

Running Head: Assessment of beliefs against volunteering for Chinese adolescents in Hong Kong

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Validation of the Beliefs Against Volunteering Scale among Chinese Adolescents in Hong Kong

Ben M.F. Law¹

Daniel T.L. Shek^{2,3,4}

¹Department of Social Work, The Chinese University of Hong Kong; ²Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong; ³Department of Sociology, East China Normal University, Shanghai; ⁴Kiang Wu Nursing College of Macau

Abstract

Participation in volunteer service is an indicator of quality of life. This study attempts to validate the Beliefs Against Volunteering Scale (BAV), an assessment of the negative beliefs about volunteerism among Chinese adolescents in Hong Kong. The BAV was administered to 5,946 Chinese adolescents. The BAV and its subscales were found to be internally consistent. Confirmatory factor analysis revealed two factors (i.e., “conceptual bias” and “instrumental bias”) against volunteering. This supports the factorial validity of the test. The BAV scores showed a differentiation of volunteers versus non-volunteers, thus supporting the criterion-related validity of the test. The negative correlations between BAV and (1) measures of positive beliefs about volunteering; and (2) purpose in life demonstrated the construct validity of BAV. The findings suggest that BAV is a reliable and valid instrument in assessing underlying negative beliefs about volunteerism among Chinese adolescents.

Participation in volunteer service is an indicator of quality of life. This study attempts to validate the Beliefs Against Volunteering Scale (BAV), a tool that assesses negative beliefs about volunteerism among Chinese adolescents in Hong Kong. Volunteer service refers to an activity within an organizational context that “is not undertaken for financial gain. It is undertaken out of one’s own free will. The activity is arranged by a formal agency. It brings benefits to both the third party and the volunteers. The third party does not include family members, friends, and neighbors” (Law, 2008, p.6). Examination of adolescent volunteerism is important because of its relevance to community development, youth development, quality of life, and social services. Volunteerism and social development are closely related. One aim of community development is to facilitate cooperation in the community through volunteerism (Midgley & Livermore, 1998). Many services would not be possible without the participation of volunteers (Finn & Checkoway, 1998; Kahle & Westheimer, 1996). In addition, adolescent volunteerism is an integral part of positive youth development. Adolescents can achieve social, emotional, cognitive, behavioral, and moral competence through service (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Pittman, Irby, & Ferber, 2001; Shek, 2007; Youniss, McLellan, & Mazer, 2001). Participation in volunteer service is an indicator of quality of life. Participating in volunteer service can enhance purpose in life (Weinstein, Xie & Cleanthous, 1995), life’s meaning, and happiness (Magen, 1998). Research shows that pro-social behavior, such as participation in volunteer service, is closely related to an adolescents’ emotional quality of life (Sun & Shek, 2010). Adolescent volunteerism is a common phenomenon where adolescents around the world are actively involved (Commission on Youth, 1998; Flanagan, Jonsson & Botchera, 1999; Hodgkinson, 1995; Independent Sector, 2010). In Hong Kong, around 53.4% of adolescents have served the community for 12 months (Law & Shek, 2009) with most of the services offered by the social work sector (Hong Kong Federation of Youth Groups, 2001; Liu, Holosko & Lo, 2009).

Given the importance of adolescents participating in volunteer service, one crucial factor for youth workers and researchers is how to motivate adolescents to become volunteers (initiation) and how to sustain their participation (continuation) (Chapman & Morley, 1999; Ellis, 2002; Marta, Rossi & Boccacin, 1999; Rious & Penner, 2001; Snyder, Clary & Stukas, 2000). The main research question for most of the existing studies looks at the positive beliefs or the push factor of volunteerism (e.g.

Eisenberg, Carlo, Murphy, & Van Court, 1995; Nelson & Crick, 1999) or the positive effects of adolescent volunteerism (e.g. Carlo & Randall, 2002; Calabrese & Schumer, 1986; Raskoff & Sundeen, 1999). In reality, volunteerism can mean both good and bad things to adolescents; positive beliefs may go hand-in-hand with negative beliefs. The first author has more than 10 years' working experience as a youth social worker. Helping people is beneficial to adolescent volunteers. However, he has also observed that volunteer service, if not well-organized, can be boring and without meaning. It is only manual labor. This creates a negative impression that affects people's beliefs about volunteer service and sometimes causes adolescents to refrain from participating. For a more thorough examination of adolescent volunteerism, both positive and negative beliefs about volunteerism should be investigated.

A review of literature shows that there is very little study on the negative beliefs about helping. Only one academic article has been identified in terms of exploring the reasons for not helping others (Barnett, Thompson, & Schroff, 1987). Some surveys conducted in the West and Hong Kong examined why people do not volunteer. In some countries, non-volunteers do not volunteer because of lack of time; this is true for about 80% of Canadian non-volunteers (Canadian Centre for Philanthropy, 2010), as well as around 65% of Americans aged 16 to 24 and 43% of Americans aged 25 or above (Bureau of Labor Statistics, 2005). In Hong Kong, the three main reasons for not volunteering were (1) "the lack of time" (Central Committee on Youth, 1988; Commission on Youth, 1998; Hong Kong Federation of Youth Groups, 2001; Mongkok District Broad, 1984), (2) "activities not interesting enough" (Hong Kong Federation of Youth Groups, 2001), and (3) "not knowing how to join" (Commission on Youth, 1998). Lack of time is probably the most predominant reason for not volunteering.

The findings of the surveys, however, are unable to show the reasons for not helping, as well as how the situation can be improved. Since "self-perceived" reasons were used as entry points, the findings obtained were quite problematic. First, these self-perceived reasons may not be the underlying and genuine reasons. Some of the reasons may be attributed to the following: (1) the service is not important to respondents; (2) the respondents are not motivated; (3) the tasks may be difficult or boring; (4) the tasks are not approved by either parents or peers; (5) the respondents are not approached; and (6) the respondents are not competent enough. Second, self-perceived reasons are verbal responses that can be described immediately and

casually. However, respondents do not normally spell out the more significant variables, such as “civic involvement” or “psychological well-being.” Third, self-perceived reasons can be easily regarded as causal. However, these explanations lack empirical support and thus cannot be antecedents to the volunteering behavior. If the reason for not volunteering is simply “lack of time,” it does not necessarily mean that adolescents will volunteer if they have time.

Instead of using self-perceived reasons, the underlying negative beliefs must be explored in an objective manner. Beliefs are “acceptance of some cognitive propositions, statements, or doctrine” (Reber, 1995). They can be “true or false,” “good or bad,” and “desirable or undesirable” (Rokeach, 1973). The cognitive motivational approach emphasizes that cognitive beliefs influence the subsequent behavior. It has been long argued that “if we are to understand social behavior, we must know how all perceptions, memories, and fantasies are combined, integrated or organized into present cognitive structures” (Kretch & Crutchfield, 1958, p.77). Negative beliefs about volunteerism can influence the subsequent participation. They also reflect the self-perceived reasons. These fundamental beliefs are important in the derivation of practices for adolescents.

There are three main theories in explaining pro-social behavior, namely, social norms, social exchange, and evolutionary theories (Batson, 1995). The social norms theory implies some societal or cultural beliefs about helping that we should act accordingly. It is a sociological explanation. The social exchange theory focuses on the give and take of helping. It is a psychological explanation. The evolutionary theory implies the biological nature of helping for the formation of kinship. Apart from the evolutionary theory, both social norms theory and social exchange theory provides insights on the negative beliefs about volunteerism. The social norms theory suggests that in a society, negative beliefs about volunteerism en masse can affect the subsequent participation. The social exchange theory suggests that negative beliefs about volunteerism can focus on the meaning of action and the exchange among individuals. The service can affect the individuals’ other activities (such as studying) and the service is for selfish aims rather than other-centered concerns.

Other studies on helping were done on situational factors, notably the bystander effect (Latane & Nida, 1981). The only study looking at the reasons for not helping focuses on situational factors such as “negative qualities of the potential recipients,” “desire not to get involved in another’s personal situation,” and “help is not needed”

(Barnett, Thompson & Schroff, 1987, p.492). However, negative beliefs about volunteerism were not directly explored.

There is no conceptual framework guiding the understanding of negative beliefs. Cnaan and Goldberg-Glen (1991) proposed that people volunteer because of a combination of various motives, suggesting a unitary motive approach. This study also proposes that people do not volunteer due to a combination of negative beliefs about volunteerism. This is a unitary approach.

When we borrow the social norms theory and the social exchange theory, two kinds of negative beliefs about volunteerism can be distinguished, one related to “conceptual bias” and one related to “instrumental bias.”

Conceptual bias, which focuses on the general impression about volunteerism, is evident among adolescents. Some feel that volunteering is not meaningful. It is considered a waste of time, and volunteers feel they will gain nothing from it. It is a form of exploitation in the name of “helping the community.” In Hong Kong, one form of treatment for offenders is the Community Service Order, which mandates offenders to complete a certain number of hours serving the community (Hong Kong Legal Information Institute, 2009). Some high schools in Hong Kong adopt similar practices as a form of punishment. Thus, adolescents may feel that only people who are problematic or not smart enough participate in volunteer service. This general impression forms a conceptual bias.

Instrumental bias focuses on the helpers’ psychological nature of action: helping is not genuine or it brings unfavorable consequence. Volunteer service aims at helping other people in need. The bias stems from the possibility that volunteers have selfish aims. In fact, many motivational factors for participation are self-serving rather than other-serving. Adolescents want to get along with peers or to gain a better résumé. These are self-centered motives (Law & Shek, 2010). Helping in these instances may be pretentious. Another type of instrumental bias is that participation would adversely affect adolescents’ studying. Academic excellence is a major goal of socialization for Chinese adolescents (Leung, 1996). By participating in volunteer service, adolescents feel they have less time for studies.

As an under-researched area, Law (2008) had attempted to locate these beliefs in the context of work experiences, which resulted into the construction of the Beliefs Against Volunteering Scale (BAV). This study examined several psychometric properties of the BAV. Reliability was adopted to explore whether items were

internally consistent. Criterion-related validity was adopted to explore whether volunteers' scores were different from those of non-volunteers. Construct validity was adopted to validate the relationships of negative beliefs with other constructs, namely, personal beliefs about volunteerism and purpose in life. Personal beliefs about volunteerism should be negatively correlated with the negative beliefs. People with a higher purpose in life should have a lower score of negative beliefs. Factorial validity was also explored. Two models were tested: one with unitary approach (one general negative belief) and one with two factors (conceptual and instrumental biases).

Method

This paper focused on the validation of the Beliefs Against Volunteering Scale (BAV). Based on a large-scale survey in 31 high schools and one church ($N = 5,946$), the reliability, validity (content validity, criterion-related validity, and construct validity), and factor structure of the scale were examined.

Study participants and procedure

A total of 5,946 secondary school students (i.e., 2,193 boys or 36.9%; 3,744 girls or 63.1%; nine respondents did not indicate their gender) participated in the study by convenience sampling. The data is based on the first author's network in the community. The first author located the schools and church. The personnel responsible would select classes to fill the questionnaires. Among the respondents, 66% were juniors (i.e., Grade 7 to Grade 9 with an age range of 11 to 14) and 34% were seniors (i.e., Grade 10 to Grade 12, with an age range of 15 to 19). The mean age of respondents was 14.77 years ($SD = 1.60$).

Both parental and participant consent were obtained. All respondents completed the scales and demographic characteristics in a self-administration format with adequate time provided.

Instruments

Beliefs Against Volunteering Scale (BAV)

Law (2008) constructed the BAV, a 14-item self-reported questionnaire. Participants are requested to indicate their extent of agreement on an item using a six-point Likert-type scale (1 for "strongly disagree"; 6 for "strongly agree"). The higher the score, the more negative the beliefs the participants hold on any specific item. Table 1 shows the BAV items.

The scale was reported to achieve acceptable content validity (Law, 2008). Two groups of bias were identified, namely conceptual bias (Items: BAV 1, 2, 3, 4, 5, 6, 7,

8, 12, 13, and 14) and instrumental bias (Items: BAV 9, 10, and 11).

Revised Personal Functions of Volunteerism Scale (R-PFVS)

Law and Shek (2010) developed the 31-item self-reported R-PFVS to measure the underlying motivational beliefs (i.e., personal functions) about volunteering. Participants were requested to indicate the extent of agreement about an item using a six-point Likert-type scale (1, “strongly disagree”; 6, “strongly agree”). Seven factors were verified using confirmatory factor analysis: understanding, pro-social value, future plans, pro-social competence, civic participation, well-being, and socializing (getting along with peers) functions. The Cronbach’s alpha coefficients for the seven factors ranged from .65 to .88. The overall Cronbach’s alpha for R-PFVS was .93, which was very satisfactory.

Purpose in Life Scale (PIL)

Crumbaugh and Maholick (1964) designed the Purpose in Life Scale (PIL), while Shek (1992) validated the scale in the Chinese context. This was used in the main study as a seven-item and seven-point Likert scale. In this study, the reliability of the PIL Scale (i.e. Cronbach’s alpha = .87) was very satisfactory.

Volunteering Experience

Respondents were asked to indicate whether they had volunteering experience or not in the past 12 months. Those without volunteering experience were identified as “non-volunteers” whereas the rest were identified as “volunteers.”

Data analytic strategy

The total data set was randomly divided into two halves, 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 has an eigenvalue equal to or greater than 1.0 (Kaiser, 1974); (2) An item has a factor loading equal to or greater than .40 (Stevens, 2002); (3) A factor has at least three items (Hair, Anderson, Tatham & Black, 1998); and (4) An identified factor and retained items are interpretable in the theoretical context. The second half of the data was used for CFA. Before testing the parameters for the hypothesized model, a preliminary analysis was conducted to check for any violations of the multivariate normality assumption and the skewness and kurtosis values of all items. This preliminary step is important because the maximum likelihood estimation method (ML) only correctly estimates the model based on the multivariate normality of the observed variables (Breckler, 1990; Curran, West & Finch, 1996).

The CFA was used to evaluate the theoretical dimensions of BAV in terms of the overall fit of the model. Two models were tested.

Model 1: *One-factor model*. Based on the inference from Cnaan and Goldberg-Glen (1991) on the unitary motive approach in understanding motivation to volunteer, this study proposes that the underlying negative beliefs were combined as a general negative belief (one factor).

Model 2: *Two-factor model*. Model 2 contained two factors derived from two theories, namely, the social norms theory and the social exchange theory. Items 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, and 14 were found to belong to Factor 1 (i.e., conceptual bias), whereas Items 9, 10, and 11 belonged to Factor 2 (i.e., instrumental bias).

To evaluate the overall fit of the models, several fit indices were employed: 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, NNFI, there is a general agreement that the value of .95 or greater indicates a satisfactory fit (Schumacker & Lomax, 2004). SRMR and RMSEA values below .08 and .06, respectively, represent acceptable model-data fit (Hu & Bentler, 1999). The ECVI should be as low as possible. Among the aforementioned indices, both SRMR and RMSEA are the most critical indicators. All analyses were conducted using covariance matrices via LISREL 8.80 (Jöreskog & Sörbom, 2006).

Results

The principal components analysis with varimax rotation resulted in a one factor-solution explaining 64.74% variance. A two-factor model was attempted revealing that two factors could explain 72.71% of variance. However, the eigenvalue of the second factor was slightly less than unity, that is, .97. Double loading was also substantial. The original conceptual framework suggested that there should be two dimensions of BAV, although the principal components analysis revealed that one factor was optimal. To address this, the study included a confirmatory factor analysis (CFA) to test the original conceptual model.

Two models were tested. Table 2 shows the overall goodness-of-fit indices for

the models. Generally, a two-factor model fits data better than a one-factor model. For the one-factor model (Model 1), the CFI was .84. The GFI was .77, and the NNFI was .96. For the two-factor model (Model 2a), the CFI was .98. The GFI was .88, and the NNFI was .97. The two-factor model can explain the underlying latent constructs better than the one-factor model. However, the RMSEA of both models were not satisfactory at .13 and .11. High MIs were shown in three pairs of error co-variances in Model 2a (Item 1 and Item 2; Item 2 and Item 3; and Item 1 and Item 3). The values ranged from 411.69 to 534.85. A closer examination of these pairs revealed that their contents were very similar (see Table 1), which might cause large MI. These parameters were allowed to be free as they belonged to the same factor. These modifications led to Model 2b. This modified model fitted the data better with a mediocre fit ($\chi^2_{(411)}=3178.88, p < .01$; CFI = .98; GFI = .92; NNFI = .98; RMSEA = .09; SRMR = .04; EVCI = .60). Figure 1 shows the factor structure and the completely standardized factor loadings for all items in Model 2b.

Based on Cronbach's alpha, the reliability of the conceptual bias subscale was .95 while that of the instrumental bias subscale was .81. The reliability of the total scale was .96, which was very high. The scale showed good internal consistency. In addition, the correlation between these two subscales was high, that is, .83. The two latent constructs were closely related to each other.

Two groups of respondents were identified to examine the criterion-related validity of BAV. The first were those who have volunteered in the past 12 months (volunteers), and the second were those who have not volunteered in the past 12 months (non-volunteers). The mean of BAV for volunteers was 2.03 (SD = .89), whereas those for non-volunteers was 2.41 (SD = .99). Univariate analysis showed that the mean BAV of volunteers was significantly lower than that of the non-volunteers ($t = 15.46, p < .001$), implying that volunteers held fewer negative beliefs compared with non-volunteers. The effect size, Cohen's *d*, was .40, which was medium. Criterion-related validity was attained.

Table 3 shows the correlation matrix in terms of BAV, personal beliefs, and purpose in life. Consistent with our expectations, the score of personal functions of volunteerism (R-PFVS) was negatively correlated with BAV, with a large effect size ($r = -.48, p < .001$). Similarly, it was also found that purpose in life was also negatively correlated with BAV, with a medium effect size ($r = -.29, p < .001$). The relationships

between negative beliefs and personal functions/purpose in life were established. Construct validity was attained.

Generally, the findings of the present study show the existence of the two dimensions of BAV. This study also demonstrates that BAV is a valid and reliable instrument.

Discussion

Many adolescents join volunteer service (Law, 2008), and that participation is an indicator of quality of life. However, almost all studies tend to focus only on the positive aspect of participation (Clary et al., 1998; Eisenberg et al., 1995; Hofer, 1999). This study is the first to explore systematically the negative beliefs on volunteering by adolescents.

Two main groups of negative beliefs are formed: one from general impression and one from the nature of action. The formulation of these two groups is based on the social norms theory and social exchange theory on helping (Batson, 1995). This study extends the use of social norms theory and social exchange theory to understand adolescent volunteerism. In addition to the reasons for helping, both theories are used to explain why people do not help. The social norms theory suggests that the negative impression of volunteerism forms a stereotype or societal belief that can be deep-rooted among individuals. On the other hand, the social exchange theory suggests that there are negative beliefs about volunteerism with reference to a particular service. The volunteer may offer help because of selfish aims, or the service can affect the adolescents' studies negatively. Thus two groups of negative beliefs are formed, namely the conceptual bias and the instrumental bias. This study sheds light on grouping all these negative beliefs into two main categories.

Along with conceptual categorization, BAV is a two-factor instrument with good psychometric properties in terms of reliability, criterion-related validity, construct validity, and latent structure. The first group (BAV 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, and 14) is on perceptions such as volunteerism being "meaningless" or a way to "be fooled" and to give with "no benefit." These fall under conceptual bias. The second group (BAV 9, 10, and 11) is on perceptions such as volunteerism being done for "selfish aims of actions" or it "affects other activities." These fall under instrumental bias. Findings from the confirmatory factor analysis supported the conceptual model underlying the BAV.

The BAV, as a validated instrument, can be widely used for adolescent volunteers.

There are two practical implications. First, there are two aspects of negative beliefs, that is, conceptual and instrumental biases. Different measures can be taken to provide meaning and benefits to volunteers in these two dimensions. Service organizers should highlight the importance of a particular service to the recipients and to society to the extent that volunteers feel their efforts are worthwhile and their services are meaningful. Besides, we understand that some volunteers have selfish aims during the service such as socializing with peers and better resume, the importance of pro-social helping should be emphasized. In this way, both conceptual and instrumental biases were tackled.

Second, the scale can be used as an instrument to measure the effectiveness of volunteer service programs. If volunteers feel that they can help recipients and the service is successful, the volunteers should have fewer negative beliefs about volunteerism after the service. Currently, satisfaction score was used to measure the program effectiveness for volunteers. This method only documents the subjective experience (Law, 2008). At present, not too many objective assessment yardsticks are available to measure effectiveness of the service. BAV is a useful and quick tool that can indirectly measure the impact of the service to adolescents with the use of pre-post single-subject design.

Participation in volunteer service is an indicator of quality of life and one measurement of quality of life is the purpose in life. Further studies should be done to explore the relationship between volunteerism and purpose in life. Law and Shek (2009) proposed that volunteerism is the antecedent of purpose in life. Logically speaking, volunteerism can also be concomitant with or consequence of purpose in life. Other indicators of quality of life can also be used for the sake of understanding its relationship with volunteerism.

The current study has several limitations. First, the research findings reported here are based on the study of adolescents in Hong Kong. There is a need to replicate the study in adolescents with different ethnicities and context. Second, the respondents are not randomly sampled, although the sample size is large. The application of the findings to other adolescent populations should be interpreted with caution. Third, there may also be other negative beliefs in the context of other cultures that are not included in BAV. An example is the experience of adolescents in ex-Soviet countries. The volunteer service participation there is observed to be low because of the association of volunteerism with Communist rule (Salamon &

Sokolowski, 2001). Despite these limitations, this study is the first to have a validated instrument to measure adolescents' underlying negative beliefs about volunteerism and its relation to quality of life.

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Table 1: The items of Beliefs Against Volunteering Scale (BAV)

Dimension 1: Conceptual bias

- BAV 1: Only idiots will volunteer.
- BAV 2: Volunteering is meaningless.
- BAV 3: Only problematic people volunteer.
- BAV 4: I have no benefits from volunteering.
- BAV 5: Volunteering is a waste of money.
- BAV 6: We volunteer, but we are eventually fooled.
- BAV 7: Volunteering is a waste of time.
- BAV 8: Volunteering is an alternative punishment.
- BAV 12: Volunteers are “cheap labor.”
- BAV 13: I like helping people, but I do not want to be a volunteer.
- BAV 14: We are bound to be cheated if we become volunteers.

Dimension 2: Instrumental bias

- BAV 9: Volunteers in general have selfish aims.
- BAV 10: Volunteers do not help people genuinely.
- BAV 11: Volunteering affects my study negatively.

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	6488.56**	77	.84	.77	.96	.13 (.07-.08)	.05	1.36 (1.31-1.41)
2a	2 Factor model	4749.19**	76	.98	.88	.97	.11 (.11-.11)	.04	.96 (.92-1.01)
2b	2 Factor model 3 Error covariances were allowed to be related	3178.88**	73	.98	.92	.98	.09 (.09-.08)	.04	.60 (.57-.64)

Note: $N_{effective\ sample}=5946$. 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 BAV, positive personal beliefs and purpose in life

	<u>BAV(CON)</u>	<u>BAV(IN)</u>	<u>BAV</u>	<u>R-PFVS</u>	<u>PIL</u>
<u>BAV(CON)</u>		.83***	.99***	-.48***	-.29***
<u>BAV(IN)</u>			.86***	-.36***	-.26***
<u>BAV</u>				-.48***	-.29***
<u>R-PFVS</u>					.32***

*** $p < .001$

Note:

- BAV(CON): Beliefs Against Volunteering Scale: Conceptual bias subscale
 BAV(IN): Beliefs Against Volunteering Scale: Instrumental bias subscale
 R-PFVS: Revised Personal Functions of Volunteerism Scale
 PIL: Purpose in Life Scale

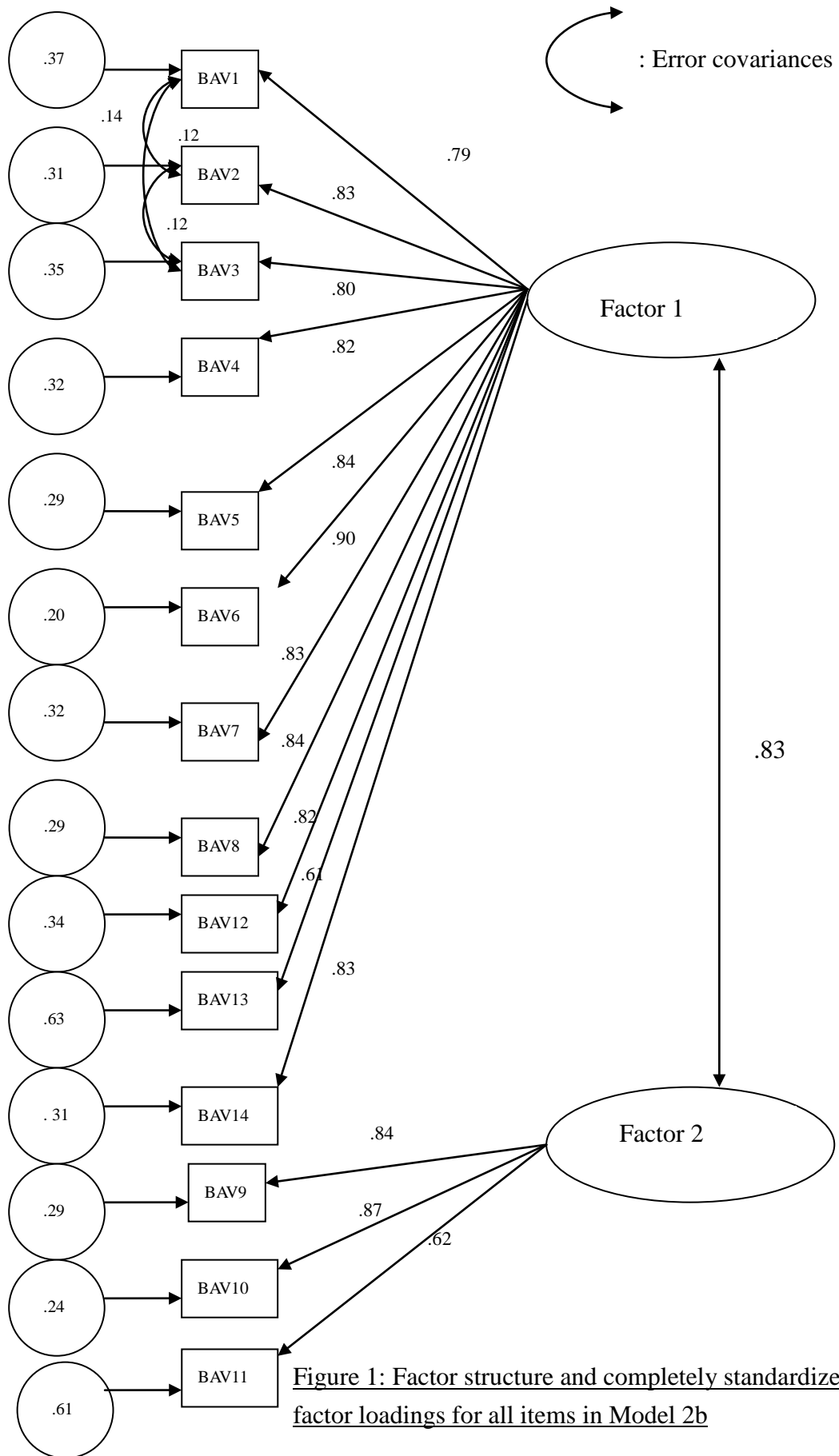


Figure 1: Factor structure and completely standardized factor loadings for all items in Model 2b