on kin relationship is not performed out of duty because of the sense of gratitude (Chua & Nazareno, 1982). Social justice differs with the rest of the factors in terms of its scope. Reciprocity, heroism, and relational kinship are in the personal level while social justice is beyond personal because it contains and obligation to a macro level (Ang-See, 1997).

Heroism, reciprocity, and relational kinship are relational in their nature. These factors of helping are completed based on others. In heroism, one executes an action even if the elders would disagree (Andres & Ilada-Andres, 1986). In relational kinship, one is connected to his keen and ones orientation is build upon others. Reciprocity is shown in order to maintain a smooth interpersonal relationship. The four factors that compose the predisposition to help captures the nature of helping in a Filipino way.

The Chinese-Filipino and Filipinos are compared in the five factors and only heroism discriminates the two groups. The Chinese-Filipino volunteer group significantly tends to be more heroic than the Filipino firefighters. This result contradicted the belief that Filipino people are known for their heroic nature which was taken from the word “bayanihan.” According to Chua and Nazareno (1992), as well as to Andres and Ilada-Andres (1987), the term bayanihan denotes that Filipino people like to help each other out voluntarily without asking anything in return. Heroism, on the other hand, was defined almost in the same way but the only difference is that it is in the light of a hero where assistance is offered to victims even though there will be a risk involved in the part of the helper. Although this has been incorporated in the Philippine setting and in the Filipino culture, there is no proof that only the Filipino people exhibit this type of value. The Chinese-Filipino people having lived here in the Philippines for centuries have also come to adopt the lifestyle and culture of the Filipinos. According to Ang-See (1997), there is an integration of the culture between the Chinese-
Filipino and the Filipino people. The Chinese-Filipino people have also learned the value of heroism. Although there is integration of culture between the two groups, this somehow did not coincide completely when the test of significance was applied to the data obtained from the firefighters. It turned out that the Chinese-Filipino firefighters got a higher mean score in this factor, which explains that they exhibit a higher tendency in helping a victim in times of calamity. This result could be further supported by the fact that the volunteer fire brigades or stations were put up by the Chinese-Filipino people because of their willingness to give something back to the community where they are living in. Even though they had to choose other ways of helping their own community, they still decided to adopt this risk-taking “job” in order to show their support, which later became universal. Universal in a sense that not only was this “job” directed towards the Chinese-Filipino community, it was also directed towards the Filipino community. The sense of heroism of the Chinese-Filipino people especially the Chinese-Filipino volunteer firefighters is made evident through their helping.

In using the Rasch Model, the 71 items are calibrated to to arrive with an ability free measure of predisposition to help. Given the 71 items there is now a separate parameter for the items and the respondents’ ability. The calibrated values of persons and items arrived at show that the dispersion of extremely high and low scores on helping equalizes with the helping characteristics of the respondents. The test width of the scale to measure helping is 1 which is low and extreme scores were removed creating a sample free measure of predisposition to help. The values of the standard error computed are low which indicates that the characteristics of the respondents in helping is centered among the spread of the items creating a more precise measure of predisposition to help. The local independence of the measure and standard errors result in a measure of helping that improves accuracy and performs in a stable manner across settings and populations.

The Rasch model showed that majority of the misfitting items occurred for the heroism and sensitivity. The importance of these concepts were explained as appropriate characteristics of helping but due to the presence of misfitting items, there is a need to review the items identified if they really capture the meanings associated for the construct. However, most of the items for the social justice, relational kinship, and reciprocity were more responsive. The lack of fitting items for heroism and reciprocity indicates the need to make consistent the meanings that people attach for the construct. Respondents may have different ways of looking at the meanings attached for heroism and sensitivity which resulted to having several misfitting items.

The present study advances what is known about helping especially for Filipinos and firefighters. Common theories that are used to explain helping behavior are western in orientation such as the social exchange theory,
evolutionary theory and normative theory. The present study advances knowledge on a more culturally appropriate construction of predisposition to help. The present study also made helping behavior domain specific for firefighters and it showed that not much difference occurred between Filipinos and Chinese-Filipinos. This shows that the Chinese-Filipinos share common characteristics of helping with the Filipinos.

References


**About the Author**

Dr. Carlo Magno is presently a faculty of the Counseling and Educational Psychology Department at De La Salle University, Manila, Philippines. His research interest includes volunteerism, predisposition to help, self-regulation, metacognition, language learning, and scale development using Item Response Theory. Further correspondence can be addressed to him at carlo.magno@dlsu.edu.ph.