

Validation of the Cultural Influence on Helping Scale among Chinese Adolescents

Abstract

The influence of culture on adolescent prosocial behavior is a neglected aspect in existing studies. **Objectives:** This study evaluates the psychometric properties of the Cultural Influence on Helping Scale (CIHS) among Chinese adolescents. CIHS is an instrument that assesses Chinese cultural influence on helping other people. **Method:** The CIHS was administered to 5,812 high school students in Hong Kong. **Results:** The confirmatory factor analysis revealed three factors, namely, “Advantages of helping people”, “Disadvantages of helping people”, and “Self-centeredness”, which support the hypothesized dimensions. The CIHS demonstrated good internal consistency. Construct validity and criterion-related validity were also supported. **Conclusions:** The psychometric properties of CIHS are adequate in the assessment of cultural influence on helping in Chinese adolescent samples.

This study aims to examine the psychometric properties of an indigenous measure, the Cultural Influence on Helping Scale (CIHS), an instrument assessing cultural beliefs about helping among Chinese adolescents in Hong Kong. Since the re-unification of Hong Kong and mainland China in 1997, more adolescents in Hong Kong have been participating in prosocial activities, such as volunteerism, which are mainly conducted through the arrangement of social service agencies (Hong Kong Federation of Youth Groups, 2001; Liu, Holosko, & Lo, 2009). Secondary schools have also been promoting adolescent volunteerism. Although volunteerism is not mandated in Hong Kong, many secondary schools have provided volunteering opportunities to their adolescent students because under the new Education Reform in Hong Kong, it is considered a type of “Other Learning Experience” (Education Commission, 2000).

Hence, the factors influencing adolescent prosocial participation in Hong Kong should be understood. Numerous factors are involved in the demonstration of prosocial behavior, including prosocial values (Clary et al., 1998; Marta, Rossi, & Boccacin, 1999; Penner & Finkelstein, 1998), civic involvement (Conrad & Hedin, 1982; Flanagan, Jonsson, & Botchera, 1999; Wilson, 2000), opportunities to learn (Hansen, Larson, & Dworkin, 2003; Omoto & Snyder, 2002), personal interests (Andolina, Jenkins, Keeter, & Zukin, 2003), social needs (Bales, 1996; Dworkin, Larson, & Hansen, 2003), and personal well-being (Magen & Aharoni, 1991; Carlo & Randall, 2002). Situational factors are also prominent, of which the bystander effect is most notable (Latane & Nida, 1981). Social systems, such as families (Hofer, 1999; Yates & Youniss, 1996), schools (Institute for Volunteering Research, 2010; Takahashi & Hatano, 1999), and peers (Eccles & Barber, 1999; Youniss, McLellan, & Mazer, 2001), also influence adolescent helping behavior. Cultural influence on the act of helping in Chinese communities has not been examined yet despite findings indicating that differential endorsements of cultural beliefs influence adolescent learning and problematic behavior

(Shek, 2004) and that indigenous emic constructs are important (Cheung & Leung, 1998).

Culture is defined as a “collective process for the symbolic and learned, non-biological aspects of human society” (Abercrombie, Hill, & Turner, 1988). It includes ethnic cultures and collective symbolic influences, such as literature, religion, and technology. All cultural practices provide social codes and norms for behavior, value inclination, emotional expression, daily practice, and prosocial behavior. The social norms theory, which is used to explain the origin of prosocial behavior, suggests that there are societal and cultural beliefs about helping that people follow (Batson, 1995). A close relationship exists between cultural influence and prosocial behavior.

Traditional Chinese culture covers large geographical territories. There are four main philosophies in traditional Chinese culture: Confucianism, Buddhism, Taoism, and Mohism. These schools of thought have different concepts about helping people. As a cornerstone of Chinese culture, Confucianism emphasizes helping by exhibiting care and concern for others, especially the needy. The Confucian notion of *ren* (kindness) recognizes the importance of helping the needy to maintain social harmony effectively. Mencius, an important Confucian scholar, called for self-sacrifice for the sake of the greater good. Taoism teaches that prosocial behavior is a means of forgoing self-desires because helping is directed towards other people, whereas Buddhism encourages helping the needy as a means of alleviating inherent human suffering (i.e., birth, aging, sickness, and death). Helping others is also a way to train an individual to sacrifice himself/herself to be able to enter *nirvana* or paradise. Finally, Mohism from *Mo Tzu* advocates “universalistic love” towards other people; however, the show of concern is ultimately aimed towards personal benefit (i.e., “I help you so that you will help me later”). Mohism can be considered a give-and-take philosophy. Nevertheless, this philosophy highlights the importance and benefits of helping.

Aside from traditional culture, each region has also developed its own idiosyncratic

sub-cultures according to its history, religions, geographical characteristics, economic situation, and material/spiritual beliefs. In the past 100 years, Hong Kong has been developed from a fishing village to an international city. Most people from Hong Kong came from the mainland during the 1950s as refugees. The refugees considered themselves “sojourners” in the colonial society. As a result, they would get the most resources from the colonial society. In the 1970s, Hong Kong began to be perceived as a land of opportunity (Lau, 1982). A decade later, in 1985, about 85 % of the Hong Kong population still regarded money making as the most important personal goal (Lau & Kuan, 1995). Eventually, a materialistic sub-culture that encourages people to be self-centered, instrumental, opportunistic, and materialistic was formed in Hong Kong (Lau & Kuan, 1995). There is even a maxim among the Chinese in Hong Kong that states “Being the first to endure losses is worse than losing your family fortune” [Based on Wong’s (1998) transcription system of the Cantonese dialect, i.e., *zap1 syu1 haang4 tau4 caam2 gwo3 baai6 gaa1*], which implies that a person should prioritize his/her welfare over others. This emphasis on the importance of self-centeredness can hinder prosocial behavior among adolescents. Another prevalent cultural belief in Hong Kong demonstrates that helping people only causes disadvantages and that helping yields no personal benefits. People in Hong Kong do not help each other because interpersonal relationships are considered “thinner than paper” (*hoeng1 gong2 dei2 jan4 cing4 bok6 gwo3 zi2*) (Leung, 1996). Based on such belief, some people think that helping others is not only useless but that they also would not benefit from it. The lack of spiritual and religious beliefs and the lack of security among Hong Kong people exacerbated the situation (Lau, 1982). With the gradual urbanization and transformation of Hong Kong from an industrial city to a financial center, the indigenous culture was transformed into a more pragmatic and materialistic one, with lesser focus on spiritual and non-materialistic values (Shek, 2010a). Adolescents socialized with such beliefs have diminished tendency to help because they may

have been brought up to believe that helping others is not an important value. This type of cultural belief can be regarded as a negative influence of Chinese culture on helping.

Social work and prosocial behavior are closely related. Several social work values and ideals, notably social justice, service, dignity, and empowerment, are actualized through helping others (Finn & Checkoway, 1998). Social workers are necessary for the implementation of organized helping activities in communities (Kahle & Westheimer, 1996). In fact, social workers in various sectors in Hong Kong have to mobilize different volunteers (Law, 2008) to serve the needy. Social workers in Hong Kong have to provide various forms of volunteer service training (Law & Shek, 2009a; 2009b). An instrument measuring the cultural influence on helping is useful in social work practice. If social workers can measure potential volunteers' helping inclination by assessing their receptiveness of various cultural influences, social workers can select volunteers more promptly. Social work agency administrators need such instrument because their responsibilities include assessing the volunteers. To date, volunteer service training mainly focuses on skill training (Ellis, 2002). As cultural influence is prevalent in prosocial behavior, social workers can develop community-based or school-based social programs to magnify the positive cultural influences on helping as well as challenge the negative influences on helping. The content of the instrument serves as a guideline for the program design for frontline social workers. For example, having an objective assessment of which cultural beliefs about helping are held by young people is important to help them engage in voluntary activities. Furthermore, an objective measure of cultural beliefs about helping can be used as an outcome indicator for youth programs. The evidence-based evaluation is important for both the social workers who provide the service and the social work agency administrators. However, a review of existing research reveals that no study has been conducted to examine the indigenous Chinese beliefs about helping others in different Chinese communities. Thus, the present study attempts to

address this gap.

Law (2008) constructed the Cultural Influence on Helping Scale (CIHS). This paper further examines the psychometric properties of CIHS, such as internal consistency and factorial validity. A critical psychometric property is the factorial structure of the instrument. The factorial structure explains the program design of the volunteer service training. Social workers can evaluate which aspects of cultural influence are associated with helping behavior as well as exert additional effort in promoting their respective domains. There are at least three different ways to approach the dimensions of the cultural influence. Cnaan and Goldberg-Glen (1991) suggested that prosocial motivation can be perceived crudely as one construct. In a similar manner, cultural influence can also be perceived as a generic cultural belief factor. This is the unitary approach to understanding culture. The second approach is based on the conventional dichotomous understanding of cultural influence. The types of influence are divided into positive cultural influence on helping and negative cultural influence on helping. This is the binary approach to understanding culture. Moreover, the review of related literature shows that there are three types of Chinese cultural influences on helping others: (1) the benefits or advantages of helping others, (2) the disadvantages of helping others, and (3) the importance of self-interest over those of others. This is called the three-factor approach. Accordingly, this study evaluates these three models as evidence of factorial validity.

Given that volunteerism is an example of planned helping, volunteers are expected to have more positive cultural beliefs than non-volunteers. Furthermore, based on existing research (Ajzen, 2002; Glasman & Albarracin, 2006), indigenous Chinese beliefs about helping are linked to helping intention and behavior. Evidence of the expectations would give support to the criterion-related validity and construct validity of CIHS.

Method

Participants and Procedure

This study was conducted in the Hong Kong Special Administrative Region (HKSAR), which is a major international city south of Guangdong province in the People's Republic of China. A total of 5,812 high school students consisting of 2,140 males (36.8%) and 3,672 females (63.2 %) from 32 high schools participated in this study. Among the respondents, 66% were Secondary 1 (Grade 7) to Secondary 3 (Grade 9) students, with ages ranging from 11–14, whereas 34 % were Secondary 4 (Grade 10) to Secondary 6 (Grade 12) students, with ages ranging from 15–19. The mean age of the respondents was 14.77 years ($SD = 1.60$).

Informed consent was obtained from both the adolescents and their parents. All respondents completed the scales and demographic characteristics in a self-administered test with adequate time provided.

Instruments

Cultural Influence on Helping Sale (CIHS)

The 16-item CIHS is a self-reported rating scale consisting of statements of belief from the Chinese culture (i.e., Confucianism, Taoism, Buddhism, and Mohism) and the Hong Kong sub-culture. All items are related to helping others and self-interest. The CIHS consists of three subscales: advantages of helping people (AHELP) (Items 1–8), self-centeredness (SELF) (Items 9–11), and disadvantages of helping people (DHELP) (Items 12–16). Participants were requested to indicate whether or not they agree on particular items using a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). With the proper recoding of items 1–8, a higher CIHS score represents a stronger identification with self-interest and a stronger belief that helping others causes disadvantages. Table 1 shows the items in the CIHS.

Law (2008) reviewed the content validity of the CIHS with the assistance of an expert panel, which included two social workers, two teachers of Chinese Culture, and one secondary school vice-principal. Panel members fulfilled any of the following inclusion

criteria: (1) extensive working experience in organizing volunteer services among adolescent volunteers; (2) substantial Chinese cultural knowledge; and (3) expertise in understanding the literacy level of secondary school students. On the whole, the experts were satisfied with the cultural relevance and representativeness of the CIHS items. The scale attained acceptable content validity. Details of the content validation process are indicated in the study of Law (2008).

Volunteering Intention Scale (VI)

The VI scale consists of four items measuring the tendency of an individual to volunteer but not the actual behavior. These four items are interest to volunteer, acceptance of invitation to volunteer, volunteering intention, and paying attention to information on volunteer service. Different items have different score ranges. The score of each item was standardized first before all the scores were added. A high score in this scale implies a strong willingness to participate. The Cronbach's alpha of VI is .82.

Service Hours

Volunteering behavior was measured by the self-reported total hours of community service within the past 12 months. Those who served the community within the past 12 months were classified as "volunteers," while those who did not serve the community (i.e., zero service hours) were classified as "non-volunteers." As service hours are not part of the secondary school curricula in Hong Kong, students from Secondary 1 to Secondary 6 were exposed to similar opportunities to serve; that is, the school grades did not influence the number of service hours.

Data analytic strategy

Total data set was randomly divided into two: one for the principal components analysis (PCA) and the other for confirmatory factor analysis (CFA). The criteria used to determine the factors and their items in the PCA include the following: (1) a factor with an eigenvalue equal

to or greater than 1.0 (Kaiser, 1974), (2) an item with a factor loading equal to or greater than .40 (Stevens, 2002), (3) a factor with at least three items (Hair, Anderson, Tatham, & Black, 1998), and (4) an identified factor and the retained items that are interpretable in the theoretical context. The second half of the data was used for CFA.

CFA was used to evaluate the theoretical dimensions of CIHS in terms of the overall fit of the model. Three models were then tested.

Model 1 (One-factor model): Based on the conclusion of Cnaan and Goldberg-Glen (1991) on the unitary motive approach in understanding the motivation to volunteer, underlying cultural beliefs can be combined into one generic cultural belief factor.

Model 2 (Two-factor model): Based on the conventional dichotomous understanding of cultural influence, underlying cultural beliefs can be distinguished into positive cultural influence (Items 1–8) and negative cultural influence (Items 9–16).

Model 3a (Three-factor model): This model contained three factors derived from three conceptual dimensions, namely, advantages of helping people (Items 1–8), importance of self-interest (Items 9–11), and disadvantages of helping people (Items 12–16).

To evaluate the overall fit of the models, several fit indices were employed, including chi-square (χ^2), root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), standardized mean square residual (SMSR), Bentler-Bonett non-normed fit index (NNFI), comparative fit index (CFI), and the expected cross-validation index (ECVI) (Schumacker & Lomax, 2004). For GFI, CFI, and NNFI, there is a general agreement that the value of .95 or greater indicates a satisfactory fit (Schumacker & Lomax, 2004). On the other hand, SRMR and RMSEA values below .08 and .06, respectively, represent an acceptable model-data fit (Hu & Bentler, 1999). ECVI should be as low as possible. Among these indices,

SRMR and RMSEA are the most critical indicators. All analyses were conducted using covariance matrices via LISREL 8.80 (Jöreskog & Sörbom, 2006). These measures are commonly used in the social work research context (Shek & M.S. Ma, 2010).

Results

Factor structure of CIHS

PCA with varimax rotation resulted in a three-factor solution accounting for 60.58 % of the total variance. The eigenvalues of the three factors were greater than unity. Scree plot also suggested a three-factor solution. Table 1 shows the rotated component matrix. Factor loadings can distinguish the factors easily.

In addition to the exploratory factor analysis, CFA was employed to validate the factor structure. Prior to testing the parameters for the hypothesized models using CFA, a preliminary analysis was conducted to check for any violations of the multivariate normality assumption as well as to check the skewness and kurtosis values of all items. This preliminary step is important because the maximum likelihood estimation method only correctly estimates the model when there is multivariate normality of the observed variables (Breckler, 1990; Curran, West, & Finch, 1996). Data were generally normally distributed, indicating that the univariate skewness and kurtosis values were lower than 2 and 7, respectively (Finney & DiStefano, 2006). Thus, maximum likelihood estimation was used. Table 2 shows the overall goodness-of-fit indices for the three models that were initially tested. Generally, the three-factor model (Model 3a) fit the data better than the other models. For the one-factor model (Model 1), CFI, GFI, and NNFI were .83, .62, and .81, respectively. For the two-factor model (Model 2), CFI, GFI, and NNFI, were .95, .89, and .94, respectively. However, the RMSEA of both models were unsatisfactory (.22 and .10). For the three-factor model, the CFI, GFI, and NNFI were .97, .93, and .96, respectively. RMSEA was more satisfactory at .08. However, high MI (930.14) was seen in one pair of error covariances between Item 13

(Kind-hearted ones are not rewarded, “*hou2 sam1 mou5 hou2 bou3*”) and Item 14 (Kind-hearted ones will meet ill fate, “*hou2 sam1 zoek6 leoi4 pek3*”); this can be attributed to the extreme similarity of the two items. Thus, this parameter was released, leading to Model 3b. This modified model fit the data better with an acceptable fit ($\chi^2_{(411)}=5916.74, p<.001$; CFI=.98; GFI=.95; NNFI=.97; RMSEA=.07; SRMR=.04; and EVCI=.45). CFA results indicate that CIHS consists of three factors, namely, AHELP (Items 1–8), SELF (Items 9–11), and DHELP (Items 12–16). Figure 1 shows the factor structure and the completely standardized coefficients based on Model 3b.

Reliability and validity of CIHS

The Cronbach’s alpha values of the subscales AHELP, SELF, and DHELP were .87 (mean inter-item correlation=.46), .76 (mean inter-item correlation=.51), and .86 (mean inter-item correlation=.56), respectively. The Cronbach’s alpha of the entire CIHS was .89 (mean inter-item correlation=.34). These findings imply that the subscales have satisfactory reliabilities and that the CIHS has satisfactory internal consistency.

Participants with higher CIHS scores were expected to attribute higher importance to self-centeredness and disadvantages of helping people; hence, they were also expected to have minimal volunteering experience. Participants were grouped into volunteers and non-volunteers based on volunteering experience in the past 12 months. Analyses show that the CIHS scores of the two groups differ: the mean score of the AHELP subscale for volunteers was lower than that for non-volunteers (volunteers: mean=2.43, *SD*=.75; non-volunteers: mean=2.70, *SD*=.85; $t=12.72, p<.001$); the mean score of the SELF subscale for volunteers was lower than that for non-volunteers (volunteers: mean=2.80, *SD*=1.03; non-volunteers: mean=3.07, *SD*=1.12; $t=9.90, p<.005$); the mean score of the DHELP subscale for volunteers was lower than that for non-volunteers (volunteers: mean=2.77, *SD*=1.07; non-volunteers: mean=3.09, *SD*=1.15; $t=11.17, p<.001$); the mean score of CIHS

total score in volunteers was lower than that in non-volunteers with a medium effect size (volunteers: mean=2.61, $SD=.70$; non-volunteers: mean=2.89, $SD=0.79$; $t=14.49$, $p<.001$).

The scores of the effect size for the differences of AHELP, SELF, DHELP, and CIHS, as indicated by Cohen's d , were .34, .25, .28 and .38, respectively. All fall into the small-to-medium range. The findings support the criterion-related validity of the scale.

Table 3 shows the correlation coefficients among CIHS and its subscales, along with volunteering intention and behavior. Results show that CIHS and its subscales are all associated with volunteering intention and behavior. The relationship between cultural beliefs and intention (-.34 to -.49, $p<.001$) was stronger than that between cultural beliefs and behavior (-.13 to -.19, $p<.001$). These findings provide evidence for the construct validity of CIHS.

Discussion and Applications to Social Work

Cultural influence on helping others among the Chinese population has not been systematically assessed in existing studies. Thus, an indigenous CIHS was developed to include cultural beliefs in the form of cultural idioms and popular sayings in Hong Kong. This study has several unique characteristics. First, Chinese adolescents were recruited, which is unlike in the majority of research that features Western adolescents. Second, a large sample size was employed. Third, an indigenous cultural measure of Chinese beliefs about helping others was developed, which includes major Chinese cultural schools of thoughts and the distinctive Hong Kong ethos. Finally, several aspects of the psychometric properties of the scale were examined, and confirmatory factor analyses were performed.

Law (2008) demonstrated that CIHS attained satisfactory content validity. This study further showed that CIHS is an instrument with sufficient psychometric properties that include internal consistency, criterion-related validity, construct validity, and factorial validity. Results suggest that CIHS consists of three factors. The first factor is concerned with the

advantages of helping people (Items 1–8), which is closely related to the principles espoused by Confucianism, Taoism, Buddhism, and Mohism. The second factor is related to the importance of self-interest (Items 9–11), which is related to the materialistic sub-culture prevalent in Hong Kong. The third factor covers the disadvantages of helping people (Items 12–16), which is also related to the Hong Kong sub-culture. Furthermore, reliability analyses show that the CIHS and its subscales are internally consistent.

Regarding the relationships among CIHS, intention to volunteer, and actual behavior, both the CIHS-intention and the CIHS-behavior correlation coefficients were significant. However, the CIHS-intention relationship was stronger. Cognitive motivational approach emphasizes that cognitive beliefs influence the intention directly because beliefs contain the motivational component (Rokeach, 1973). Thus, there is a strong conceptual linkage between beliefs and intention that can be used to explain the stronger relationship observed. On the other hand, people with good beliefs and intentions may fail to act on them (Sheeran, Webb, & Gollwitzer, 2005). The successful transformation of beliefs into behavior depends on numerous factors, such as personal correlates including habits, human, capital, sense of self-control, and personality (Ajzen, 2002; Glasman & Albarracin, 2006); environmental influence including conformity, system, and situation (Ajzen, 2002); and chance effect. Various factors have also been found to weaken the direct linkage between beliefs and behavior. An alternative explanation focuses on the irrelevance of cultural belief to the behavior. Some secondary school students may join the service because of the influence of their families, schools, and peers, whereas some join because of other personal interests and beliefs. Thus, their behavior is not strongly related to the cultural influence.

The identification of different cultural beliefs underlying helping behavior measured by CIHS is a major conceptual breakthrough of the current study. This study has several social work implications. First, culturally sensitive practice in youth work service is emphasized.

The culture of the target group should be incorporated into the program planning, implementation, and evaluation to make the interventions more accessible, congruent, and effective (Jackson & Hodge, 2010; Kreuter, Lukwago, Bucholtz, Clark, & Sanders-Thompson, 2003). For instance, Latino value on the centrality of the family can moderate and protect the youth from engaging in undesirable behaviors (German, Gonzales, & Dumka, 2009). In this sense, inclusion of cultural values into social work intervention in certain ethnic groups is deemed necessary. The newly devised tool, the CIHS, can help volunteer service organizers or youth social workers assess the influence of Chinese cultural forces. Traditional volunteer service training normally focuses on skill training for a particular service and is task-based rather than value-based (Ellis, 2002). Organizers of local positive youth development programs, such as the project P.A.T.H.S. (Shek & H.K. Ma, 2010; Shek & Sun, 2010) and volunteer service, should help adolescent participants be aware of their beliefs and shape them accordingly. These three factors, that is, advantages of helping, disadvantages of helping, and self-centeredness, are the cornerstone of the culturally sensitive social programs.

Culturally sensitive social work practice reminds practitioners that if cultural beliefs related to the advantages of helping people are not cultivated among adolescents, two other aspects of negative cultural influences, self-centeredness and disadvantages of helping people, would emerge. In addition, culturally sensitive social work practice has expanded the existing social work intervention, particularly volunteer service training and prosocial value education, from individual motivation (e.g., Law, Shek, & Ma, 2010) to the influence of social systems. Social workers all over the world working with Chinese adolescents will find the tool relevant in their promotion and implementation of volunteerism.

Second, the scale can be used as an instrument to measure the effectiveness of volunteer service programs. Volunteer service organizers, specifically frontline social workers in Hong Kong, currently use the client satisfaction approach to measure program effectiveness, which

documents only subjective experience without objective assessment to measure the effectiveness of the service (Law, 2008). A positive volunteer service experience is assumed to yield a more positive cultural influence to adolescents. Adopting the CIHS in a pretest-posttest design can be a useful and effective tool to measure service impact. Social service administrators also look for evidence for service effectiveness. The CIHS can detect the changes in the internal three factors after rendering the services, allowing us to examine the effectiveness of the services closely. In fact, evidence-based practice is relatively weak in the Hong Kong social work practice (Thyer, 2002).

Third, the CIHS can be used as a quick assessment of the suitability of potential volunteers. Many Hong Kong social service sectors require a large number of volunteers (Law, 2008). However, there is no existing validated tool to assess potential volunteers. The CIHS can be used as a criterion-referenced assessment (Glaser, 1963). Given that a large sample was employed in this study, the cut-off scores for volunteers and non-volunteers were calculated. Social workers can use the test scores of potential volunteers as reference for the selection of volunteers. This is important because service training is costly, and volunteer retention is vital to social service organizers (Ellis, 2002).

Fourth, the study demonstrates the importance of developing and validating indigenous psychosocial measures. Throughout this study, different aspects of the psychometric properties of the CIHS were examined, suggesting that it is methodologically feasible to use indigenously developed Chinese measures instead of relying on translated measures. Shek (2010b) pointed out that there are a few measures of psychosocial functioning in the Chinese culture, and this study contributes to existing research on the matter.

Fifth, the scale can facilitate the development of prosocial behavior among adolescents in Chinese communities, such as Hong Kong. In Hong Kong, around 53.4 % of adolescents serve the community for 12 months (Law & Shek, 2009a, 2009b). Most of the services are

offered by the social work sector (Hong Kong Federation of Youth Groups, 2001; Liu, Holosko, & Lo, 2009). Given the importance of volunteer service participation of adolescents, a pertinent concern of youth workers and researchers is finding ways to motivate adolescents to become volunteers (initiation) and to sustain their participation (continuation) (e.g., Chapman & Morley, 1999; Ellis, 2002; Marta, Rossi, & Boccacin, 1999). Cultural beliefs can also be a means to promote adolescent volunteerism in terms of intention and actual behavior.

This study has several limitations. First, given that the reported findings are only based on adolescents in Hong Kong, there is a need to replicate the findings in Chinese adolescents in other contexts, such as American Chinese. Second, although the present sample size was large, participants were not randomly sampled. Thus, the generalizability of the findings to other adolescent populations should be interpreted with caution. Third, this study adopted volunteering status (i.e., intention and behavior) as the yardstick for criterion-related and construct validities. However, the scale has not been used to measure spontaneous helping, which can be different from planned helping (Batson, 1995). Fourth, apart from main Chinese cultural schools and Hong Kong culture, Chinese adolescents are also exposed to individualistic Western culture, religions, and other Chinese cultural forces, such as strong family values and Christianity. The interaction of cultural and religious/spiritual beliefs not included in the current scale is a possible area for future research, although existing studies on this matter is sparse (Shek, 2010a). Nevertheless, despite these limitations, this study is the first to construct a validated instrument to measure cultural influence on helping others among adolescents in a Chinese community, which is indispensable for the development of local evidence-based social work practice.

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Table 1. Rotated component matrix of the Cultural Influence on Helping Scale (CIHS)
(Principal components analysis, varimax rotation)

Item description [with Cantonese pinyin]		Sources of influence	Factor loadings		
1.	We should sacrifice ourselves for the greater good. [<i>hei1 sang1 siu2 ngo5, sing4 cyun4 daoi6 ngo5</i>]	Buddhism	.67	.06	.15
2.	We should treat others in the same way you treat yourself. [<i>oi3 jan4 jyu4 gei2</i>]	Confucianism	.73	.18	.13
3.	It is more blessed to give than to receive. [<i>si1 bei2 sau6 gang3 wai4 jau5 fuk1</i>]	Taoism, Buddhism	.75	.18	.16
4.	It is a blessing to suffer a loss. (Do not worry about suffering a loss.) [<i>hek3 kwai1 si6 fuk1</i>]	Taoism	.63	.13	.15
5.	Being human, we should help others as much as we can. [<i>zou6 jan4 ge3 je5, bong1 dak1 zau6 bong1</i>]	Mohism	.73	.09	.09
6.	Benevolence is the most joyful thing. [<i>wai4 sin6 zeoi3 lok6</i>]	Buddhism	.76	.21	.09
7.	One for all and all for one. (Others are considerate of me, and I should be considerate of others as well.) [<i>jan4 jan4 wai6 ngo5, ngo5 wai6 jan4 jan4</i>]	Mohism	.72	.16	-.02
8.	It does no harm to help others. [<i>bong1 haa5 jan4 mou5 wai6</i>]	Confucianism	.68	.06	-.06
9.	Heaven and earth will destroy those who do not care for themselves. [<i>jan4 bat1 wai6 gei2, tin1 zyul dei6 mit6</i>]	Hong Kong	.01	.16	.78
10.	Being the first to endure losses is worse than losing your family fortune. (Never allow yourself to lose.) [<i>zap1 syul haang4 tau4 caam2 gwo3 baai6 gaal</i>]	Hong Kong	.17	.33	.58

11.	Do not do anything without gain. <i>[mou5 zoek6 sou3, m4 zou6]</i>	Hong Kong	.30	.46	.58
12.	In Hong Kong, compassion is paper-thin. <i>[hoeng1 gong2 dei2 jan4 cing4 bok6 gwo3 zi1]</i>	Hong Kong	.07	.68	.12
13.	Kind-hearted ones are not rewarded. <i>[hou2 sam1 mou5 hou2 bou3]</i>	Hong Kong	.16	.86	.11
14.	Kind-hearted ones will be hit by thunderstorm. (Kind-hearted ones will meet ill fate.). <i>[hou2 sam1 zoek6 leoi4 pek3]</i>	Hong Kong	.14	.87	.11
15.	Righteous people are bound to become beggars. <i>[zung1 zung1 zik6 zik6, zung1 seoi1 hat1 sik6]</i>	Hong Kong	.21	.76	.25
16.	I need help from others. Why should I help others? <i>[ngo5 dou1 jiu3 jan4 bong1, zung6 giu3 ngo5 bong1 jan4]</i>	Hong Kong	.23	.66	.31
FACTOR			AHELP	DHELP	SELF
Variance explained			26.93%	21.62%	12.03%

Note: Note: $N_{\text{effective sample}}=2906$; AHELP = Advantages of helping people; DHELP = Disadvantages of helping people; SELF = Self-centeredness; the highest factor loading for each item is bolded.

Table 2. Summary of Goodness-of-fit Indices for all CFA models

Model	Description	χ^2	df	CFI	GFI	NNFI	RMSEA (90% CI)	SRMR	ECVI (90% CI)
1	1 factor model	15873.26**	104	.83	.62	.81	.22 (.22-.22)	.12	4.96 (4.87-5.06)
2	2 factor model	5170.62**	103	.95	.89	.94	.10 (.10-.11)	.06	1.03 (.99-1.08)
3a	3 factor model	3125.21**	101	.97	.93	.96	.08 (.07-.08)	.05	.61 (.58-.65)
3b	3 factor model A pair of error covariance was allowed to be correlated (i.e. Item 13 & Item 14)	5916.74**	100	.98	.95	.97	.07 (.06-.07)	.04	.45 (.06-.07)

** $p < .001$

Note: $N_{effective\ sample} = 2906$; S-B χ^2 = Satorra-Bentler chi-square; CFA = confirmatory factor analysis; CFI = comparative fit index; GFI = goodness-of-fit index; NNFI = Bentler-Bonett nonnormed fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; ECVI = expected cross-validation index.

Table 3. Correlation matrix among CIHS and its subscales, volunteering intention and volunteering behavior

	SELF	DHELP	CIHS	VI	Hours
AHELP	.36***	.39***	.80***	-.47***	-.16***
SELF		.59***	.72***	-.30***	-.13***
DHELP			.83***	-.34***	-.14***
CIHS				-.49***	-.19***
VI					.35***

*** $p < .001$

Note: AHELP = subscale of CIHS: Advantages of helping people; SELF = subscale of CIHS: Self-centeredness; DHELP = subscale of CIHS: Disadvantages of helping people; VI = volunteering intention; Hours= service hours within the past 12 months

