Match/Mismatch of the College Business Student Service-Learning Experiences: Drivers of Perceived Attitude Change, Satisfaction, and Future Volunteering Intentions

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This paper explores the role of the college service-learning experience as a driver of future volunteering decisions. Utilizing the service-learning context and a sample of 157 business students, the TMI is used as a pre-post functional motivation measure. Perceived attitude change and satisfaction are examined as mediators of the relationship between TMI and future volunteering behavioral intentions. The hypotheses are tested using PLS-SEM for the analysis. The findings indicate that perceived attitude change and satisfaction are mediators and the service learning experience, as well as perceived attitude change and satisfaction, are drivers of future volunteering intentions.

INTRODUCTION

In order for nonprofit organizations to continue to meet the needs of those they serve, they must both obtain funding and volunteers in an increasingly competitive environment (Bussell and Forbes 2002). As a first step, nonprofits must increase their visibility in order to increase donor and volunteer awareness. Increasing awareness requires branding, marketing and targeted messages (Wymer et al. 2006). An additional tool for nonprofits to generate volunteers is collaborating with higher education institutions.

According to (Collett and Morrissey 2007), generosity is "freely giving of one's financial resources, time, and talents, [including], for example, charitable financial giving, volunteering, and the dedication of one's gifts for the welfare of others or the common good". They also contend that it is "unique in that it is the habit of giving, or the quality of being 'generous' (i.e. willing to share and give, not selfish, characterized by a noble, forgiving, and kind spirit, magnanimous)." This differentiates it from pro-social behaviors based on the temporal reference. Pro-social behaviors are short term and specific, generosity is a lifelong endeavor. Included in generosity behaviors are the donation of time (volunteering) money (donations) other donations (services, blood, organs and goods).

In addition to being explored within the pro-social and generosity literatures, both volunteering and donating to nonprofit organizations have been explored as consumer behaviors themselves (Pho 2004; Wymer et al. 2006; Wymer and Starnes 2001). The reason this is the case is because volunteering takes from time spent on other consumer activities such as recreational activities or other leisure activities (Fisher and Ackerman 1998). Volunteering itself has been considered a leisure activity (Pho 2004).

Regardless of the underlying motive to volunteer, increased trust and norms of reciprocity (social capital) are benefits of volunteering behaviors which help society function better (Stukas et al. 2008). So even as the work of the nonprofit sector increases (Weerawardena and Mort 2008), the number of volunteers (people actually donating their time) is not growing at the same rate (Bussell and Forbes (2002). In a call for research, Bussell & Forbes (2002) further note that the process of deciding to volunteer either as a new behavior or the reactivation of former volunteers have not been examined in detail.

A form of business partnership adopted by many non-profit organizations is alliances with universities. A specific form of these alliances is the service-learning experience where nonprofit organizations form alliances with colleges and universities through service learning programs. Through these programs, the non-profit organization gains labor (service learning students) and develop a brand image with a sector that may not have been exposed to their other marketing messages. The students in return gain experience volunteering and the opportunity to see the civic responsibility benefits volunteering has in society.

As a means of developing future generosity and citizenship behaviors, universities and colleges have developed service learning programs that provide the nonprofit organizations with volunteers who receive course or college credit for their efforts. Service-learning is touted as a means for students to gain hands on application of classroom theories while simultaneously developing citizenship behavior (i.e., giving of themselves for a greater good, demonstrating pro-social behavior/generosity) (Berger 2004). While research has considered the efficacy of the applied learning experience (e.g., in service-learning projects where students perform meaningful public service and on student understanding of course concepts, Kaye Berger 2004; Kezar and Rhoads 2001; Strain 2005), a gap exists. The gap relates to how required service-learning experiences (hereafter, SLEs) shape student's attitudes, satisfaction, and future volunteering intentions (for model, see Figure 1 below).

FIGURE 1
FUNCTIONAL APPROACH TO VOLUNTEERING
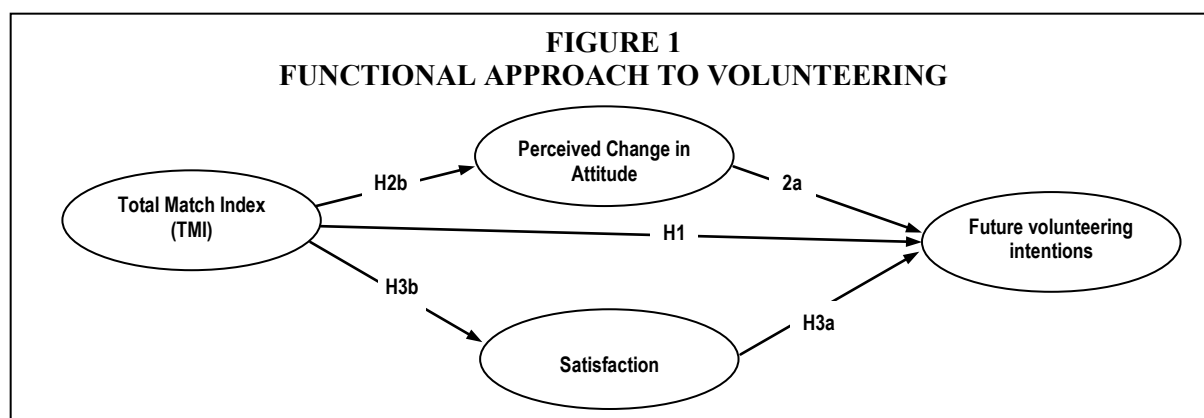
In the service-learning context, student populations are studied at all grade levels including college. The *NSSE Yearbook* (National Society for the Study of Education) has even dedicated a whole chapter to service-learning in higher education (Schine 1997). While studies have looked at outcomes of college student volunteering (e.g., Marta and Pozzi 2008), the focus has largely been on reflection, applied learning experiences, and curricula (for a summary, see Astin et al. 2000). Taking a functional approach to college-based service-learning, this study focuses on the importance of managing the match/mismatch between students' expectations regarding SLEs and their actual experiences in order to maximize both the pedagogical outcomes of volunteering. The contribution to the higher education literature thus rests in using the functional approach to study college-based SLEs where students gain by matching their volunteer experiences with their expectations/motives.

There is a body of research exploring generosity behaviors and behavioral intentions including what motivates people to volunteer (Clary et al. 1998; Davis 2003; Omoto and Snyder 1995; Penner 1998).

However, there is much less research on the impact of the SLE on the future generosity behavior of volunteering (Tomkovick et al. 2008).

HYPOTHESES

Functional Approach to Volunteering

The functional approach to volunteering posits that certain aspects of volunteer work attract certain groups/types of volunteers. Operationalized using the Volunteer Function Inventory (hereafter, VFI), the functional approach examines what volunteers want to get out of their volunteer experiences (Clary et al. 1996). In other words, the VFI explores the extent to which volunteer experiences align with and drive their volunteer goals/motives. As an extension of the VFI, the Total Match Index (hereafter, TMI) measures the match/mismatch between motivation and experience (Stukas et al. 2009) (for an explanation of how the TMI is calculated, see the *Measures* section).

TMI →Future Volunteering Intentions

While previous research has shown that one can predict future volunteering intentions by considering the extent to which volunteer experiences align with volunteer goals/motives (for use of the VFI, see Clary et al. 1998; Van Vianen et al. 2008). In a recent study, the TMI was found to be a better predictor of future volunteering intentions than either motives or environmental affordances (i.e., experiences) alone (Stukas et al. 2009). Based on this evidence,

H1: The TMI is positively related to students' future volunteering intentions.

Perceived Change in Attitude as a Mediator

In studying the antecedents of volunteering, Omoto and Snyder (1995) found that volunteer motivations predicted volunteers' change in attitude. Using the VFI, Okun and Sloane (2002) also showed volunteer motivations to be a good predictor of attitude change. Since the VFI affects volunteers' change in attitude, and the TMI is an extension of the VFI, the TMI will also be a good predictor of attitude change. The positive impact of attitudes on volunteer intentions is further supported by Okun and Sloane (2002). Hence,

Perceived change in attitude will mediate the relationship between the TMI and students' future volunteering intentions. In particular, H2a) change in attitude is positively related to students' future volunteering intentions and H2b) the TMI is positively related to perceived change in attitude.

Satisfaction as a Mediator

Several researchers have demonstrated that the greater the motive congruence, the greater the satisfaction with volunteering (Clary et al. 1998; Davis 2003; Van Vianen et al. 2008). In other words, the extent to which volunteer experiences align with volunteer goals/motives is a good predictor of satisfaction (Clary et al. 1998). Since the VFI impacts satisfaction, the belief is that the TMI will do the same. Drawing upon Marta and Pozzi (2008) who demonstrated satisfaction with volunteer experiences positively affects future volunteering intentions, the following is further suggested:

Satisfaction will mediate the relationship between the TMI and students' future volunteering intentions. In particular, H3a) satisfaction is positively related to students' future volunteering intentions and H3b) the TMI is positively related to satisfaction.

METHODOLOGY

The data were collected in the school of business at a private, northeastern university, which, as part of graduation requirements, requires 30 hours of service-learning volunteer experience toward the completion of their Student Engagement Transcript (SET). To collect the data, a pre- post-experience design is used. For both the pre- and the post-experience data collections, online surveys were e-mailed to

~1400 undergraduate business students. Upon completion of *both* the pre- and post-experience online surveys, students earned one-credit hour toward their SET requirement. Responses used for this study include only those business students who volunteered during the semester examined resulting in 157 useable pre- and post-experience survey responses. The pre-experience survey assesses the students' motivations to participate in the SLE. The post-experience survey assesses their satisfaction with the volunteer experience, perceived attitude change (PAC) as a result of the SLE, as well as a generosity behavioral intention measure of future volunteering intentions (FVI).

Measures

Adapted from Clary et al. (1998), the VFI is a 29-item measure of the six motivations of volunteerism (i.e., motivations of volunteering): values, understanding, enhancement, social, career, and protective. Linked to these six motivations, environmental affordance (hereafter, EA) is measured using a 12-item scale adapted from Stukas et al. (2009). The independent variable, TMI, is calculated by multiplying the VFI score on a given motivation by the EA score (i.e., experience score) on the same construct. The scores for these constructs is then summed creating one formative index score used as the TMI motivation indicator.

Perceived change in attitude vis-à-vis the volunteer experience, one of the mediating variables, is assessed in the post-experience survey using the Omoto and Snyder (1995) three-item, 7-point scale. Assessed in the post-survey, the second mediating variable, satisfaction, is adapted from Omoto and Snyder's (1995) 9-item, 7-point scale which captures satisfaction with the volunteer experiences.

The dependent measure, future volunteering intentions, is assessed using an adaptation of the Stukas, et al. (2009) scale. This two-item scale is anchored by 1=*not at all likely* and 7=*extremely likely*. The items include (1) "How likely is it that you will be volunteering for *this organization* in one year?" and (2) "How likely is it that you will be volunteering for *a different organization* in one year?" Additional volunteer intention measures included these same questions based on how likely it is that participants will be volunteering for (3) "this" and a (4) "different" organization *after* graduation. This creates a four-item future volunteering intention measure.

Analysis

Partial Least Squares structural equation modeling (PLS-SEM) is used for the analysis. The data were cleaned, examined for outliers, skewness, kurtosis, and other anomalies. While skewness was found, the PLS-SEM algorithm is robust and readily handles non-normally distributed data (Hair et al. 2011).

When estimating this type of model both the measurement and structural components must be assessed simultaneously (Hair et al. 2011). The key goals of this study are to predict target constructs and to identify key "driver" constructs. The model in Figure 1 is not that complex in terms of structural equation models. The ratio of the number of indicators to the number of constructs and to the limited size of the sample is 42:8:157. One construct, the TMI, is comprised of one indicator and is a formative construct. Based on this assessment, the covariance based structural equations modeling (CB-SEM) approach is not appropriate (Hair et al. 2010; Hair et al. 2011). Additionally, this research is exploratory in nature in that it is looking at the drivers of FVI a future generosity behavioral intention. This study uses a relatively small sample size (but still meets the minimum requirement of over 10 times the largest number of structural paths directed at a one latent construct in the structural model). Additionally, the desire is to estimate simultaneously the factor loadings of the measurement model and path coefficients of the structural model. All of these factors indicate the use of partial least squares path modeling (PLS-SEM) (Hair et al. 2011).

Results

The model shown in Figure 1 is analyzed using SmartPLS (Ringle et al. 2005). PLS-SEM uses a predictive modeling approach to maximize the explained variance of the dependent latent constructs. The data is analyzed using the Hair, et al. (2011), "Rules of Thumb." The PLS inner model is evaluated after the outer model as follows. In the assessment of the reflective measurement model, the composite

reliabilities, shown in Table 1, are all above 0.5 and are acceptable. While the Cronbach's Alphas are all above 0.45 and are included in Table 1 below, they typically are not used as reliability indicators for this research because they tend to underestimate internal consistency reliability (Henseler et al. 2009).

TABLE 1
ASSESSMENT OF THE MEASUREMENT MODEL: OVERVIEW REPORT

Construct	Average Variance Extracted (AVE)	Composite Reliability	R Square	Cronbach's Alpha
Future volunteering intentions	0.645	0.783	0.412	0.454
Perceived Attitude Change	0.805	0.971	0.407	0.965
Satisfaction	0.609	0.922	0.324	0.9

Internal consistency reliability (indicator reliability) is used to assess whether measures consistently represent the same construct and, to be considered for retaining, need to have cross-loadings greater than 0.40. All items greater than 0.70 were retained, one item, Satis1_Boring, was retained based on face and content validity (Hair et al. 2011). However, one item (Satis1_Dissappoint, 0.36) was deleted because it was below the 0.40 threshold (Hair et al. 2011).

Convergent validity assesses the extent a construct is positively correlated with the other indicators of the same construct. Convergent validity is evaluated using the average variance extracted (AVE). An adequate degree of convergent validity is demonstrated with AVEs of 0.50 or higher (Hair, et al., 2011). As shown in Table 1 above, all the reflective measurements have AVEs higher than 0.50. To assess discriminant validity, cross-loadings are examined and the Fornell-Larcker criterion is used (Fornell and Larcker 1981). The squared correlation matrix, including AVEs (shown on the diagonal) for each reflective measure, is shown in Table 2 below. The AVE for each latent construct is greater than each of the latent construct's highest squared correlation with any other latent variable. In assessing the cross-loadings, one indicator warrants closer examination. While Satis1_Boring is lower than some of its cross-loadings, it is again retained based on face and content validity. Regarding the formative measurement model, since the TMI is a formative construct with only one indicator, a VIF analysis to assess multicollinearity is not warranted. The number of cases used for bootstrapping is 157 and the number of bootstrapping samples is 5,000 (Hair, et al. 2011). An examination of the bootstrapped factor loadings of the indicators indicates all had t values >1.96 and are significant at the .05 level. Since the measurement model is found to be satisfactory, the structural model can be evaluated (Hair et al. 2011). A discussion of the structural model results used to test the hypotheses follows.

TABLE 2
TEST FOR DISCRIMINANT VALIDITY: FORNELL-LARCKER CRITERION*

	Future Volunteering Intentions	Perceive Attitude Change	Satisfaction
Future Volunteering Intention	**0.645**	0	0
Perceived Attitude Change	0.301	**0.805**	0
Satisfaction	0.322	0.458	**0.61**

* Squared correlations with the diagonal representing the AVE

Structural Model Assessment and Path Estimates of the Model

The structural model is examined using the R^2 measures and path coefficients. The R^2 (shown in Table 1 above) for the constructs are 0.32 for satisfaction, 0.41 for PAC, and 0.41 for FVI and are considered to be just under moderate in a marketing research context (Hair, et al., 2011). Regarding drivers of FVI, the TMI, PAC and satisfaction hypotheses, H1, H2a and H3a are found to be significant and positive drivers of FVI as hypothesized and are included in Table 3 below. Furthermore, TMI is found to be a significant and positive driver of both PAC and satisfaction (H2b and H3b) as hypothesized and shown in Table 3 below.

TABLE 3
STRUCTURAL PATH ESTIMATES

H	Driver	Endogenous Variable	β	Standard Error	T Statistics
1	TMI →	FVI	0.55	0.069	7.934**
2a	PAC →	FVI	0.179	0.096	1.868*
2b	TMI →	PAC	0.638	0.046	13.797**
3a	Satisfaction →	FVI	0.293	0.089	3.303**
3b	TMI →	Satisfaction	0.569	0.047	12.005**

*Significant at $p<0.1$, **Significant at $p<0.01$ (one-tailed test)

Sobel tests for mediation revealed that PAC mediates the relationship between TMI and FVI with a score of 1.78 and a one-tailed p-value of 0.037. Additionally, PAC also mediates the relationship between TMI and future volunteering intentions with a score of 2.8 and a one-tailed p-value of 0.002.

IMPLICATIONS AND FUTURE RESEARCH

Based on the results presented in this study, in order for universities to drive FVI as a result of the SLE, they should use the TMI and emphasize match between students' expectations/motivations and the SLE--especially since this match is positively related to both satisfaction and PAC.

The TMI significantly predicted satisfaction, PAC, and FVI demonstrating its importance as a construct of interest for future research. Further, the implied mediated relationships are fully supported with both satisfaction and PAC serving as mediators between TMI and FVI.

This research builds a theoretical model that captures the impact of college SLEs as drivers of perceived attitude change because of the volunteer experience as well as the impact of the SLE on satisfaction and FVI. It highlights the need for matching the motivations for volunteering with the experience. Higher match scores did predict future volunteering intentions as well as higher positive attitude changes and higher satisfaction. In order to achieve generosity and citizenship behaviors, attention should be paid to the motivations of the students volunteering.

Future research in the area of which motives are the most important drivers for future volunteering in a service-learning setting would contribute to this stream of literature. Research into volunteering motivations would benefit from new decision theories such as behavioral reasoning theory (Westaby 2005). Finally, longitudinal research examining the impact of the service-learning experience five, ten, or even more years would validate the model.

LIMITATIONS

As is the case with any research study, there are some limitations. The sample is from the business school of one private university requiring a SLE limiting its generalizability. Because of this, a university-wide or multi-university study could be considered. For greater generalizability, this study could be extended to include a national sample and include universities that do and do not require college-level SLEs. As with any survey requiring pre-/post-matching of surveys, the nature of the participant attrition limited the number of useable surveys since only completed and matched pre- and post-experience survey responses were used.

CONCLUSION

This paper explored the drivers of future volunteering and found that the TMI predicted future volunteering decisions, satisfaction and perceived attitude change. From a theoretical perspective, the research further demonstrated the importance of the match between the underlying motivations to volunteer and the experience. The results also demonstrate the mediated relationship between the TMI and future volunteering intentions with both satisfaction and perceived attitude change as mediators. The results also serve as a warning to service-learning programs to ensure there is a match so the goals of the program (increased citizenship and volunteering behavior) are met. If not, quite the opposite may happen.

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