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The Matching of Motivations to Affordances in the Volunteer Environment:

An Index for Assessing the Impact of Multiple Matches on Volunteer Outcomes

Arthur A. Stukas   Keilah A. Worth

La Trobe University   Dartmouth Medical School

E. Gil Clary   Mark Snyder

College of St. Catherine   University of Minnesota

Please address correspondence concerning this article to Art Stukas, School of Psychological Science, La Trobe University, Bundoora, Victoria 3086, Australia. Tel. 61-3-9479-1515. Fax: 61-3-9479-1956. Email: A.Stukas@latrobe.edu.au.

Abstract

The functional approach to volunteerism holds that outcomes from volunteering (e.g., satisfaction and intentions to remain a volunteer) are a function of the match between a volunteer's motivations and affordances to meet those motivations found in the environment (i.e., the volunteer activities, position, or organization). In this paper, we introduce an index for calculating a volunteer's total number of matches across six motivational categories identified by past research (e.g., Clary & Snyder, 1991). We demonstrate that this index predicts outcomes better than motives or affordances alone and as well as any univariate match index (i.e., in a particular motivational category). Following logic about strong and weak situational contexts (e.g., Snyder & Ickes, 1985), we demonstrate that the magnitude of the total matches effect may be greater when organizational contexts are less structured and smaller when contexts are more structured. We discuss theoretical and practical benefits of this Total Match Index.

The Matching of Motivations to Affordances in the Volunteer Environment:

An Index for Assessing the Impact of Multiple Matches on Volunteer Outcomes

Of the choices available to people in their leisure time, one activity has captured the attention of policymakers, community activists, religious leaders, and social scientists: volunteerism. Volunteers provide assistance free of charge to those who need help -- the lonely, the ailing, the grieving, and the destitute-- and in doing so, fill gaps that communities do not fill on their own or have overlooked. Moreover, volunteers can act as the social glue that links disparate members of a multicultural society, contributing to the greater public good through the creation of social capital. Given the benefits that volunteers provide to society, recipients of services, and to volunteers themselves (see Snyder, Omoto, & Lindsay, 2004), it is not surprising that there is interest in knowing who volunteers and especially why-- namely the personal and social motivational forces that lead people to act in prosocial ways.

The functional approach is a psychological perspective on the motivations for community involvement and service (Clary & Snyder, 1991; Snyder, Clary, & Stukas, 2000). Beginning with the question "why volunteer?" and the findings of research on the functions that attitudes serve for people (e.g., Katz, 1960; M. B. Smith, Bruner, & White, 1956), Clary and Snyder (1991) reviewed the (then incipient) literature on volunteerism and proposed a theoretically-derived set of motivations for volunteerism. A survey instrument, the Volunteer Functions Inventory (VFI; Clary, Snyder, Ridge, Copeland, Stukas, Haugen, & Miene, 1998), was created to assess six primary motives for volunteerism: 1) to express important values; 2) to better understand the world and its people; 3) for positive self-enhancement 4) for protective effects against guilt, self-doubt and other negative feelings; 5) to fit into one's social reference groups; and) to obtain career skills and opportunities. In line with other motivational theories (e.g., Lewin, 1936; Allport, 1937; and Murray, 1938), the functional

account proposed that volunteers who saw a particular motive as important would be likely to pursue a volunteer activity for that purpose (see Snyder & Cantor, 1998, for a theoretical discussion).

However, not all volunteer activities offer opportunities to meet every motivation (Clary, Snyder & Stukas, 1996). In accord with other theorists (e.g., Lewin, 1936), the functional theorists recognized that volunteers may seek activities that serve a particular function, but if the activities do not offer ways to satisfy that function, then behavior will ultimately drop off. Thus, the functional approach also directs attention to the social and physical environments that provide contexts for a person's behavior. In particular, this approach predicts that when volunteers' important motivations for service are paired with features of the environment that allow them to engage these motivations, then these volunteers will be more satisfied and more likely to continue volunteering in the future. This prediction, following from the functional approach's "matching principle," highlights the benefits of a match between personal motivations and environmental affordances; it also equates with Lewin's (1951) dictum that behavior is a function of the person and the environment [$B = f (P, E)$]. Although a strict "behaviorist" approach (e.g., Watson, 1930) would focus solely on reinforcements in promoting behavior and producing satisfaction, as would other approaches that focus on an individual's construal of the environment (Rotter, 1972), the functional approach suggests that different environmental opportunities may be differentially rewarding to volunteers with different motivations. Thus, the importance of the motivation to the volunteer and the volunteer's belief that the environment affords the benefits associated with the motivation are thought to interact to produce volunteer outcomes.

Empirical studies with a range of different organizations have demonstrated that volunteers who do find that their tasks offer opportunities that allow them to fulfill their primary motivations are typically more satisfied, and intend to stay at their organizations longer, than volunteers who do not find activities that match their primary motivations (Clary et al., 1998; O'Brien, Crain, Omoto, &

Snyder, 2000; Stukas, Daly, & Cowling, 2005). The "matching principle" has also been supported in laboratory and field studies of recruitment into volunteer activities, showing that messages targeting the primary motives of volunteers are more influential than those that do not (Clary, Snyder, Ridge, Miene, & Haugen, 1994; Clary et al., 1998; Omoto, Snyder, & Smith, 1999; D. M. Smith, Omoto, & Snyder, 2001). More recently, Stukas et al. (2005) have demonstrated that important indicators of social capital within a society are higher for those who report successful (i.e., matched) volunteer experiences.

Most of these past studies examined the six motives separately, on the assumption that different volunteers may have different reasons for volunteering. And in most, appropriately, it is the "match" (i.e., high motive scores and high affordance scores intersecting) that best predicts volunteer outcomes rather than just the content of a particular motivation. To illustrate, in Clary et al.'s (1998) Study 6, volunteers performing service in a variety of organizations reported the importance of the six VFI motivations before starting their service and, then, after several months of service, reported on the "functional benefits" (i.e., affordances) and important volunteer outcomes (i.e., satisfaction and intentions to volunteer in the future) of their service. These researchers calculated "matches" by first separating each motivation scale at its median to identify groups that saw each motivation as relatively important or unimportant. Then, the same procedure was followed to separate those receiving "high" affordances or "low" affordances for the six categories. Finally, planned comparisons tested whether the high motive – high affordance group had significantly different and better outcomes than volunteers who fell into the other three quadrants. Clary et al.'s (1998) Table 4 shows these significant results across the six motivation categories and for a number of key outcomes. Stukas et al. (2005) used the same framework with Australian volunteers, although others have used different means of identifying matches (see Davis, Hall, & Meyer, 2003; Tschirhart, Mesch, Perry, Miller, & Lee, 2001).

The functional approach has some similarity to frameworks used to study "person-environment fit" with paid employees (see Kristof-Brown, Zimmerman, & Johnson, 2005). Both examine how features of persons (volunteers, employees) and features of environments (positions, workgroups, organizations) predict satisfaction, turnover, and performance. Both highlight the subjective nature of matching or fit, suggesting that a person's *perceptions* of the environment may be more important in constructing fit indices than actual objective assessments of the environment (e.g., Kristof-Brown et al., 2005). However, unlike many approaches to person-environment fit, the functional approach explicitly predicts that "high motivation – high affordance" matches will be more influential than "low motivation – low affordance" matches. This makes sense when the content area for the assessment of person and environment relations is motivation, because low motivation may be associated with undesirable outcomes (e.g., lowered intentions to continue or poor performance; Deci & Ryan, 1985).

With these specific premises, the functional approach has contributed to understanding volunteerism – an area where motivational factors may be of central importance for satisfaction and commitment, given the more flexible arrangements (such as lack of contracts or pay) that volunteers have with organizations, in comparison to the paid employees studied in the person-environment fit literature. The matching principle should enable organizations to improve both recruitment and retention of volunteers (for reviews, see Snyder, Omoto, & Lindsay, 2004; Stukas, Daly, & Clary, 2006; Stukas, Snyder, & Clary, in press). However, volunteer coordinators are faced with a complex task when it comes to applying the functional approach in their organizations. Specifically, we now ask how an understanding of the interplay of volunteers' motivations and the volunteering environment could be useful for organizations that work with volunteers who come with a collection of more and less important motivations, and thus a collection of matches and mismatches.

Total Number of Matches

Indeed, the functional approach suggests that different motives may be more or less important for different individuals, and that different organizations may allow volunteers to satisfy their primary motives to greater or lesser degree. However, in contrast to many models used to test person-environment fit (e.g., O'Reilly, Chatman, & Caldwell, 1991), it is not clear that matching unique patterns of motivations with unique patterns of affordances would necessarily result in more satisfied and committed volunteers (partly because the "low – low" match may not relate positively to important outcomes). Such an idiographic model would also prove difficult to implement on a practical level. Instead, a more parsimonious way of identifying volunteers who are likely to sustain their commitment is needed, and one possibility is that "more is better" such that volunteers who (a) find more of the functional approach's six motivations to be important and who (b) see that more of those motives can be satisfied by affordances in the volunteer activity will be more satisfied than volunteers who have either less motivation or see less opportunity (but see Puffer & Meindl, 1992, for a contrasting view).

We propose that an index of the number of matches attained by a volunteer at an organization may be a practical and important predictor of outcomes. This index should be easily calculated for each volunteer (who would provide ratings of motives and functional affordances) and could therefore overcome earlier difficulties that organizations may have faced in integrating a blend of matches and mismatches assessed in their volunteer population as a whole. Indeed, the univariate relations between a match on any given motivational category and any given outcome may actually underestimate the potential predictive value of matching, and an aggregated index of the number of matches reported by a volunteer may prove to be the best predictor of a range of outcomes for him or her.

A recent pilot study of Australian volunteers has provided suggestive data. Using the VFI, Stukas et al. (2005) replicated past tests of the "matching principle" by showing that volunteers who found certain motivations to be of key importance to them and also felt that they had been able to

satisfy these motives in their activities, were also those who felt more satisfied, more likely to plan to continue volunteering, and greater trust and sense of community, the hallmarks of contributions to social capital. Interestingly, the univariate relations held for some, but not all, of the motivations and outcomes (e.g., matches for the career motivation were unrelated to outcomes in this sample). Relevant to the current study is an analysis that demonstrated that volunteers who reported a greater number of "high motive – high affordance" matches were more satisfied than volunteers who reported a lower number of matches; indeed, a linear relation was found between "number of matches" (calculated by adding the number of times a volunteer fell into the "high – high" quadrant) and several important volunteer outcomes[1]. However, this sample was small (less than 100 volunteers) and limited to volunteers from only two organizations.

One drawback of calculating matches using the median (or mean) of each sample's scores on each motive and functional benefit measure is that this information isn't always readily available when an organization is considering a particular volunteer. The functional approach suggests, too, that the median for a particular motive or benefit may be different for different samples, organizations, or activities. As such, a method for calculating matches that can be used with individual volunteers is needed. In the current research, which examines a very large sample of volunteers drawn from a large number of organizations in seven broad domains, we examined the measurement of motivations and outcomes, and how these can be combined to generate an index of total matches for each volunteer. Our solution is a simple one: we multiply each motive score by its corresponding affordance score and sum across the six motive categories. Besides being easy to calculate, a multiplicative product also resonates with other well-known heuristic formulas in psychology; e.g., the classic Expectancy-Value models (Feather, 1982) that predict goal-driven behavior by multiplying a person's subjective likelihood of success (expectancy) by the importance of the goal (value). Similarly, we used this index

to predict important outcomes: satisfaction with volunteer activities, positive or negative emotions in response to activities, and intentions to volunteer at the same organization or at a different organization. Given that models of the interactive effects of personal and environmental features with multiplicative interaction terms may also include within them the influence of main effects of personal or environmental features on outcomes (e.g., Kristof-Brown et al., 2005), we include analyses that consider whether our total match index predicts outcomes above and beyond the predictive ability of (a) motives and benefits alone; and (b) any given univariate match score.

Contextual Moderators

There may be drawbacks to reducing the complexity of the functional approach to a single index. As every volunteer action takes place in a context, often an organizational one (e.g., Penner, 2002), there may be contexts for which the total number of matches is not the best predictor of outcomes. There may be important contextual "moderators" that determine when the total number of matches will and will not be a good predictor of outcomes. This analysis follows Snyder and Ickes' (1985) argument that situations vary according to how much they proscribe behavior through strong norms, rules, or pressures to act (referred to as "strong situations") versus how much they allow people to act on their own internal impulses in the absence of such norms (referred to as "weak situations"). Snyder and Ickes proposed that personality traits are better predictors of behavior in weak situations whereas traits (and other dispositional characteristics, including motivations) are less predictive of behavior in strong situations. In volunteer organization contexts, then, there may be features of organizations that make "strong situations" more frequent and aspects of these strong situations may better predict volunteer outcomes than an individual's motives or the sense that motives have been satisfied. That is, some organizations may have practices that help to retain and satisfy volunteers quite apart from their ability to offer opportunities to satisfy important motives. These organizations may

have ways of binding volunteers to them, by providing structured and organized channels for behavior, that may require less motive-specific effort by volunteers or which may lock them into a committed course of action. Alternately, other volunteer organizations may be less structured, with fewer organizational rules or procedures, and in these "weak volunteer situations," a volunteer's own motives and sense that affordances match these motives may be better predictors of outcomes.

Thus, we propose that there are qualities of organizations, their procedures, or structures that differentiate those for which the total number of matches should be a good predictor of volunteer outcomes and those for which total number of matches should be less important in explaining outcomes. Organizations with more structure, that involve volunteers working in conjunction with clients and other volunteers (who enforce the norms and rules), with supervision and ongoing contact from support staff or coordinators, and with such things as position descriptions and evaluations, may create an environment where motivation can ebb and flow but outcomes remain comparatively stable. Such factors may provide more order and organization for volunteers by providing clear guidelines and constraints that limit behavioral options and variability. In comparison, organizations that leave it to volunteers to create their own positions and to be self-directed, and which do not work actively to locate their volunteers within the organizational mission or framework, may have volunteers whose outcomes are more closely tied to their own motives and the opportunities they find to satisfy them within the organization or activities at hand. To test this hypothesis, after examining the relations between our total match index and key outcomes, we conducted analyses to determine whether these relations are moderated by the relative amount of structure apparent in the volunteer organizations.

Therefore, with a new strategy designed to capture the total number of matches between a volunteer's primary motivations and the affordances available in the volunteer environment, we hope to advance the functional approach to volunteerism both practically and theoretically. Practically, we

believe that organizations can benefit from having an index of matching that can be calculated for any individual volunteer, without reference values from the larger population of volunteers. If the Total Match Index successfully predicts important outcomes, then it may prove useful as a tool for coordinators who seek to optimize volunteers' experiences and outcomes. Theoretically, this new tool better captures the premise that volunteers come to their service with a collection of motives, not all of which may be met by any activity or organization. Having a summary measure of matching allows us to examine relations between matching at the collective level and important volunteer outcomes, while also testing predictions about the moderation of matching effects by other contextual variables.

<div align="center">Method</div>

Participants

Volunteers (N = 1388; 70.3% female, 28.8% male, and 0.9% who did not indicate their gender) were surveyed from organizations in the Minneapolis and St. Paul metropolitan areas affiliated with the Volunteer Resource Center, a regional volunteer referral and placement agency. The mean age of the participating volunteers was 53.79 years ($\underline{SD}$ = 18.38). On average, they had served as volunteers at their current organization for 48.41 months ($\underline{SD}$ = 58.44), contributing an average of 13.60 hours per month ($\underline{SD}$ = 16.81). Their mean length of other volunteer experience, prior to their current job was 12.04 years ($\underline{SD}$ = 12.77). Other demographic characteristics are available in Tables 1 and 2.

To recruit participants, letters of invitation were sent to the 381 affiliates of the Volunteer Resource Center. Eighty-five affiliated organizations signed up to participate in the study and volunteers from 83 of these organizations completed the questionnaire. These organizations fell into 10 of the 15 categories used by the Independent Sector (1999) to classify volunteer activities, services and organizations: arts, culture and humanities (N = 181); recreation (N = 5); human services (N = 444); public/society benefit (N = 89); health (N = 219); youth development (N = 82); international/foreign (N

= 24); political organizations (N = 17); environment (N = 141); and education and instruction (N =

104). Given that very few respondents came from recreation, political or international organizations,

which is consistent with national trends in volunteerism (Independent Sector, 1999), only seven

categories were used in analyses examining differences by category.

Measures

Characteristics of Current Volunteer Job. The first section of the questionnaire asked

participants, in an open-ended format, to describe their current volunteer work environment: where

they worked,; what they did at that organization; whether they worked with clients, other volunteers, or

paid staff; the number of hours per week they volunteered; how long they had worked at this

organization; and years of volunteer experience before volunteering at this organization.

Volunteer Functions Inventory (VFI). Participants' motivations for volunteering were assessed

using the 30-item Volunteer Functions Inventory (Clary et al., 1998) that focuses on six functions

(assessed with five items each) that volunteering can serve: Values ($\underline{M}$ = 5.61, $\underline{SD}$ = 1.21, α = .76; e.g.,

"I am genuinely concerned about the particular group I am serving"); Understanding ($\underline{M}$ = 4.52, $\underline{SD}$ =

1.44, α = .80; e.g., "Volunteering allows me to gain a new perspective on things"); Enhancement ($\underline{M}$ =

4.03, $\underline{SD}$ = 1.47, α = .82; e.g., "Volunteering makes me feel better about myself"); Social ($\underline{M}$ = 2.98,

$\underline{SD}$ = 1.43, α = .81; e.g., "People I'm close to want me to volunteer"); Protective ($\underline{M}$ = 2.76, $\underline{SD}$ = 1.36,

α = .78; e.g., "Volunteering is a good escape from my own troubles"); and Career ($\underline{M}$ = 2.13, $\underline{SD}$ =

1.50, α = .89; e.g., "Volunteering experience will look good on my résumé"). Participants indicated on

7-point scales (1 = "not at all" to 7 = "extremely") how important or accurate each reason for

volunteering was for them.

Environmental Affordances. Participants reported their experiences of functional affordances

when doing their volunteer work using a 12-item measure designed for this purpose. Each item was

measured on a 7-point scale (1= "not at all accurate" to 7 = "extremely accurate"). Affordances linked to the six functions of volunteering were assessed with two items each: Values ("I am meeting my humanitarian obligations through my volunteer work at this organization" and "Through volunteering here, I am doing something for a cause that I believe in"; M = 4.81, SD = 1.44; α = .41); Understanding ("My volunteerism has allowed me to think about my life in new ways" and "I have learned how to deal with a greater variety of people through volunteering at this organization; M = 4.57, SD = 1.66; α = .70); Enhancement ("My self-esteem is enhanced by performing volunteer work in this organization" and "I feel more positive about myself and my place in the world as a result of my volunteer work"; M = 4.32, SD = 1.67; α = .78); Social ("I am meeting social obligations through my volunteer work" and "My family and/or friends would be disappointed if I stopped volunteering at this organization"; M = 2.16, SD = 1.38; α = .46); Protective ("Volunteering at this organization allows me the opportunity to escape some of my own troubles" and "By volunteering at this organization, I have been able to work through some of my own personal problems"; M = 2.16, SD = 1.55; α = .86); and Career ("In volunteering with this organization, I made new contacts that might help my business or career" and "I have learned skills that help me in my paid work"; M = 2.08, SD = 1.58; α = .79).

Emotions. Volunteers indicated their emotional response to their activities on eight items, organized into positive and negative scales. Volunteers rated their experiences on 7-point scales (ranging from "not at all" to "extremely"). The positive scale asked participants how rewarding, exciting, interesting, enjoyable, and fulfilling their experience volunteering at the organization had been (M = 5.64, SD = 1.03; α = .87), whereas the negative scale asked participants how emotionally draining, frustrating, and disappointing their experience had been (M = 2.22, SD = 1.16; α = .74).

Satisfaction. Satisfaction with volunteer work was assessed with a single item, "How satisfying is your experience at this organization?" (M = 6.01, SD = 1.11), using a 7-point scale ranging from "not at all satisfying" to "extremely satisfying".

Intentions to Volunteer in the Future. Two questions[1] assessed volunteers' intentions to volunteer in the future: "How likely is it that you will be volunteering for this organization in one year?" (M = 6.23, SD = 1.41) and "How likely is it that you will be volunteering for a different organization in one year?" (M = 3.67, SD = 2.21). Participants responded on 7-point scales, where 1= "not at all likely" and 7= "extremely likely".

Demographic Information. Finally, volunteers provided background demographic information, including age, gender, racial or ethnic background, current employment status, highest level of education completed and marital status.

Information about Organizations. We conducted phone interviews with representatives of each of the 85 participating organizations to collect information about the volunteer environments in which volunteers performed their jobs. For example, they were asked whether they have a volunteer coordinator or director and whether there are regular performance evaluations of volunteers. We also collected information about the paid employees at each organization (number, full-time or part-time status), the types of clients served by the organization, the membership of each organization's governing board, and the physical resources of the organization (e.g., computers).

Procedure

Organizations were invited to participate by letter from the Volunteer Resource Center. A staff member at each organization subsequently invited their volunteers to participate. Smaller organizations invited all of their volunteers, but larger organizations were asked to select a random subset of their volunteers. The survey was available both in a paper and pencil format and *via* the Internet. Hard

copies were distributed to volunteers by a member of their organization to be returned directly to the

Volunteer Resource Center, whereas those who completed the survey on-line were emailed a link to the

survey by their organization. Three thousand and ninety paper surveys were distributed and 1019 were

completed (32.9%). One thousand and one web survey invitations went out over email, and 369

participants completed the web version (36.9%). Very few differences emerged between these two

samples; however, the web sample was significantly younger ($\underline{M}$ = 43.10, $\underline{SD}$ = 15.45) than the paper

sample ($\underline{M}$ = 57.55, $\underline{SD}$ = 17.85).

<div align="center">Results</div>

<u>Calculating Matches</u>

We calculated indices of each match between a motive score and environmental affordance

score, separately, by multiplying these scale responses together for each of the six motive categories

(e.g., VFI Values score * Values affordance score). Scores then ranged from 1 to 49, with higher scores

indicating that both motives and functional benefits were high – a match (in our terminology, wherein

low-low "matches" are not predicted to promote positive outcomes): Values Index ($\underline{M}$ = 27.90, $\underline{SD}$ =

11.57), Understanding Index ($\underline{M}$ = 22.34, $\underline{SD}$ = 12.48), Enhancement Index ($\underline{M}$ = 19.18, $\underline{SD}$ = 12.00),

Protective Index ($\underline{M}$ = 7.47, $\underline{SD}$ = 8.49), Social Index ($\underline{M}$ = 7.33, $\underline{SD}$ = 7.46), and Career Index ($\underline{M}$ =

6.26, $\underline{SD}$ = 9.18). To create the Total Match Index (TMI), we simply summed these six indices: TMI

($\underline{M}$ = 89.91, $\underline{SD}$ = 43.52; range 6.00 to 271.90; α = .80). Table 1 reports the means and standard

deviations for the TMI and all five of our outcomes across a variety of demographic categories.

<div align="center">[table 1 here]</div>

As can be seen in Table 1, organizations focused on health issues had volunteers with

significantly higher TMI scores than organizations focused on public benefit (all other organizations

did not differ). Women, persons of color, and volunteers under 35 years old had higher TMI scores than

their comparison groups. Health volunteers were also highest in satisfaction, positive emotion, and

intentions to remain at the current organization, whereas youth development volunteers scored lowest

in satisfaction, highest in negative emotion, and among the lowest in intentions to remain at the same

organization. However, caution should be applied when interpreting differences based on organization

type, due to the within-domain variability apparent in our sample (as a result of many organizations

within each domain, sometimes with small numbers of volunteers). Readers should also be aware that

our analyses focused on breakdowns by age, race, gender, and so on, contain overlapping samples and

thus the results are not independent.

Total Match Index and Volunteering Outcomes

The key test of our new index is whether it successfully predicts important volunteer outcomes.

Using linear regression analyses with the full sample, we found significant relations between the TMI

and satisfaction ($\beta = .25$, $\underline{r}^2 = .06$, $\underline{t}(1311) = 9.41$, $\underline{p} < .001$), positive emotion ($\beta = .40$, $\underline{r}^2 = .16$, $\underline{t}(1302)$

$= 15.62$, $\underline{p} < .001$), negative emotion ($\beta = .12$, $\underline{r}^2 = .02$, $\underline{t}(1308) = 4.48$, $\underline{p} < .001$), and intentions to

remain at the same organization ($\beta = .10$, $\underline{r}^2 = .01$, $\underline{t}(1315) = 3.46$, $\underline{p} = .001$). The TMI was only

marginally related to intentions to volunteer at another organization ($\beta = .05$, $\underline{r}^2 = .002$, $\underline{t}(1268) = 1.78$,

$\underline{p} = .076$). Table 2 shows these results and the zero-order relations between TMI and volunteer

outcomes.

[table 2 here]

Across most organizational and demographic categories, the TMI was a good predictor of satisfaction

and positive emotion in volunteer activities. Negative emotion was also significantly predicted by TMI

overall and for many different types of volunteers, perhaps representing the challenge presented by

volunteer work that meets multiple motivations simultaneously. Relations between TMI and intentions

to volunteer in the future, either at the same organization or at a different one, were noticeably smaller,

potentially reflecting the likelihood of such decisions to be influenced by other variables in addition to

motivations and their fulfillment. Although differences between demographic categories seem

apparent, in most cases these sub-group differences were not significant.

Total Match Index As Compared to Motives and Affordances

Was the TMI is as good a predictor as either motive scores or environmental affordances alone?

To demonstrate that the new match index (representing the interaction between motives and benefits)

predicts outcomes over and above the main effects of motive and benefits, we performed hierarchical

regression analyses on each volunteer outcome by entering the motive and affordance totals (summed

across the six categories) on the first step of the regression and the TMI on the second step. As Table 3

shows, the TMI predicted a significant amount of variance in four of five outcomes (save only

intentions to volunteer elsewhere), even after controlling for the effects of motives and benefits alone.

[table 3 here]

Total Match Index as Compared to Univariate Match Indices

Was the TMI a better predictor than any of its constitutent univariate match indices? We

performed regression analyses to demonstrate that the aggregated index was able to explain variation in

volunteer outcomes beyond any single univariate match on its own (see Table 4).

[table 4 here]

For satisfaction, the TMI was always a better predictor than any single match variable alone, adding

variance beyond these univariate predictors (r^2_{change} ranged from .007 to .076). The same result held for

positive emotion, with r^2_{change} ranging from .013 to .146. For negative emotion, the TMI added

significant predictive ability four out of six times (ranging from $r^2_{change} = .007$ to .038) with only

marginal increases in prediction beyond understanding and career matches; the values match and the

enhancement match indices were not significant univariate predictors. For intentions to remain at the

same organization, TMI predicted additional variance beyond the predictive ability of the protective, social, and career match indices; however, only small amounts of variability were predicted after values, understanding or enhancement match indices were controlled. For intentions to volunteer at a different organization, a slightly different pattern was found, with significant variance accounted for by the TMI after enhancement, protective and social match indices were controlled, but no significant increase above values, understanding, or career. In this final analysis, only career and understanding were significant univariate predictors. Thus, the TMI proved a handy tool, providing a useful summary of a volunteer's matches and mismatches, that predicts as well or better than any single match index alone.

Moderation by Organizational Context

Despite the strong relation of the TMI to volunteer outcomes, there may be contexts in which motivations and their fulfillment are not as important in predicting outcomes. Organizational contexts that feature strong situations with clear norms or rules for behavior, and contact with others who uphold such norms, are likely to be contexts in which motivations and other person-centered factors are less influential on outcomes; contexts that involve weak situations (the converse) should allow the TMI to better predict outcomes. To examine the potential moderating effect of organizational characteristics, we tallied a number of "yes or no" questions about organizational or task-based features from the survey. Volunteers had indicated whether they typically worked directly with clients, with other volunteers, or with paid staff, and a representative from each organization had indicated whether there was a volunteer coordinator or performance evaluations for volunteers at their organization. If volunteers indicated that they worked with any of these groups or if these other two characteristics existed at their organization, they were given one point, thereby yielding a variable that ranged from 0

to 5 ($\underline{M}$ = 3.58, $\underline{SD}$ = 0.91). Only one volunteer indicated that none of these characteristics applied; most volunteers scored three (28.0%) or four (46.6%); see Table 5 for frequencies.

[table 5 here]

To test whether the organizational context moderated the effects of total matches on volunteer outcomes, we created an interaction term by first centering and then multiplying our organizational context variable by the (centered) TMI, and entered it on the second step in all regression analyses (i.e., after entering organizational context and TMI on the first step, as instructed by Baron & Kenny, 1986). The interaction term, and therefore the moderation analysis, was significant for the analyses involving satisfaction, positive emotion, and intentions to volunteer at a different organization (see Table 6).

[table 6 here]

Interestingly, on its own, our organizational context variable does not predict volunteer outcomes significantly (at least not when entered in conjunction with TMI); instead its role does seem to be as a moderator, determining when TMI will be a stronger or weaker predictor of outcomes.

To display these interactions graphically, we present scatterplots in Figures 1 through 3, showing each data point plotted with TMI on the x-axis and the relevant outcome on the y-axis.

[figure 1, figure 2, figure 3 here]

To show how TMI was related to the outcome differently at structured "strong" and unstructured "weak" levels of organizational context, we plotted two regression lines on each figure. One (dotted) regression line shows the relation for volunteers who indicated that their organization or position involved a more impoverished context (2 or fewer characteristics; called "low structure"; N = 157) and a second (solid) regression line shows the relation for volunteers who indicated a more structured organizational context (all 5 characteristics; called "high structure"; N = 159). Figures 1 and 2 show that when the organizational context is less structured, or more impoverished, then the TMI is a

stronger predictor of satisfaction (low structure r = .30 vs. high structure r = .10) and positive emotion (low r = .48 vs. high r = .36). Conversely, Figure 3 shows that TMI is a negative predictor of intentions to volunteer elsewhere when structure is low (r = -.09), but a positive predictor when structure is high (r = .18).

Discussion

Our survey of over 1000 volunteers in over 80 organizations from a broad range of domains demonstrates the potential for the Total Match Index as a predictor of important volunteer outcomes. This index represents the multiplicative product of the importance of volunteers' individual motivations and their subjective experience of affordances in the volunteer environment, summarized across the six motivations of the functional approach to volunteerism (e.g., Clary et al., 1998). This new way of calculating matches enabled us to predict satisfaction and intentions to remain at the same organization in the future, consistent with Clary et al. (1998). Moreover, we showed that the TMI could predict experiences of both positive and negative emotion in volunteer organizations. We expected that the more that volunteers found affordances in the environment related to their motives, the more they would find their experience rewarding, exciting, interesting, enjoyable, and fulfilling – in addition to the overall satisfaction they feel. However, we did not expect that these same volunteers would also find their experience somewhat more emotionally draining, frustrating, and disappointing. Clearly, this outcome needs further examination, for it is possible that those volunteers who are most motivated and best able to satisfy their motivations are also those who have the highest expectations for the impact of their service for recipients, an outcome that is by no means guaranteed.

For all four outcomes, the TMI added significant predictive ability even after controlling for motives and affordances. Aside from demonstrating that these interactive effects do not capitalize on the main effects contained within the index, these effects suggest, as the functional approach maintains,

that it is not enough simply to know the motivations of volunteers or the affordances they report to be able to predict outcomes such as satisfaction or future intentions. Analyses that examine only main effects of motives on volunteer outcomes (e.g., Finkelstein, Penner, & Brannick, 2006; Liao-Troth, 2005) may therefore yield only modest effects if the volunteer's assessment of the affordances in their environment is not incorporated. Additionally, the TMI was generally a better predictor of outcomes than any single univariate match index. Again, because different volunteers may have different goals for their service, aggregating matches across motivations ensures that volunteers are "given credit" for their successful experiences in a way that choosing any single motivational category might miss. We also attempted to predict volunteers' intentions to volunteer at a different organization in the future; however, this effort was less successful. Perhaps this is because we were unable to determine whether volunteers saw this question as asking whether they would leave their current organization to move to a new one, or whether they anticipated volunteering at more than one organization. But, perhaps a more cogent reason why the TMI was not a good predictor of these intentions in the entire sample is because this relation was moderated by the organizational context.

Following a theoretical analysis laid out by Snyder and Ickes (1985) about "strong" and "weak" situations, we examined volunteers according to the extent to which their volunteer environments were relatively impoverished (e.g., the volunteer worked alone rather than with others) or unstructured (e.g., without a volunteer coordinator or performance evaluations). According to Snyder and Ickes, individual differences may be more strongly influential on behavior and outcomes in weak situations that have fewer clear norms or rules. Thus, we expected that the TMI, based on individual differences in motivations yoked to relevant experiences, would be more predictive of outcomes when the volunteer environment was less rather than more structured. Our moderation analyses show exactly that: the relation between TMI and both satisfaction and positive emotions was stronger for volunteers

in less structured "weak" environments than in more structured "strong" environments (although these relations were still significant in both contexts).

With regard to intentions to volunteer at a different organization, a different pattern emerged. The TMI was a <u>negative</u> predictor in less structured environments, suggesting that volunteers may have seen this as a measure of whether they planned to leave their current organization (i.e., dissatisfaction). Those experiencing more successful volunteer service (i.e., a higher TMI) may be less likely to want to leave their current position. In more structured environments, the TMI was a positive predictor of intentions to work at a different organization, suggesting either that volunteers with more matches sought additional experiences or that they might be dissapointed or satiated in more structured environments. Nevertheless, intentions to volunteer elsewhere were, on the whole, much lower than intentions to continue at the same organization. This, then, is a question for future research with research tools designed expressly for this purpose. A thorough examination of volunteer environments in all their variety, with an emphasis both on functional affordances and situational contexts, is needed.

Aside from its benefits as a research tool, the logic of the Total Match Index makes it more practically useful for organizations than earlier methods for calculating motivational matches (e.g., Stukas et al., 2005; Tschirhart et al., 2001). The TMI can be calculated for any given volunteer without knowledge of the median or mean on a particular scale in a particular sample. Of course, higher scores are more likely to indicate successful volunteerism than lower scores, although the relative distribution of scores in a sample may vary according to the nature of the task and organization. Our research suggests that TMI's of 90 may be average. Organizations may work with volunteers with lower TMI's to identify ways to incorporate or make salient affordances to important motivations or help individuals reflect on their own motives for service. Readers should note, however, that these data were collected from a sample of relatively older volunteers with a reasonably lengthy (on average) tenure at their

current organizations, which may have helped to determine our effects. Indeed, we might expect some of our effects to be even larger in a sample with greater variability in volunteer characteristics. Nevertheless, caution should be used when generalizing our results to different types of volunteers.

We note too that our survey of a large number of volunteers in a large number of organizations with a large number of purposes could not be particularly specific about the types of affordances available to volunteers to meet the motives indicated by the VFI. Nor did we attempt to determine whether other motives might be relevant to particular volunteers in particular types of organizations (e.g., the "community concern" motive identified by Omoto & Snyder, 1995, in their study of volunteers working with people with HIV and AIDS). For these reasons, the smaller effects in the current study may underestimate the true power of the Total Match Index when used by volunteer coordinators in specific organizations.

Theoretically, we believe that the TMI captures something that earlier functional analyses did not, namely, the aggregated effect of multiple motives, both important and unimportant, satisfied and unsatisfied, on volunteering outcomes. Although organizational research on person-environment fit might suggest that it is the patterning of motives and the relation of that pattern to features of the environment that best predicts satisfaction (e.g., Kristof-Brown et al., 2005; O'Reilly et al., 1991), our results suggest a more straightforward possibility -- the satisfaction of multiple important motivations in volunteering is linearly related to positive outcomes. Nevertheless, we recognize that the potential matches between a volunteer's motives and the affordances available are but one contributor to overall satisfaction. As Schneider (2001) noted, person – environment fit is likely to be multidimensional, and a volunteer's consequent thoughts, feelings, and behaviors are likely due to the many ways their personal characteristics intersect with organizational features. We remain convinced, however, when it

comes to freely chosen and unpaid work of volunteerism, motivation and the ability to meet one's goals and purposes in the environment will be of key importance to understanding these important outcomes.

In conclusion, we hope that readers find both theoretical and practical promise in this new summary measure of matches between volunteers' motivations and the environmental affordances that allow them to satisfy these motivations. As a handy predictor of important outcomes, such as satisfaction or intentions to remain at the same organization, it is one more implement in the volunteer coordinator's toolbox, helping to guide important decisions about volunteers, their placement and retention. As the starting point for further investigations of the moderating effects of organizational contexts, the Total Match Index can be a valuable research tool, lending conceptual elegance to research that takes a functional approach to the study of volunteerism. For both theory and practice, we hope that this approach better captures relations between individual volunteers with a collection of motives and volunteer organizations with an array of opportunities.

Notes

[1]Using a modified version of the VFI, Tschirhart et al. (2001) also proposed that a weighted aggregate of motive-affordance matches might be the best predictor of outcomes. In their study of "stipended" volunteers, Tschirhart et al. provided different weights to "high motive – high affordance", "high motive – low affordance", "low motive – high affordance" and "low motive – low affordance" combinations (by standardizing all scales and separating them into high and low groups at the mean), producing a formula to predict outcomes from the different combinations of motives and affordances (specifically, "high – high" matches earned 3 points, "low – high" and "low – low" combinations earned 2 points, and "high – low" matches, earned only 1 point). The total points earned, across the five motivational categories assessed, was a predictor of both volunteer satisfaction (explaining almost 8% of the variance) and intentions to volunteer in the future (explaining 4% of the variance).

[2]Intentions to volunteer at the same organization and intentions to volunteer at a different organization were uncorrelated therefore we did not aggregate them into a single index. We have retained both items as we believe there is an important conceptual distinction between them; moreover, taken together, these items have the potential to inform us about the long-term impact of an experience. That is, the effect of a volunteer experience, positive or negative, may be local (only affecting the current organization) or global (affecting current organization and volunteering generally).

Author Note

References

Allport, F. H. (1937). Teleonomic description in the study of personality. *Character and Personality, 5*, 202-214.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Clary, E. G., & Snyder, M. (1991). A functional analysis of altruism and prosocial behavior: The case of volunteerism. In M. Clark (Ed.), *Review of Personality and Social Psychology: Vol. 12* (pp.119-148). Newbury Park, CA: Sage.

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*, 1516-1530.

Clary, E. G., Snyder, M., Ridge, R. D., Miene, P., & Haugen, J. (1994). Matching messages to motives in persuasion: A functional approach to promoting volunteerism. *Journal of Applied Social Psychology, 24*, 1129-1149.

Clary, E. G., Snyder, M., & Stukas, A. A. (1996). Volunteers' motivations: Findings from a national survey. *Nonprofit and Voluntary Sector Quarterly, 25*, 485-505.

Davis, M. H., Hall, J. A., & Meyer, M. (2003). The first year: Influences on the satisfaction, involvement, and persistence of new community volunteers. *Personality and Social Psychology Bulletin, 29*(2), 248-260.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Feather, N. T. (Ed.) (1982). *Expectations and actions: Expectancy-value models in psychology*. Hillsdale, NJ: Erlbaum.

Finkelstein, M. A., Penner, L. A., & Brannick, M. T. (2006). Motive, role identity, and prosocial personality as predictors of volunteer activity. *Social Behavior and Personality, 33*(4), 403-418.

Independent Sector (1999). Giving and volunteering in the United States: Findings from a national survey (1999 edition). Washington D. C.: Author.

Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly, 24*, 163–204.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*, 281-342.

Lewin, K. (1936). *Principles of topological psychology*. New York: McGraw-Hill.

Lewin, K. (1951). *Field theory in social science*. New York: Harper.

Liao-Troth, M. A. (2005). Are they here for the long haul? The effects of functional motives and personality factors on the psychological contracts of volunteers. *Nonprofit and Voluntary Sector Quarterly, 34*, 510-530.

Murray, H. A. (1938). *Explorations in personality*. New York: Oxford University Press.

O'Brien, L. T., Crain, A. L., Omoto, A. M., & Snyder, M. (2000, May*). Matching motivations to outcomes: Implications for persistence in service.* Paper presented at the annual meetings of the Midwestern Psychological Association, Chicago, IL.

Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology, 68*, 671-686.

Omoto, A. M., Snyder, M., & Smith, D. M. (1999). [Unpublished Data]. Lawrence, KS: University of
Kansas.

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile
comparison approach to assessing person-organization fit. *The Academy of Management
Journal, 34*, 487-516.

Penner, L.A. (2002). Dispositional and organizational influences on sustained volunteerism: An
interactionist perspective. *Journal of Social Issues*, *58*, 447-467.

Puffer, S. M., & Meindl, J. R. (1992). The congruence of motives and incentives in a voluntary
organization. *Journal of Organizational Behavior*, 13, 425-434.

Rotter, J. B. (1972). *Applications of a social learning theory of personality.* New York: Holt.

Schneider, B. (2001). Fits about fit. *Applied Psychology: An International Review, 50*, 141-152.

Smith, D. M., Omoto, A. M., & Snyder, M. (2001, June). *Motivation matching and recruitment of
volunteers: A field study*. Presented at the annual meetings of the American Psychological
Society, Toronto, Canada.

Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality*. New York: Wiley.

Snyder, M., & Cantor, N. (1998). Understanding personality and social behavior: A functionalist
strategy. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th
ed., Vol. 1, pp. 635–679). New York: McGraw-Hill.

Snyder, M., Clary, E. G., & Stukas, A. A. (2000). The functional approach to volunteerism. In G. R.
Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 365-393). Mahwah
N.J.: Lawrence Erlbaum.

Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.),
The handbook of social psychology (3rd ed., Vol. 2, pp. 883-947). New York: Random House.

Snyder, M., Omoto, A. M., & Lindsay, J. J. (2004). Sacrificing time and effort for the good of others: The benefits and costs of volunteerism. In A. Miller (Ed.), *The social psychology of good and evil* (pp. 444-468). New York: Guilford.

Stukas, A. A., Daly, M., & Clary, E. G. (2006). Lessons from research on volunteering for mobilizing adults to volunteer for positive youth development. In E. G. Clary & J. E. Rhodes (Eds.), *Mobilizing adults for positive youth development: Strategies for closing the gap between beliefs and behaviors* (pp. 65-82). New York, NY: Springer.

Stukas, A. A., Daly, M., & Cowling, M. J. (2005). Volunteerism and social capital: A functional approach. *Australian Journal on Volunteering, 10*(2), 35-44.

Stukas, A. A., Snyder, M., & Clary, E. G. (in press). The social marketing of volunteerism: A functional approach. In C. P. Haugtvedt, P. Herr, & F. Kardes (Eds.), *Handbook of consumer psychology*. Mahwah, NJ: Erlbaum.

Stukas, A. A., & Tanti, C. (2005). Recruiting and sustaining volunteer mentors. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 235-250). Newbury Park, CA: Sage.

Tschirhart, M., Mesch, D. J., Perry, J. L., Miller, T. K., & Lee, G. (2001). Stipended volunteers: Their goals, experiences, satisfaction, and likelihood of future service. *Nonprofit and Voluntary Sector Quarterly, 30*(3), 422-443.

Watson, J. (1930). *Behaviorism*. New York: Norton.

Author Bios

Art Stukas is Senior Lecturer in the School of Psychological Science at La Trobe University in Melbourne, Australia, an Associate (Individual) Member of Volunteering Australia, and a collaborating investigator of the Center for the Study of the Individual and Society at the University of Minnesota. Keilah A. Worth is a research associate at the Norris Cotton Cancer Center at Dartmouth Medical School (Hanover, NH). Gil Clary is Professor of Psychology at the College of St. Catherine, St. Paul MN, USA, and a faculty affiliate of the Center for the Study of the Individual and Society at the University of Minnesota. Mark Snyder is a member of the faculty in psychology at the University of Minnesota where he holds the McKnight Presidential Chair in Psychology and is Director of the Center for the Study of the Individual and Society.

Table 1.

Means and Standard Deviations for Total Match Index and Outcomes by Demographic Categories.

	TMI	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*
All Volunteers *(N = 1314-1368)*	89.91 *(43.52)*	6.01 *(1.11)*	5.64 *(1.03)*	2.22 *(1.16)*	6.23 *(1.41)*	3.67 *(2.21)*

	TMI	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
Organization Type	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*	M *(SD)*
Education *(N = 101-104)*	83.95$_{ab}$ *(39.07)*	6.02$_{ab}$ *(1.03)*	5.50$_{ab}$ *(1.08)*	2.02$_{ab}$ *(0.96)*	6.26$_{ab}$ *(1.46)*	3.85$_{b}$ *(2.38)*
Human Services *(N = 431-440)*	92.50$_{ab}$ *(44.20)*	5.94$_{ab}$ *(1.16)*	5.60$_{ab}$ *(1.03)*	2.37$_{c}$ *(1.19)*	6.18$_{ab}$ *(1.38)*	3.80$_{b}$ *(2.17)*
Health *(N = 204-216)*	94.74$_{b}$ *(45.56)*	6.20$_{b}$ *(1.05)*	5.75$_{b}$ *(0.99)*	2.00$_{ab}$ *(0.99)*	6.41$_{b}$ *(1.18)*	2.91$_{a}$ *(2.10)*
Public Benefit *(N = 80-88)*	77.46$_{a}$ *(38.26)*	5.93$_{ab}$ *(1.03)*	5.38$_{a}$ *(1.14)*	2.31$_{bc}$ *(1.15)*	6.01$_{ab}$ *(1.76)*	3.76$_{b}$ *(2.11)*
Youth Dev. *(N = 80-82)*	92.37$_{ab}$ *(36.77)*	5.77$_{a}$ *(1.18)*	5.60$_{ab}$ *(1.11)*	2.74$_{d}$ *(1.25)*	5.93$_{a}$ *(1.68)*	3.73$_{b}$ *(1.97)*
Arts *(N = 172-178)*	87.71$_{ab}$ *(44.78)*	6.19$_{b}$ *(0.86)*	5.83$_{b}$ *(0.90)*	1.76$_{a}$ *(0.92)*	6.35$_{ab}$ *(1.31)*	3.53$_{b}$ *(2.21)*
Environment *(N = 135-139)*	84.89$_{ab}$ *(47.76)*	6.05$_{ab}$ *(1.26)*	5.75$_{b}$ *(1.04)*	2.39$_{c}$ *(1.41)*	6.49$_{b}$ *(1.16)*	4.01$_{b}$ *(2.30)*

Gender	TMI M *(SD)*	Satisfaction M *(SD)*	Positive Affect M *(SD)*	Negative Affect M *(SD)*	Same Intentions M *(SD)*	Different Intentions M *(SD)*
Female *(N = 926-967)*	93.19$_b$ *(43.76)*	6.02 *(1.12)*	5.66 *(1.04)*	2.24 *(0.96)*	6.18$_a$ *(1.46)*	3.69 *(2.22)*
Male *(N = 381-394)*	81.96$_a$ *(42.21)*	5.99 *(1.08)*	5.60 *(1.01)*	2.16 *(1.19)*	6.35$_b$ *(1.26)*	3.61 *(2.19)*

Race	TMI M *(SD)*	Satisfaction M *(SD)*	Positive Affect M *(SD)*	Negative Affect M *(SD)*	Same Intentions M *(SD)*	Different Intentions M *(SD)*
Person of Color *(N = 54-60)*	112.73$_b$ *(56.85)*	5.92 *(1.27)*	5.68 *(1.07)*	2.22 *(1.15)*	6.20 *(1.05)*	3.56 *(2.17)*
White *(N = 1249-1296)*	88.78$_a$ *(42.52)*	6.01 *(1.11)*	5.64 *(1.03)*	2.21 *(1.16)*	6.23 *(1.43)*	3.67 *(2.22)*

Age	TMI M *(SD)*	Satisfaction M *(SD)*	Positive Affect M *(SD)*	Negative Affect M *(SD)*	Same Intentions M *(SD)*	Different Intentions M *(SD)*
Less than 35 *(N = 264-271)*	105.12$_b$ *(45.56)*	5.80$_a$ *(1.28)*	5.59 *(107)*	2.55$_c$ *(1.25)*	5.76$_a$ *(1.67)*	4.03$_b$ *(2.02)*
35 to 49 *(N = 250-263)*	90.72$_a$ *(38.60)*	6.03$_b$ *(0.96)*	5.66 *(0.95)*	2.49$_c$ *(1.18)*	6.29$_b$ *(1.35)*	4.04$_b$ *(2.16)*
50 to 64 *(N = 334-352)*	83.68$_a$ *(38.71)*	5.99$_b$ *(1.16)*	5.61 *(1.07)*	2.23$_b$ *(1.19)*	6.39$_b$ *(1.22)*	3.69$_b$ *(2.19)*
65 and above *(N = 435-473)*	84.97$_a$ *(46.06)*	6.13$_b$ *(1.05)*	5.68 *(1.04)*	1.87$_a$ *(0.98)*	6.35$_b$ *(1.34)*	3.24$_a$ *(2.28)*

Note. Different subscripts in columns (within category) indicate significantly different means at $p <$ .05. A range of sample sizes is provided due to missing data.

Table 2.

Volunteer Outcomes Regressed on Total Match Index by Demographic Category.

Attribute	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
	beta	beta	beta	beta	beta
All Volunteers (N = 1269 to 1315)					
Total Match Index	.25**	.40**	.12**	.10**	.05
Organization Type					
Education (N = 98 to 100)					
Total Match Index	.41**	.48**	.10	-.01	-.07
Human Services (N = 411 to 429)					
Total Match Index	.24**	.38**	.12*	.06	.12*
Health (N = 197 to 202)					
Total Match Index	.24**	.36**	.18**	.06	.12
Public Benefit (N = 75 to 83)					
Total Match Index	.36**	.58**	.21	.28**	-.02
Youth Development (N = 78 to 81)					
Total Match Index	.26*	.37**	.03	.15	.03
Arts and Culture (N = 161/164 to 166/169)					
Total Match Index	.15*	.32**	.12	.08	.01
Environment (N = 130 to 133)					
Total Match Index	.32**	.48**	.11	.14	-.05
Gender					
Female (N = 893 to 928)					
Total Match Index	.25**	.38**	.13**	.09**	.06

Male (N = 369 to 380)
Total Match Index   .25**   .45**   .11*   .14**   .03

Race

Person of Color (N = 53 to 58)
Total Match Index   .46**   .51**   .09   .24   -.04

White (N = 1204 to 1244)
Total Match Index   .24**   .40**   .13**   .09**   .06

Age

Less than 35 (N = 261 to 268)
Total Match Index   .39**   .44**   .09   .17**   .12

35 to 49 (N = 248 to 259)
Total Match Index   .17**   .30**   -.04   .09   .04

50 to 64 (N = 325 to 342)
Total Match Index   .22**   .40**   .11*   .08   .01

65 and above (N = 416 to 434)
Total Match Index   .30**   .47**   .17**   .16**   -.01

Note. *p < .05. **p < .01. A range of sample sizes is provided due to missing data.

Table 3.

Hierarchical Regression Analyses Showing Outcomes Regressed on Motives, Benefits, and Total Match

Index (N = 1269 to 1315).

Attribute	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
	beta	beta	beta	beta	beta
Step 1					
Total Motive Score	-.06	.03	.09	-.14**	.18**
Total Benefits Score	.29**	.36**	.06	.21*	-.12*
R^2	.058	.145	.021	.015	.010
Step 2					
Total Match Index	.80**	.79**	-.58**	.65**	-.04
R^2	.084	.170	.036	.031	.011
R^2 change	.026**	.025**	.014**	.017**	.000

Note. *p < .05. **p < .01. A range of sample sizes is provided due to missing data.

Table 4.

Hierarchical Regression Analyses Showing Outcomes Regressed on Total Match Index After

Controlling for Each Univariate Match (N = 1269 to 1315)

Attribute	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
	beta	beta	beta	beta	beta
Step 1					
Values Match	.28**	.35**	.05	.14**	.07
R^2	*.076*	*.122*	*.002*	*.021*	*.005*
Step 2					
Total Match Index	.12**	.30**	.16**	-.01	-.00
R^2	*.083*	*.169*	*.015*	*.021*	*.005*
R^2 *change*	*.007**	*.047**	*.014**	*.000*	*.000*
Step 1					
Understanding Match	.25**	.40**	.17**	.08**	.08**
R^2	*.060*	*.163*	*.028*	*.007*	*.007*
Step 2					
Total Match Index	.16**	.20**	-.06	.08	-.06
R^2	*.068*	*.176*	*.029*	*.009*	*.008*
R^2 *change*	*.008**	*.013**	*.001*	*.002*	*.001*
Step 1					
Enhancement Match	.24**	.34**	.01	.10**	-.01
R^2	*.055*	*.113*	*.000*	*.009*	*.000*
Step 2					
Total Match Index	.18**	.37**	.34**	.05	.17**
R^2	*.066*	*.158*	*.038*	*.010*	*.010*
R^2 *change*	*.011**	*.045**	*.038**	*.001*	*.010**

Step 1
Protective Match   .10**   .19**   .09**   .06*   -.05
R^2 *.011*   *.037*   *.009*   *.004*   *.003*

Step 2
Total Match Index   .33**   .49**   .11**   .10**   .16**
R^2 *.071*   *.168*   *.015*   *.009*   *.016*

R^2*change*   *.060*** *.131*** *.007*** *.006*** *.013***

Step 1
Social Match   .09**   .16**   .06*   .05*   .01
R^2 *.008*   *.026*   *.004*   *.003*   *.000*

Step 2
Total Match Index   .33**   .50**   .14**   .10**   .08*
R^2 *.072*   *.172*   *.016*   *.009*   *.004*

R^2*change*   *.064*** *.146*** *.012*** *.006*** *.004**

Step 1
Career Match   .05   .16**   .14**   -.07*   .09**
R^2 *.002*   *.024*   *.019*   *.005*   *.008*

Step 2
Total Match Index   .34**   .46**   .06   .20**   -.00
R^2 *.078*   *.166*   *.022*   *.031*   *.008*

R^2*change*   *.076*** *.141*** *.003*   *.027*** *.000*

Note. *p < .05. ** p < .01. A range of sample sizes is provided due to missing data.

Table 5.

Frequency of Organizational Structure Characteristics.

Characteristic	Yes	*%*	No	*%*	Total N
Works with Clients	1139	*82.1*	249	*17.9*	1388
Works with Other Volunteers	1078	*77.7*	310	*22.3*	1388
Works with Paid Staff	1135	*81.8*	253	*18.2*	1388
Volunteer Coordinator	1168	*93.8*	77	*6.2*	1245
Performance Evaluation	219	*17.6*	1026	*82.4*	1245

Table 6.

Hierarchical Regression Analyses Testing the Moderation of the Total Match Index Effect on Volunteer

Outcomes by Organizational Structure (N = 1145 to 1184)

Attribute	Satisfaction	Positive Affect	Negative Affect	Same Intentions	Different Intentions
	beta	beta	beta	beta	beta
Step 1					
Structure	.02	.07*	.04	.02	-.03
Total Match Index	.24**	.39**	.11**	.08**	.04
R^2	*.062*	*.163*	*.015*	*.007*	*.002*
Step 2					
Structure X TMI	-.09**	-.09**	-.02	-.04	.08**
R^2	*.069*	*.171*	*.015*	*.008*	*.008*
R^2 *change*	*.007**	*.008**	*.000*	*.001*	*.006**

Note. *p < .05. **p < .01. A range of sample sizes is provided due to missing data.

Figure Captions

Figure 1. Scatterplot showing the relations between Total Match Index and Satisfaction with regression lines for volunteers in high versus low structure environments.

Figure 2. Scatterplot showing the relations between Total Match Index and Positive Emotions with regression lines for volunteers in high versus low structure environments.

Figure 3. Scatterplot showing the relations between Total Match Index and Intention to Volunteer at a Different Organization with regression lines for volunteers in high versus low structure environments.