

**Volunteer Motivations and Youth Mentoring:
Validating the Volunteer Functions Inventory**

Liliokanaio Peaslee

Dr. Amanda C. Teye

James Madison University

Paper prepared for the Western Political Science Association Annual Meeting, April 13-15, 2017; Vancouver, British Columbia.

Introduction

Nonprofit organizations rely heavily on volunteers, particularly within the social service arena, to expand service provision and extend limited resources. A substantial body of literature investigates initial motivations for volunteerism in order to better understand how to effectively recruit, manage, and retain volunteers. While researchers have used a variety of instruments to measure volunteer motivations, the most widely replicated is Clary et al.'s (1998) Volunteer Functions Inventory (VFI). The VFI has been validated for general volunteerism, for field-specific uses, and for use with specific populations. However, few studies have looked specifically at whether the VFI adequately captures the motivations of those who volunteer to be mentors for at-risk youth. While the VFI could be relevant to mentoring, it first needs to be fully validated.

This paper presents findings from such a study in which we validate the VFI in a sample of volunteers in a national youth mentoring program ($n = 480$), discuss trends in mentor motivation, and identify alternative scales for contemporary volunteerism. The paper employs data from a five-year, experimental study designed to investigate the impact of mentor training and support on the strength of mentoring relationships and youth outcomes. The study was funded by a major grant from the Office of Juvenile Justice and Delinquency Prevention and conducted with an affiliate of Big Brothers Big Sisters of America.

The Importance of Volunteer Motivation

There is a substantial body of literature investigating links between initial motivations for volunteerism to decisions to initiate and continue volunteering, activity preferences, and overall satisfaction. Volunteers whose motivations match their experience are likely to be more satisfied, volunteer for longer periods, and to volunteer again (Bussell & Forbes 2002; Clary et al. 1999;

Finklestein 2009; Gage et al. 2011; Houle et al. 2005; Hwang 2005; Martinez & McMullin 2004; Stukas 2006). Clary et al. (1998).

In the mentoring field, Stukas and Tanti (2005) suggest that identifying the goals mentors have going into the match relationship is an important first step that agencies should take—in addition to ensuring that motivations are realized—to ensure mentor satisfaction and match longevity. This is critical, given the close relational nature of one-to-one youth mentoring; research has consistently found that the strength and length of mentoring relationships mediate positive youth outcomes and that early match closures can have a negative impact on vulnerable youth (Thomson & Zand, 2010; DuBois, Neville, Para, & Pugh-Lilly, 2002; Grossman & Rhodes, 2002; Herrera, DuBois, and Grossman 2013). Similarly, the U.S. Department of Education Mentoring Resource Center emphasizes the importance of understanding mentor motivations: “Mentoring programs can improve their volunteer recruitment and retention efforts by identifying potential volunteers’ backgrounds, beliefs, and motivations and speaking to these directly in recruitment messages and ongoing support” (Mentoring Resource Center 2006, p.2). Moreover, they suggests that mentor motivations are best captured by Clary et al.’s Volunteer Functions Inventory.

Despite these recommendations and growing use of the VFI in mentoring research, there is limited research on instrument validation specific to this context. Instead, extant literature employing the VFI have relied on instrument validation with volunteers more generally. We discuss these below. First, however, we provide brief overview of the Volunteers Functions Inventory.

The Volunteer Functions Inventory

The Volunteer Function Inventory is a 30-item questionnaire that was developed by Clary et al., (1998) to understand the motivation of volunteers through the functional approach, which argues that people can perform the same action (such as volunteerism) through different motivational processes (Katz, 1960). In a review of previous literature on volunteers, the Clary et al. (1998) identified six motivational functions served by volunteerism: *Values, Understanding, Social, Career, Protective, and Enhancement*. *Values* motives speak to the need to express humanitarian and prosocial values through action. *Understanding* motives drive behavior through a desire to gain greater understanding of the world, the diverse people in it, and ultimately oneself. *Social* motives refer to satisfying the expectations of friends and close others. *Career* motives describe volunteerism as way to explore career options and increase the likelihood of a career path in the future. *Protective* motives refer to the need to distract oneself from personal problems or to work through problems in the context of service. *Enhancement* motives are distinguished by the need to boost self-esteem, feel important and needed by others, and form new friendships. The VFI is measured on a seven-point response set. The use of the VFI scale scores as either a summed score or an average score depends on the focus of the research question. Clary et al. (1998) note that a higher score suggests the motivation is more important, but the functional approach is multi-motivational perspective in that mentoring could serve more than one motive for an individual.

Previous Validation of the VFI

Clary et al. (1998) initially validated the consistency and reliability of the VFI in two separate studies that look at the psychometric properties of the instrument. Results from exploratory and confirmatory factor analyses led the authors to recommend use of the six-factor model described

above. In the first study, researchers administered the instrument to experienced adult volunteers (n=465) from five organizations, ranging from medical services to programs for children and families. The mean age of volunteers was 40.9 years and the mean length of volunteerism 68.2 months. While most of the items were consistent with the hypothesized factor loadings, Item 29 from Enhancement (“Volunteering is a way to make new friends”) loaded with Understanding items. Clary et al. also ran two additional models to confirm that the six-factor structure best fit the data. In a preselected five-factor solution, Values, Career, Social and Understanding followed six factor results and Protective and Enhancement loaded together as a single factor. A preselected seven-factor solution followed the same pattern as the six-factor model, with no factors loading on Factor 5. In comparing the three models, Clary et al. concluded that despite the problems noted above, the six-factor model had strongest confirmatory support (GFI=.91; RMSEA= .057).¹

Clary et al. confirmed this model in a second study in which the VFI was administered to a sample of university students (n=535; mean age 21.25 years) from introductory psychology courses. Of these, 320 reported experience as volunteers, while 213 did not have volunteer experience. Of note, however, the authors reported the same issue with Item 29. Additionally, Item 15 (“Volunteering allows me to explore different career options”) cross-loaded on Career and Understanding. Again, using a similar model comparison technique, they found acceptable alpha scores and concluded that six-factor model is most appropriate for understanding functional motivations for volunteering.

Researchers have looked to validate the VFI for field-specific use, including youth sports (Kim, Zhang & Connaughton, 2010) and environmental conservation (Wright, Underhill, Keene

¹ For the five factor model the GFI was .88, RMSEA .064. Moreover, they found improved Chi-squared values comparing the five-factor and six-factor models ($\chi^2_{diff}=106.5$). Alpha scores for the six factor model were C = .89; E = .84; S = .83; U = .81; P = .81 V = .8.

& Knight, 2015). Others have validated the instrument for use with particular demographic groups, including American (Finkelstein, 2009; Francis, 2011), Chinese (Wu, Lo, & Liu 2009), and Australian university students (Hyde & Knowles, 2013) and older adults (Okun, Barr & Herzog, 1998; Okun & Shultz, 2003).

While some researchers have found issues with individual items in the VFI, most end up adopting the six-factor VFI. For example, in a study of youth soccer (N = 515), confirmatory and exploratory factor analyses supported the VFI's six-factor structure, however the EFA led to the elimination of 12 items that loaded on two constructs or had low factor loadings. This included Item 29 from the Enhancement construct, "Volunteering is a way to make new friends," which cross-loaded with Understanding (Kim, Zhang & Connaughton, 2010). Wu, Lo and Liu's (2009) study of Chinese university students also found that items cross-loaded on the Enhancement and Protective scales, including Item 29, and detected issues with item redundancy on the Social motivations scale. Similar issues with the Enhancement and Protective items were also detected in studies of older adult volunteers (Brayley et al., 2014; Yoshioka, Brown, & Ashcraft, 2007).

Others have critiqued the measure as insufficient, suggesting that the instrument does not capture a wide enough variety of functional motivations and should be expanded. Francis (2011) suggests that there are functional motivations unique to young adult volunteers, especially a sense that volunteering is "a normal thing to do" given the prevalence of volunteerism among many of the subjects' family, friends, and other referent groups. In Omoto and Snyder's (1995) inventory to assess why people volunteer to be "buddies" for people with AIDS, they use similar, though more specifically focused, scales to the VFI, but notably add "Community concern"—to demonstrate one's interest in, and commitment to, one's community—as an important volunteer motivation. Other work with university students indicates that researchers should also consider

capturing motivations related to time constraints, control perceptions, and perceived moral obligations (Hyde & Knowles, 2013).

The VFI in Mentoring Research

As mentioned previously, use of the VFI in mentoring research typically relies on Clary et al.'s validation of the instrument and use the original instrument to understand mentor motivations. Snyder and Stukas (1996) found that volunteerism in broader youth development programming involved higher sense of Understanding and lower sense of Enhancement. Karcher (2005) used the VFI enhancement scale to predict mentor-reported relationship quality. Findings suggest that mentor motivations and self-efficacy were more important predictors than youth risk characteristics, parental involvement, program quality, mentee disposition, and mentee support seeking. Overall, mentor motivation stemmed primarily from a desire to act on Values and to gain greater Understanding, though Karcher found differences when controlling for gender, as men tended to express Social motivations more frequently. In a study of school-based mentors (n = 31), Caldarella, Gomm, Shatzer & Wall (2010) found that mentors were significantly more likely to report being motivated by Values functions, followed by Understanding. Younger volunteers were more motivated by Career enhancement than were those over 40, a trend previously noted by other studying college-age volunteers (e.g., Gage and Thapa 2012). Similar Values and Understanding motivations have been noted for peer mentors for college students with disabilities (Griffin, Mello, Glover, Carter & Hodapp 2016).

These mentor-specific findings reinforce earlier survey findings (n = 1,388) by Worth, Clary, and Snyder (2003) that suggest that volunteers in the youth development field may be more motivated by humanitarian values and increasing understanding than are other types of volunteers (in Stukas, Clary & Snyder 2014). Taken as a whole, these findings point to specific

motivational profiles for those pursuing opportunities to mentor. This then begs the question as to whether or not the VFI—and especially the instrument’s six-factor structure—is a good fit for mentor-specific volunteerism. This study advances such an inquiry by validating the VFI for a mentoring population.

Research Questions

First, we asked, what are the functional motivation trends among volunteers in youth mentoring programs? Although not clearly established in the literature, some suggest the natural tendency of volunteers working in child and youth development programming would produce higher observed scores in the Understanding domain and a lower sense of Enhancement (Snyder and Stoukas, 1996). We anticipated higher scores in both Valuing and Understanding and lower scores in Protective and Enhancement measures. Second, we asked, can the Volunteer Functions Inventory be validated for volunteers in youth mentoring programs? Given the large body of evidence in favor of a six-factor structure, we anticipate observing satisfactory internal consistency results. However, internal consistency measures do not offer a full picture as it relates to psychometric validation. Thus, we were particularly interested in whether the six-factor structure proposed by Clary et al (1998) and, ultimately adopted in many other settings, could be confirmed for the volunteer mentoring population. While a six-factor structure may yield acceptable results, we sought to identify a model with the best fit. Finally, we asked, are the factors present in the original 30-item functional inventory relevant and completely representative of the functional motivations among contemporary volunteers in child and youth mentoring programs? We anticipated there may be one or more motivational areas undefined by the original VFI.

Methodology

The paper employs a mixed method approach. Utilizing classical test theory, we first examine descriptive statistics of the six theoretically defined composite scores (Values, Understanding, Social, Career, Protective and Enhancement), using the mean across items. VFI items were adapted to provide a mentor-specific context for volunteer motivations and measured on a 10-point scale. For example, the question “my friends volunteer” was changed to “My friends serve as mentors”. (see Table 2 for constructs and individual question wording). Second, we present internal consistency measures, using Cronbach alpha scores and Corrected Inter-Item Coefficients (CIIC), for each of the theoretically defined scales. We test reliability for the total population and by demographic groups (gender and college attendance status). Given extant validation studies have had mixed results, most confirming Clary et al’s (1998) six-factor structure and some others pointing to a single factor or general structure (Cnaan & Goldberg-Glen, 1991) or two-factor model (Latting, 1990), we felt the need to begin content validity testing with an exploratory factor analysis (EFA). The EFA approach does not assume a factor structure based on theoretical or historical findings; rather it looks to establish a structure unique to the data. Thus, our first step involved running an EFA using a Principle Components extraction method with a Promax rotation. Initially, we specified an eigen value of 1 to determine the number of factors retained. We also noted scree plots to confirm recommendations. Given the sample size, we used a liberal standard for retaining items (single factor loadings $>.4$). We defined cross-loading as loading higher than $.3$ across two or more factors. Finally, we flagged items with low extracted communalities ($<.2$), but did not remove solely on this basis. Based on EFA findings, we reduced the number of items and presented a final proposed EFA model. To test this model, we use confirmatory factor analysis (CFA).

Goodness of fit diagnostics are presented. Generally, to achieve acceptable model fit, we anticipated CMIN/df ratios below five, GFI and CFI scores near .9 or higher, RMSEA scores near .05 or lower. We also present AIC scores, assuming models with lower values represent a better fit to the data. Additionally, we present model diagnostics from three previously-defined factorial structures in the literature, Clary et al's correlated six-factor model (1998), Latting's (1990) two-factor altruism and ego model, and Cnaan & Goldberg-Glen's (1998) general factor model. Others have taken this approach to validation as well for specific populations of interest (Okun et al, 2003; Okun et al., 1998; Wu, Lo & Lui, 2009). Modelling Clary et al's (1998) approach in Study 1, we then treat models found as viable or acceptable as nested to compare Chi-Square values using a difference of means test. The paper then presents finding from a multi group confirmatory factor analysis (MGCFA) to confirm measurement invariance by gender and college attendance status. We present goodness of fit diagnostics for both full configural invariance and metric invariance models, which constrain factor loadings or measurement weights for tested subgroups. Additionally, we computed a chi-squared difference test between models. Finally, we present reliability coefficients for refined constructs. All analysis is conducted in SPSS and SPSS AMOS. Given the low number of missing values in the data (.688% missing values; only 30 cases or 6.25% had at least one missing value), we used a pairwise deletion method for computing summary statistics, reliability tests, and for initial exploratory factor analysis. For confirmatory factor analysis, we imputed missing data using an expectation maximization method.

Finally, the paper seeks to identify alternative scales for contemporary volunteerism. To achieve this, we use a qualitative open-ended indicator. The standard in-person interview conducted during BBBS enrollment, includes a question asking volunteers 'What attracted you to BBBS as a

way of becoming involved in working with youth?’ Responses were recorded and coded by a single coder using a deductive method to, first, identify the six original VFI domains. In this step, researchers relied upon Clary et al’s (1998) domain definitions and individual item content to identify and sort data. For example, if a particular response did not exactly fit one of the items in the domain but it embodied the ‘spirit’ of the definition, we coded accordingly. There were, however, several comments that did not fit clearly in the theoretically defined framework. Thus, in a second round of analysis, research looked to identify emergent themes in the data that seemed clearly beyond the scope of the original VFI. During this step, two separate coders reviewed the data and reconciled differing perspectives.

Sample

The study sample was taken from the total population of matched volunteers from a college town Big Brothers Big Sisters mentoring agency in Virginia (n=473). During a six-month period, from February 2012 to November 2013, 477 new mentors were enrolled in the program and were administered the VFI along with standard enrollment forms during an in-person meeting with an agency Match Support Specialist prior to the match date. Among these, four did not complete the VFI and were, therefore, dropped from the study. Although initial recruitment efforts were made to target males and ethnic minorities, given an agency history of lower participation rates among these groups, the final sample population for the study were a largely homogeneous group of white (white= 410, Black =18, Hispanic =12, Other ethnicities= 33), college attending (college attending= 415, community member = 50) females (female= 389, male= 76). The average age of college attending volunteers was 19.7 (SD=1.23) while the average age of community members was 38.53 (SD=15.37). 439 of the volunteers reported single as their marital status, only 22 (4.7%) reported being married. Additionally, 415 volunteers reported some previous experience

with volunteering. Ninety-one of the volunteers (19.2%) indicated they would be using their volunteer services as hours toward a class requirement or mandated community service.

Results

Initial summary statistics and internal consistency findings are presented in Table 1. Scores on the Values scale were significantly higher than all other scales, at 99.9% confidence. Similarly, Understanding scores were significantly higher than scores on all other scales at 99.9% confidence. This confirms our intuition that volunteers in child and youth development programs have greater motivations toward altruism and are more inclined to seek opportunities for learning and targeting skill development. As anticipated, reliability results indicated highly acceptable internal consistency scores within Understanding, Career, Protective, Enhancement and Social scales and moderate to high consistency within the Values scale (using .8 as a threshold).

Scale	Number of Items	M (SD)	Alpha	<i>Corrected Item Total Correlations</i>		<i>Inter-item Correlations</i>	
				Range	M	Range	M
Values	5	9.25 (.81)	.731	.336-.650	.506	.168-.588	.372
Understanding	5	8.3 (1.36)	.818	.554-.664	.623	.421-.546	.498
Career	5	5.58 (2.37)	.880	.609-.776	.713	.520-.715	.594
Protective	5	4.73 (2.18)	.867	.563-.782	.689	.375-.784	.563
Enhancement	5	6.18 (2.13)	.871	.503-.784	.699	.412-.732	.505
Social	5	6.34 (2.06)	.828	.545-.683	.637	.375-.743	.511

Within the Values scale, results indicated low CIIC (.336) for question 8, ‘I am genuinely concerned about the particular child I will mentor’. That item had low correlations with all four items in the scale, particularly with question 22 ‘I can do something for a cause that is important to me’ ($r=.168$). Females ($\alpha=.673$) and community members ($\alpha=.681$) had lower consistency scores on the Values scale than males ($\alpha=.8$) and college attending volunteers ($\alpha=.733$). Sub-

group analysis finding also suggested community members had lower internal consistency across Social items ($\alpha=.751$) than those attending college ($\alpha=.833$). For community members, question 2 “My friends serve as mentors” had the lowest inter-item correlation values (.320). When deleted, α for the sub-group improved to .779. In looking at the item, it seems logical that community members would perceive this item differently, as they may be less motivated by friends than other people in the community (e.g., coworkers, church members).

Results from the initial EFA yielded a five-factor model. Results are presented in Table 2 (suppressing factor loading lower than .3). Diagnostics tests confirm model fit (KMO= .933, Bartlett’s =.000). The oblique structure was confirmed with analysis of correlation among of saved regression values. The goodness-of-fit test confirms the model (Chi-Squared= 8111.32; $p = .000$). Total variance explained was 62.5%, which is adequate (generally 60% or higher is expected). Findings, however, indicated several challenges with cross-loading items and unanticipated factorial structures. Item 8 in the Values scale negatively cross-loaded with items in the Understanding scale. Item 22 from Values cross-loaded with items in the Understanding scale. Once we eliminated item 22, item 8 seemed to load consistently; therefore, we retained it in the final EFA. Initially, item 12 in Understanding cross-loaded with Career items, this issue was corrected with adjustments to the Career measure (dropping item 15). Notably, Enhancement and Protective items loaded onto a single factor with the exception of item 29, which loaded with Understanding items and item 11 which cross-loaded (both were dropped in the final EFA). Findings were consistent with previous literature, including Clary et al.’s (1998) seminal work. Items on the Social scale loaded consistently with the theoretical structure.

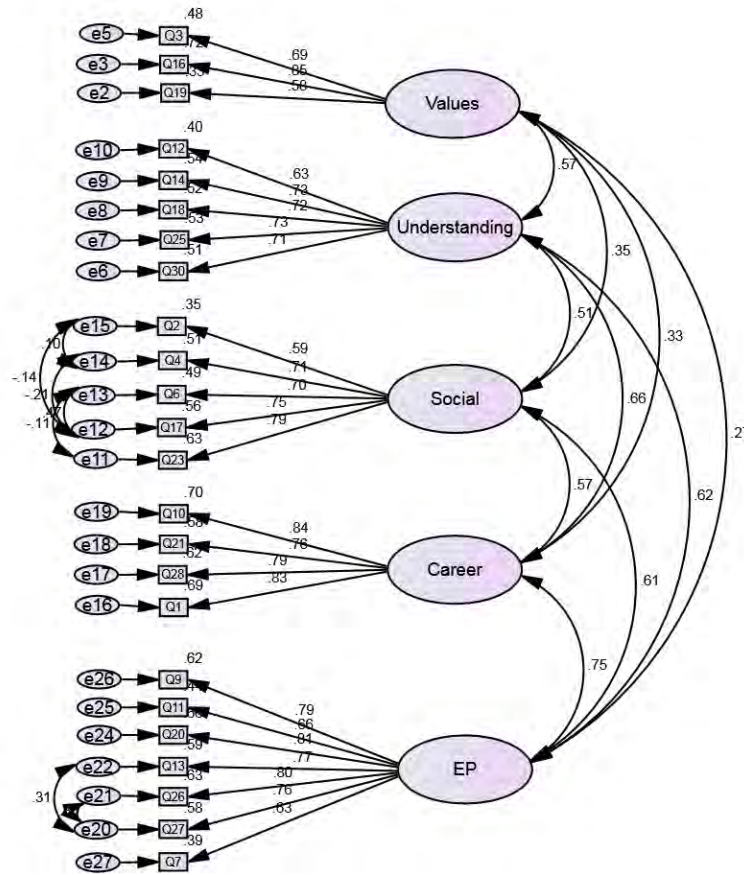
	<i>Factor</i>				
	1	2	3	4	5
<i>Values</i>					
1. I am concerned about those less fortunate than myself					.689
8. I am genuinely concerned about the particular child I will mentor		-.306			.637
16. I feel compassion toward people in need					.778
19. I feel it is important to help others					.694
22. I can do something for a cause that is important to me		.588			.393
<i>Understanding</i>					
12. I can learn more about the cause for which I am working		.431		.373	
14. Mentoring will allow me to gain a new perspective on things		.764			
18. Mentoring will let me learn things through direct, hands on experience		.643			
25. I can learn how to deal with a variety of people		.665			
30. I can explore my own strengths		.821			
<i>Social</i>					
2. My Friends serve as mentors			.708		
4. People I'm close to want me to serve as a mentor			.608		
6. People I know share an interest in community service			.886		
17. Others with whom I am close place a high value on community service			.873		
23. Mentoring is an important activity to the people I know best			.745		
<i>Career</i>					
1. mentoring can help me to get my foot in the door at a place where I would like to work				.881	
10. I can make new contacts that might help my business or career				.807	
15. Mentoring will allow me to explore different career options		.309		.487	
21. Mentoring will help me to succeed in my chosen profession				.666	
28. Mentoring experience will look good on my resume				.679	
<i>Protective</i>					
7. No matter how bad I might be feeling, mentoring can help me forget about it	.489				
9. By mentoring I will feel less lonely	.804				
11. Mentoring will relieve me of some of the guilt over being more fortunate than others	.631			.303	
20. Mentoring will help me work through my own personal problems	.872				
24. Mentoring will be a good escape from my own troubles	.866				
<i>Enhancement</i>					
5. Mentoring will make me feel important	.432				
13. Mentoring will increase my self esteem	.686				
26. Mentoring will make me feel needed	.891				
27. Mentoring will make me feel better about myself	.868				
29. Mentoring is a way to make new friends		.600			
<i>Principle Component Analysis, Promax Rotation</i> KMO = .933; Bartlett's = .000; Chi-Squared (435)=8111.32; p=.000 % total variance (rotated) = 62.5%					

The final EFA is shown in Table 2. Diagnostics tests confirm model fit (KMO= .924, Bartlett's =.000). The goodness-of-fit test confirmed a five factor model (Chi-Squared= 8111.32; p = .000). Total variance explained improved by nearly 2% to 64.22%. Eight Enhancement and Protective items loaded onto the first factor, which predicted 37.9% of the variance in the data. Moving forward, we refer to this as the Self-Help scale. Five Understanding items loaded onto the second factor, which predicted 9.74% of the variance. Five Social items, predicting 7.3% variance, loaded onto a third factor. Four Career items, predicting nearly 5% variance, loaded onto the fourth factor. In addition, four Values items, predicting 4.3% variance, loaded onto the fifth factor.

To confirm the factorial structure, we employed a CFA using SPSS AMOS. Figure 1 displays the standardized coefficients yielded by the five-factor model. Notably, in running the initial CFA, based on final EFA results, some corrections were needed. We initially observed unacceptable factor loadings for item 8 in the Values scale (.39); thus, we removed the item. Moreover, we observed high error covariances across several items in shared factors. We adjusted for these by covarying errors where appropriate. Once we made standard model adjustments, we computed reliability coefficients for all scales, including the Self-Help scale ($\alpha=.917$), and observed higher than recommended CIIC (.8) and inter-item correlation values for item 20 'mentoring will help me work through my own personal problems'. This item seemed to be duplicative with item 24 'Mentoring will help me escape from my troubles'. We removed item 24 from the scale. Generally, model goodness of fit diagnostics for the final five-factor model (Model 4) were strong.

Table 3. Factor Loadings and Alpha Values from Final Exploratory Factor Analysis

	<i>Factor Loading</i>
Factor 1: Self-Help (Enhancement/Protective)	
Extraction Sum of Squares Loading 9.853/ % of Variance 37.89%	
7. No matter how bad I might be feeling, mentoring can help me forget about it.	.479
9. By mentoring I will feel less lonely	.791
11. Mentoring will relieve me of some of the guilt over being more fortunate than others	.625
20. Mentoring will help me work through my own personal problems.	.880
24. Mentoring will be a good escape from my own troubles.	.872
13. Mentoring will increase my self esteem	.671
26. Mentoring will make me feel needed.	.866
27. Mentoring will make me feel better about myself.	.832
Factor 2: Understanding	
Extraction Sum of Squares Loading 2.533/ % of Variance 9.74%	
12. I can learn more about the cause for which I am working	.537
14. Mentoring will allow me to gain a new perspective on things	.835
18. Mentoring will let me learn things through direct, hands on experience.	.704
25. I can learn how to deal with a variety of people.	.715
30. I can explore my own strengths	.782
Factor 3: Social	
Extraction Sum of Squares Loading 1.89/ % of Variance 7.31%	
2. My Friends serve as mentors	.705
4. People I'm close to want me to serve as a mentor	.607
6. People I know share an interest in community service.	.872
17. Others with whom I am close place a high value on community service	.861
23. Mentoring is an important activity to the people I know best.	.748
Factor 4: Career	
Extraction Sum of Squares Loading 1.29/ % of Variance 4.96%	
1. Mentoring can help me to get my foot in the door at a place where I would like to work.	.875
10. I can make new contacts that might help my business or career.	.778
21. Mentoring will help me to succeed in my chosen profession	.665
28. Mentoring experience will look good on my resume.	.682
Factor 5: Values	
Extraction Sum of Squares Loading 1.12/ % of Variance 4.308%	
3. I am concerned about those less fortunate than myself.	.691
8. I am genuinely concerned about the particular child I will mentor.	.661
16. I feel compassion toward people in need	.789
19. I feel it is important to help others.	.705
<i>Principle Component Analysis, Promax Rotation</i>	
<i>KMO = .924; Bartlett's = .000; Chi-Squared (435)=6842.4; p=.000</i>	
<i>% total variance (rotated) = %64.22</i>	



Once appropriate corrections were made to the final CFA model, we ran reliability coefficients on amended VFI scales which yielding the following results: Values $\alpha=.734$ (CIIC Range .552- .679); Understanding $\alpha=.818$ (CIIC Range .554- .664); Career $\alpha= .879$ (CIIC Range .692 - .783); Social $\alpha=.828$ (CIIC range .545- .683); Self-Help $\alpha= .901$ (CIIC Range .568- .776). All values fell within acceptable ranges; although, noted issues with the Values scale persisted.

As a point of comparison, we also tested a general factor model (Model 1), a two-factor model (Model 2), and a correlated six-factor model (Model). Goodness of fit indices for all four models are presented in Table 4. The general factor model (Model 1), which assumes all items

load unto a single factor, did not yield acceptable diagnostics. All metrics failed to meet our criteria. The two-factor model (Model 2) also failed to meet stated criteria. On the other hand, the six-factor model satisfied several of our model fit criteria. Although not a perfect fit to the data, we would have accepted the model as adequate. Clearly, however, the corrected five-factor model we developed was slightly improved. Using Clary’s approach in Study1, we treated Model 3 and 4 as nested and test for chi-square differences. We asked, is the five factor model a significant improvement? When comparing Model 3 (1334.14(390) to Model 4 655.43(235), the Chi squared difference was 678.71 (df=155), which was significant at p=.000. Thus, we could confidently conclude that the five-factor structure was the best fit for our sample population.

Table: 4 Goodness of Fit Indices for CFA Models

<i>Model</i>	<i>X2</i>	<i>df</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>AIC</i>
Model 1: General Factor Model	3133.78	405	7.738	.615	.656	.119	3253.78
Model 2: 2 Correlated Factors	2075.49	274	7.58	.698	.706	.118	2177.49
Model 3: 6 Correlated Factors	1334.14	390	3.421	.832	.881	.072	1484.14
Model 4: Five Factor Corrected	655.43	235	2.789	.894	.931	.062	785.434

As a final step in our validation process, we tested for measurement invariance within the confirmed five-factor model by gender and college status. We hoped to confirm, in comparing chi-squared values, invariance across key sub-groups. Findings, however, for both tests lead to rejection of model invariance. In Table 5, we present results from our MGCFA by gender. The Chi-squared difference test was significant ($\Delta\chi^2=85.6$). Similarly, in Table 6 present results from our MGCFA by college status. The Chi-squared difference test was significant ($\Delta\chi^2=39.38$). Overall, Factor loadings were generally weaker for men and community members. This is not, however, fully conclusive given low sample population sizes for these subgroups.

<i>Model</i>	<i>CMIN (df)</i>	<i>CMIN/DF (p)</i>	<i>RMSEA (90% CI)</i>	$\Delta\chi^2$	<i>CFI</i>	<i>GFI</i>	<i>AIC</i>	<i>Comparison</i>	<i>Decision</i>
Model 1: Full Configural Invariance	930 (470)	1.979 (.000)	.046 (.042-.050)	-----	.92	.860	1190.12	-----	Accept
Model 2: Metric Invariance	1015.69 (494)	2.056 (.000)	.048 (.044-.052)	85.6***	.910	.846	1227.69	Model 1-Model 2	Reject

*P<.05; **p<.01, ***p<.001

<i>Model</i>	<i>CMIN (df)</i>	<i>CMIN/DF (p)</i>	<i>RMSEA (90% CI)</i>	$\Delta\chi^2$	<i>CFI</i>	<i>GFI</i>	<i>AIC</i>	<i>Comparison</i>	<i>Decision</i>
Model 1: Full Configural Invariance	946.29 (470)	2.031 (.000)	.047 (.042-.051)	-----	.916	.860	1206.29	-----	Accept
Model 2: Metric Invariance	985.673 (494)	1.995 (.000)	.046 (.042-.051)	39.38*	.913	.854	1197.67	Model 1-Model 2	Reject

*P<.05; **p<.01, ***p<.001

Table 7 presents results from the open-ended interview with volunteers. The initial deductive inquiry, which sought to identify responses that fell in line with the original six functional motivation domains is presented suggests the highest endorsement of Values and Social motivations. 45% of respondents indicated having an altruistic motivation for helping others or, in particular, working with or helping children. Typical responses here included ‘wanting to be a positive example’ and ‘helping kids in need’. The second most common function domain was Social. 41.5% of respondents indicated some Social motivation. These ranged from dating, encouragement from fellow fraternity or sorority members or roommates, or having named a specific friend who was currently serving (74 identified another volunteer as motivation for joining). The other four domains were seldom endorsed by respondents in the open-ended format. In a second round of inquiry, we searched responses for emergent themes. The most salient were community/civic responsibility, organizational structure or reputation, and

self-concept. 13.8% of respondents indicated they were serving to ‘help their community’ or ‘get involved in their community,’ which we felt was distinct from the Values domain in that the focus of altruism was central to the community at-large rather than individuals/children in need. Organizational structure and representation was mentioned among 18.2% of respondents. Comments were focused on the reputation of the agency as being well run and well known in the community, and the flexibility and low time commitment which seemed to make the agency an attractive place to volunteer. Finally, we noted 38 (7.9%) of respondents seem to be motivated by a deeper sense of self-concept which rooted them in volunteerism and/or giving back. These were individuals who noted that they had “always wanted to volunteer” or “missed volunteering”.

Table 7. Open-Ended Interview Results

<i>Clary et al (1998) Domains</i>	#	%	<i>Emergent Themes</i>	#	%
Values	200	45%	Community/Civic Responsibility	66	13.8%
Understanding	13	2.7%	Structure	87	18.2%
Social	199	41.5%	Self-Concept	38	7.9%
Career	24	5%			
Protective	30	6.3%			
Enhancement	11	2.3%			

Conclusions

In conclusion, paper finding confirmed that while Values and Understanding seem to be highly endorsed functional motivations among volunteers working in youth mentoring, the traditional six-factor structure proposed for Clary et al (1998) and adopted by many others does not best describe our population. Although initial reliability estimates were satisfactory, the model did not withstand EFA and CFA analysis. Moreover, key results from construct validity tests were in sync with much of the literature. Firstly, Enhancement and Protective scales should be considered as a single Self-Help scale. Second, a few items are consistently noted in the

literature and confirmed in our findings as inappropriate fits for their corresponding scales (item 29, item 15, and item 8). Thirdly, previously suggested factorial structures can be ruled out as predictive among both volunteer mentoring group, as perhaps broader populations. Model 1 and Model 2, failed to meet CFA diagnostic criteria. Given previous literature also failed to confirm these factorial structures, we might consider moving on from the consideration that all items on the VFI fall on a single construct or that they can be perceived dichotomously as altruistic or egotistic in nature. Our results confirmed a corrected five-factor, dropping five items from the original VFI, as explanatory for our population. We might also suggest the structure works for broader populations given similar findings elsewhere. While results from the MGCFA rule out the possibility of metric invariance by gender or college attending status, we believe challenges with low number of observations among men and community members may be driving these results. Research broadly confirms the notional that Chi-squared values in CFA are highly sensitive to sample size (Bentler and Bonnet 1980; Brown and Cudeck, 1993; Milfont and Fischer, 2010. Brannick 1995; Kelloway, 1995). Issues would be particularly strong were there were inadequate sub-group populations sizes. Thus, rather than concluding that the five-factor model may not explain trends for men or community members, we suggest future research be focused on using the MGCFA approach for understanding trends among sub-groups.

Finally, qualitative findings suggest there are more scales to consider for contemporary volunteer populations. These include community/civic responsibility, organizational structure or reputation, and self-concept. Inclusion of these indicators may not only be essential for understanding more contemporary functional motivations and how they may relate to volunteer engagement or satisfaction, but also in framing effective volunteer marketing and recruitment efforts.

References

- Allison, L. D., Okun, M. A., & Dutridge, K. S. (2002). Assessing volunteer motives: a comparison of an open-ended probe and Likert rating scales. *Journal of Community & Applied Social Psychology, 12*(4), 243-255.
doi:10.1002/casp.677
- Anderson, J. C., & Moore, L. F. (1978). The Motivation To Volunteer. *Nonprofit and Voluntary Sector Quarterly, 7*(3), 120-129. doi:10.1177/089976407800700312
- Brayley, N., Obst, P., White, K. M., Lewis, I. M., Warburton, J., & Spencer, N. M. (2014). Exploring The Validity And Predictive Power Of An Extended Volunteer Functions Inventory Within The Context Of Episodic Skilled Volunteering By Retirees. *Journal of Community Psychology, 42*(1), 1-18. doi:10.1002/jcop.21583
- Caldarella, P., Gomm, R. J., Shatzer, R. H., & Wall, D. G. (2010). School-Based Mentoring: A Study of Volunteer Motivations and Benefits. *Online Submission, 2*(2), 199-216.
- Clary, E. G., & Snyder, M. (1990, March). A functional analysis of volunteers' motivations. Paper presented at the meeting of the Spring Research Forum, Boston.
- Clary, E. G., Snyder, M., & Ridge, R. (1992). Volunteers' motivations: A functional strategy for the recruitment, placement, and retention of volunteers. *Nonprofit Management and Leadership, 2*(4), 333-350. doi:10.1002/nml.4130020403
- Clary, E. G., Snyder, M., & Stukas, A. A. (1996). Volunteers' Motivations: Findings from a National Survey. *Nonprofit and Voluntary Sector Quarterly, 25*(4), 485-505.
doi:10.1177/0899764096254006
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene,

- P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516-1530. doi:10.1037//0022-3514.74.6.1516
- Clary, E. G., Snyder, M., & Worth, K. (2003). *The volunteer organization environment: Key dimensions and distinctions*. Aspen Institute.
- Cnaan, R. A., & Goldberg-Glen, R. S. (1991). Measuring Motivation to Volunteer in Human Services. *The Journal of Applied Behavioral Science*, 27(3), 269-284. doi:10.1177/0021886391273003
- Fischer, L. R., & Schaffer, K. B. (1993). *Older volunteers: a guide to research and practice*. Newbury Park, CA: SAGE.
- Fischer, L. R., Mueller, D. P., & Cooper, P. W. (1991). Older volunteers: A discussion of the Minnesota senior study. *The Gerontologist*, 31, 183-193.
- Francis, J. E. (2011). The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16(1), 1-12. doi:10.1002/nvsm.390
- Frisch, M. B., & Gerrard, M. (1981). Natural helping systems: A survey of Red Cross volunteers. *American Journal of Community Psychology*, 9(5), 567-579. doi:10.1007/bf00896477
- Gage, R.L. III., & Thapa, B. (2012). Volunteer motivations and constraints among college students: Analysis of the Volunteer Function Inventory and Leisure Constraints Models. *Nonprofit and Voluntary Sector Quarterly*, 41(3), 405-430.
- Gidron, B. (1978). Volunteer work and its rewards. *Volunteer Administration*, 11, 18-32.
- Griffin, M. M., Mello, M. P., Glover, C. A., Carter, E. W., & Hodapp, R. M. (2016)

Supporting Students With Intellectual and Developmental Disabilities in Postsecondary Education: The Motivations and Experiences of Peer Mentors. *Inclusion*: June 2016, Vol. 4, No. 2, pp. 75-88.

Hochstetler, J. J. (2014). *Revising the Volunteer Functions Inventory: An Exploratory Study of Additional Functions* (Doctoral dissertation, Northcentral University, 2014) (pp. 1-83). Ann Arbor, MI: ProQuest LLC.

Hyde, M. K., & Knowles, S. R. (2013). What predicts Australian university students' intentions to volunteer their time for community service? *Australian Journal of Psychology*, 65(3), 135-145. doi:10.1111/ajpy.12014

Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental Mentoring Match Characteristics: Correspondence between Mentors' and Mentees' Assessments of Relationship Quality. *The Journal of Primary Prevention*, 26(2), 93-110. doi:10.1007/s10935-005-1847-x

Karcher, M. (2007). The importance of match activities on mentoring relationships. *Using Mentoring Research Findings to Build Effective Programs*, 39.

Kim, M., Zhang, J. J., & Connaughton, D. (2010). Modification of the Volunteer Functions Inventory for application in youth sports. *Sport Management Review*, 13(1), 25-38. doi:10.1016/j.smr.2009.04.005

Latting, J. K. (1990). Motivational Differences Between Black and White Volunteers. *Nonprofit and Voluntary Sector Quarterly*, 19(2), 121-136. doi:10.1177/089976409001900204

Luciani, J. (1993, November). Motivational determinants of volunteer behavior: A

logistic regression analysis using between-group and within-group triangulation techniques. Paper presented at the annual meeting of the Gerontological Society of America, New Orleans, LA.

- Okun, M. A., & Schultz, A. (2003). Age and motives for volunteering: Testing hypotheses derived from socioemotional selectivity theory. *Psychology and Aging, 18*(2), 231-239. doi:10.1037/0882-7974.18.2.231
- Okun, M. A., Barr, A., & Herzog, A. R. (1998). Motivation to volunteer by older adults: A test of competing measurement models. *Psychology and Aging, 13*(4), 608-621. doi:10.1037//0882-7974.13.4.608
- Stone, J., & Velmans, E. (1980-1981). Retirees as volunteers: Evaluation of their attitudes and outlook. *Volunteer Administration, 13*, 4-8.
- Stukas, A. A., & Tanti, C. (2005). Recruiting and Sustaining Volunteer Mentors. *Handbook of Youth Mentoring, 235-250*. doi:10.4135/9781412976664.n16
- Stukas, A. A., Daly, M., & Clary, E. G. (2006). Lessons from research on volunteering for mobilizing adults to volunteer for positive youth development. In *Mobilizing adults for positive youth development* (pp. 65-82). Springer US.
- Stukas, A. A., Snyder, M., & Clary, E. G. (2008). The social marketing of volunteerism: A functional approach. *Handbook of consumer psychology, 959-79*.
- Stukas, A. A., Worth, K. A., Clary, E. G., & Snyder, M. (2009). The matching of motivations to affordances in the volunteer environment: An index for assessing the impact of multiple matches on volunteer outcomes. *Nonprofit and Voluntary Sector Quarterly, 38*(1), 5-28.
- Stukas, A. A., Clary, E. G., & Snyder, M. (2013). Mentor recruitment and

retention. *Handbook of youth mentoring*, 397-410.

- Veludo-De-Oliveira, T. M., Pallister, J. G., & Foxall, G. R. (2015). Unselfish? Understanding the Role of Altruism, Empathy, and Beliefs in Volunteering Commitment. *Journal of Nonprofit & Public Sector Marketing*, 27(4), 373-396. doi:10.1080/10495142.2015.1080504
- Wiehe, V. R., & Isenhour, L. (1977). Motivation of volunteers. *Journal of Social Welfare*, 4, 73-79.
- Wright, D. R., Underhill, L. G., Keene, M., & Knight, A. T. (2015). Understanding the Motivations and Satisfactions of Volunteers to Improve the Effectiveness of Citizen Science Programs. *Society & Natural Resources*, 28(9), 1013-1029. doi:10.1080/08941920.2015.1054976
- Wu, J., Lo, T. W., & Liu, E. S. (2009). Psychometric properties of the volunteer functions inventory with Chinese students. *Journal of Community Psychology*, 37(6), 769-780. doi:10.1002/jcop.20330
- Yoshioka, C. F., Brown, W. A., & Ashcraft, R. F. (2007). A functional approach to senior volunteer and non-volunteer motivations. *The International Journal of Volunteer Administration*, 25(5), 31-43.