Development and Test of a Model Linking Volunteer Motivation to
Individual and Organizational Outcomes

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In memory of Martha Maria MacLellan, 1958-2014
Abstract

Although non-profit organizations have important mandates, they often struggle to recruit and retain volunteers. Therefore, research investigating volunteer motivation, and its associated outcomes, is of utmost importance. The current study used a longitudinal research design to examine the differential effects of volunteer motivation on both individual (i.e., psychological well-being, volunteer work engagement) and organizational (i.e., commitment, turnover intention, fundraising performance) outcomes. Specifically, data were collected from 72 volunteers on nine occasions over the course of a five-month fundraising campaign. Findings demonstrated that autonomously motivated volunteers had increased psychological well-being, enhanced volunteer work engagement, increased affective commitment, decreased turnover intention, and were more likely to reach or surpass their fundraising goals. In contrast, volunteers with controlled motivation had decreased psychological well-being, increased continuance commitment, and increased turnover intention. Furthermore, changes in autonomous motivation were associated with changes in affective commitment while changes in controlled motivation corresponded with changes in continuance commitment.

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Development and Test of a Model Linking Volunteer Motivation to Individual and Organizational Outcomes

The operations of non-profit organizations rely heavily on the services of volunteers (Grube & Piliavin, 2000). Whether the volunteers are giving up their time to provide assistance or initiating their own fundraisers for a commendable cause, volunteers engage in multiple initiatives to help those in need. According to the Canada Survey of Giving, Volunteering and Participating, fundraising and event management are the most common forms of volunteerism (Vezina & Crompton, 2012). As such, these activities form the foundation of the non-profit sector and are imperative to non-profit organizations with missions aimed at raising funds for charities (Farmer & Fedor, 2001; Lindenmeier, 2008). In fact, without the help of volunteers, many of these non-profit organizations would cease to exist (Pearce, 1993). Despite the fact that 47% of Canadians volunteer (Vezina & Crompton, 2012), non-profit organizations often struggle to recruit and retain volunteers (Choudhury, 2010). Therefore, research investigating volunteer motivation, and its associated outcomes, is of utmost importance.

The research literature on volunteerism has shifted from solely focusing on the types of individuals who volunteer (Herzog et al., 1989) to examining why individuals choose to volunteer (Omoto & Snyder, 1995) and the benefits derived from volunteering (Vecina & Fernando, 2013). Given that previous studies have provided empirical support for theories of volunteer motivation (Clary & Snyder, 1991; Deci & Ryan, 1985), researchers should build on this topic by assessing the
effects of the different types of volunteer motivation. Accordingly, the purpose of the present study was to develop and test a model linking volunteer motivation (i.e., autonomous and controlled motivation) to volunteer work outcomes at both at the individual-level (i.e., psychological well-being, volunteer work engagement) and organizational-level (i.e., organizational commitment, turnover intention, fundraising performance).

**Volunteer Motivation**

Motivation is operationalized as “an unobservable force that directs, energizes, and sustains behaviour over time and across changing circumstances” (Diefendorff & Chandler, 2010, p. 66). Whereas previous theories of motivation such as expectancy-instrumentality-value theory (Vroom, 1964) and goal-setting theory (Locke & Latham, 1990) have postulated work motivation as quantifiable, other motivational theories such as the achievement goal theory (Elliot & McGregor, 2001) and regulatory focus theory (Higgins, 2000) have examined both the quantity and quality of motivation. While the quantitative conceptualization of motivation highlights the amount of motivation, the qualitative approach emphasizes the type of motivation. In the current study, volunteer motivation was conceptualized using self-determination theory (SDT; Deci & Ryan, 1985).

**Self-Determination Theory**

Given that individuals may volunteer to varied degrees and due to different motives, self-determination theory highlights that both the quantity and quality of motivation matter (Van den Broeck, Lens, De Witte, & Van Coillie, 2013). The
original conceptualization of self-determination theory identified two types of motivation: intrinsically motivated behaviours and extrinsically motivated behaviours (Deci & Ryan, 1985). Intrinsic motivation involves engaging in an activity for its own sake because one finds it enjoyable and inherently interesting (Deci & Ryan, 2000). In contrast, extrinsic motivation entails participating in an activity for instrumental reasons such as acquiring an external reward (Gagné & Deci, 2005). Since its development, self-determination theory has expanded to specify the extent to which motivation is self-determined by placing the different types of motivational regulations along a continuum from least self-determined (i.e., controlled motivation) to most self-determined (i.e., autonomous motivation). As depicted in Figure 1, while intrinsic motivation is retained in the model, extrinsic motivation has been extended to comprise distinct degrees of regulation (Deci & Ryan, 2008).

According to the expanded version of self-determination theory, extrinsic motivation encompasses four types of regulatory behaviours: external regulation, introjected regulation, identified regulation, and integrated regulation. External regulation is the most characteristic of extrinsic motivation, as behaviors are controlled by exterior circumstances such as obtaining a reward (e.g., being appreciated) or avoiding punishment (e.g., being criticized). In the case of external regulation, these rewards or punishments are administered by others such as a supervisor, colleague, family member, or friend. Thus, external regulation may exist among individuals who are required to do volunteer work as part of a school
requirement or corporate volunteer program. With introjected regulation, behaviours are controlled by the individuals themselves. For instance, behaviours may be contingent on one’s own feelings of self-worth or guilt. Thus, introjected regulation is reflected when people volunteer in order to prove to themselves that they are decent individuals. Identified regulation occurs when individuals have identified with the principles of their behaviour and accept them as their own. Therefore, these volunteers believe that it is useful to put effort into their volunteer work. However, identified regulation is still a form of extrinsic motivation, as the behaviours are motivated by external reasons (e.g., aiming to get rewarded for identifying with the volunteer work) rather than internal factors (e.g., identifying with the volunteer work because it is internally rewarding). Integrated regulation represents the most internalized form of extrinsic motivation, as individuals integrate these behavioural values into their self-concept. In other words, volunteers with integrated regulation feel that the volunteer work they do aligns with their own personal goals in life.

The aforementioned types of extrinsic motivation differ in the degree to which they are controlled or autonomous (Gagné et al., 2010). Since external and introjected regulations represent controlled motivation, they are on the lower end of the self-determination continuum. In contrast, identified and integrated regulations are autonomously motivated and are located on the higher end of the spectrum. Additionally, intrinsic regulation represents the most autonomous form of motivation and occurs among volunteers who engage in volunteer work because they find it inherently interesting and/or enjoyable. In summary, individuals with controlled
motivation may volunteer in order to obtain a reward (i.e., external regulation), and/or due to one’s feelings of guilt (i.e., introjected regulation), while the behaviours of autonomously motivated volunteers are likely the result of knowing the volunteer work is meaningful (i.e., identified regulation), believing the volunteer work fully aligns with one’s values (i.e., integrated regulation), and/or enjoying the volunteer work (i.e., intrinsic regulation).

Outcomes of Volunteering

Previous research has demonstrated that autonomous and controlled motivation predict work outcomes differently such that autonomous motivation often predicts positive outcomes while controlled motivation is less beneficial (Gagné & Deci, 2005). Accordingly, the purpose of this research was to examine the differential effects of these types of motivation on outcomes affecting both the volunteers and the non-profit organizations they serve. The majority of previous research on volunteerism has focused on quantitative outcomes (e.g., number of absences) and studies examining the quality of volunteer outcomes (e.g., type of organizational commitment) are lacking (Penner & Finkelstein, 1998). Thus, the current study addressed this gap in the literature through its examination of the selected outcomes. Specifically, both individual (i.e., psychological well-being, volunteer work engagement) and organizational (i.e., commitment, turnover intention, fundraising performance) outcomes of volunteer motivation were assessed.

Psychological Well-being of Volunteers

Volunteering has been associated with increased positive emotions (Meier &
Stutzer, 2008), better perceived health (Li & Ferraro, 2006), and enhanced psychological well-being (Piliavin & Siegl, 2007). However, preliminary research has suggested that it may not be the volunteer work itself that results in these positive outcomes, but rather, the type of motivation causing these individuals to volunteer (Weinstein & Ryan, 2010). Vecina and Fernado (2013) examined this phenomenon through pleasure-based and pressure-based prosocial motivation. Specifically, volunteers with pleasure-based prosocial motivation experienced well-being as illustrated by both hedonic indices (i.e., life satisfaction, happiness) and eudaimonic measures (i.e., worthwhile feeling, study enjoyment, psychological well-being), as well as a volunteer-related index of well-being (i.e., volunteer satisfaction). On the contrary, pressure-based motivation was not significantly related to any of these measures of well-being. Thus, individuals that volunteer due to obligation do not experience the same positive psychological benefits as individuals that volunteer for their own enjoyment.

The aforementioned conceptualization of pleasure-based versus pressure-based prosocial motivation is similar to the distinction between autonomous and controlled motivation. For instance, volunteering due to pleasure shares commonalities with autonomous motivation and intrinsic regulation in particular. Similarly, volunteering because of pressure is related to controlled motivation and specifically to external regulation. Thus, it is likely that similar findings could be replicated when examining volunteer motivation through self-determination theory. Furthermore, autonomous motivation has been positively associated with employee
psychological well-being, whereas controlled motivation has been negatively related to the psychological well-being of employees (Blais, Brière, Lachance, Riddle, & Vallerand, 1993). Thus, adding further support to the expectation that these findings could be extended to a volunteer population.

**Hypothesis 1: Motivation will significantly predict psychological well-being between and within volunteers.**

1a. Autonomous motivation will predict increased psychological well-being

1b. Controlled motivation will predict decreased psychological well-being.

1c. Changes in autonomous motivation will correspond with changes in psychological well-being.

1d. Changes in controlled motivation will correspond with changes in psychological well-being.

**Volunteer Work Engagement**

The extent to which volunteers are engaged in their work is another individual outcome worth exploring. Schaufeli, Salanova, González-Romá, and Bakker (2002) define work engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 74). Vigor refers to high levels of mental resilience, willingness to invest effort in work, and persistence in the face of difficulties at work. The second constituent, dedication, is characterized by being strongly involved in work, enthusiastic, inspired, and proud. Finally, absorption refers to being concentrated and pleasantly engrossed in one’s work as time quickly passes. Work engagement has many benefits such as increased
job satisfaction, as well as other organizational outcomes including lower levels of absenteeism and higher levels of job performance (Jones, Ni, & Wilson, 2009; Schaufeli & Salanova, 2007). When examined in the volunteer realm, Gagné (2003) found that volunteers who were able to choose which non-profit organization to volunteer for showed greater engagement in their volunteer work. Therefore, it makes sense to investigate the effect of volunteer motivation on volunteer work engagement.

Previous research (e.g., Haivas, Hofmans, & Pepermans, 2013) has examined volunteer work engagement in relation to the basic psychological needs. Basic need satisfaction is another component of self-determination theory, which proposes that individuals view work tasks as intrinsically motivating when the work satisfies their basic psychological needs (Deci & Ryan, 1985). Specifically, Deci and Ryan (2000) outlined three basic psychological needs: the need for autonomy, which is met when individuals experience ownership and choice over their behavior; the need for competence, which is satisfied when people attain the outcomes they aspire to achieve; and the need for relatedness, which is met when individuals connect with others. Haivas et al. (2013) found that satisfaction of the autonomy and competence needs predicted volunteer work engagement such that volunteers whose needs for autonomy and competence were satisfied experienced increased volunteer work engagement. Furthermore, motivation was significantly related to volunteer work engagement. Specifically, there was a positive relationship between autonomous motivation and volunteer work engagement, and a negative relationship between
controlled motivation and volunteer work engagement. In fact, autonomous motivation partially mediated the relationship between satisfaction of the autonomy and competence needs and volunteer work engagement. Given the cross-sectional nature of this study, there is a need for further examination of these preliminary findings. Thus, a longitudinal design will contribute to the advancement of knowledge by determining whether volunteer motivation predicts volunteer work engagement over time.

**Hypothesis 2:** Motivation will significantly predict volunteer work engagement between and within volunteers.

2a. Autonomous motivation will predict increased volunteer work engagement.

2b. Controlled motivation will predict decreased volunteer work engagement.

2c. Changes in autonomous motivation will correspond with changes in volunteer work engagement.

2d. Changes in controlled motivation will correspond with changes in volunteer work engagement.

**Commitment to Non-profit Organizations**

Given that work motivation relates to both individual and organizational outcomes (Gagné & Deci, 2005), it is also important to examine factors such as organizational commitment. Organizational commitment is imperative to the non-profit sector, as volunteer directors often struggle to retain volunteers. Although autonomous motivation has been linked to organizational commitment in employment settings (Fernet, 2011), it is less common in the literature on
volunteerism. When this topic was initially examined in volunteer samples (Dailey, 1986; Pearce, 1993), researchers used Porter, Steers, Mowday, and Boulian’s (1974) measure of organizational commitment. Since then, only a select few studies (Bozeman & Ellemers, 2008; Dawley, Stephens, & Stephens, 2005) have conducted research on volunteer commitment with Meyer and Allen’s (1984) Organizational Commitment Questionnaire. Meyer and Allen’s (1991) model of organizational commitment can be adapted to volunteerism through examining the extent to which individuals volunteer because they enjoy their role (affective commitment), feel they should be committed to their role (normative commitment), and/or because they have no other option but to continue their role (continuance commitment) with the non-profit organization.

Although there are three components in Meyer and Allen’s (1999) model of organizational commitment, past research studies (Bozeman & Ellemers, 2008; Dawley et al., 2005) have only examined affective and normative commitment. This is because continuance commitment is often perceived as when employees must make sacrifices (e.g., staying in a job they do not enjoy) due to their instrumental ties with the organization (e.g., receiving a pay cheque). As such, some researchers do not see the utility of applying this concept to a context where individuals do not receive financial compensation for their work. However, there are merits to studying continuance commitment among volunteers. For instance, instrumental ties are not solely defined by monetary values, but rather, students may have to volunteer with a non-profit organization in order to fulfill a university program requirement.
Additionally, employees may get involved in volunteer work because of their company’s corporate social responsibility programs. In these circumstance, individuals may feel obliged to continue their volunteer work for a non-profit organization.

In fact, continuance commitment may be more relevant to the volunteer realm than normative commitment. The underlying theory of normative commitment is based on employees in organizations as opposed to volunteers in non-profit organizations. Thus, certain items in the Organizational Commitment Questionnaire (e.g., “If I got another offer for better work elsewhere I would not feel it was right to leave this organization”) are based on the assumption that individuals can only volunteer for one non-profit organization. Although it is more difficult for employees to commit to multiple organizations because they usually are only working full-time for one organization, individuals can easily volunteer for multiple non-profit organizations. Furthermore, previous findings have demonstrated that neither autonomous nor controlled motivation were significant predictors of normative commitment among volunteers (MacLellan & Kelloway, 2013). Thus, the current study includes measures of affective and continuance commitment due to previous empirical findings and the underlying theory of the organizational commitment model.

_Hypothesis 3: Motivation will significantly predict organizational commitment between and within volunteers._

3a. _Autonomous motivation will predict increased affective commitment._
3b. Controlled motivation will predict increased continuance commitment.

3c. Changes in autonomous motivation will correspond with changes in affective commitment.

3d. Changes in controlled motivation will correspond with changes in continuance commitment.

**Turnover Intention in Non-profit Organizations**

Since affective commitment has been associated with decreased turnover intention in employee samples (Schaufeli & Bakker, 2004), it makes sense to examine volunteers’ intentions to quit their volunteer work. Moreover, reports have estimated that one third of volunteers do not return after their first year of service (Corporation for National and Community Service, 2007). This demonstrates that volunteer retention has become increasingly difficult for non-profit organizations. Turnover intention is a particularly important outcome to examine, as it is behavioural-based in that it predicts observable behaviours (Chacon, Vecina, & Davila, 2007). The majority of previous research on volunteer turnover intention has focused on contextual factors (Cuskelly & Boag, 2001; Harrison, 1995; Jamison, 2003; Miller, Powell, & Seltzer, 1990) as opposed to individual variables such as volunteer motivation. However, volunteers’ intent to quit their volunteer work for non-profit organization should be explored through both contextual and motivational factors (Haski-Leventhal & Bargal, 2008). Willems and colleagues (2012) used this approach in their study that explored whether volunteers’ decisions to quit in a particular context were similar to their motives for volunteering. For instance,
volunteers may leave a non-profit organization if their motives for volunteering are not fulfilled (Richard, McMillan-Capehart, Bhuian, & Taylor, 2009; Willems et al., 2012). However, findings demonstrated that volunteers’ reasons for quitting were not symmetrical with their motives for continuing their volunteer work.

Of the few studies that do examine volunteer motivation in relation to volunteer turnover intention, there have been conflicting results in the literature. For instance, some findings demonstrate that volunteers with extrinsic forms of motivation tend to stop volunteering (Cappellari & Turatio, 2004) while volunteers that are intrinsically motivated have been reported to continue their volunteer work (Snyder & Omoto, 2001). On the contrary, other studies have found no empirical support for this relationship such that neither autonomous nor controlled motivation predicted turnover intention among volunteers (Haivas et al., 2013). Thus, further research aimed at disentangling these effects is valuable.

Hypothesis 4: Motivation will significantly predict turnover intention between and within volunteers.

4a. Autonomous motivation will predict decreased turnover intention.

4b. Controlled motivation will predict increased turnover intention.

4c. Changes in autonomous motivation will correspond with changes in turnover intention.

4d. Changes in controlled motivation will correspond with changes in turnover intention.

Fundraising Performance
In addition to measuring outcomes indicative of the individual volunteers and the non-profit organization, it is important to consider outcomes associated with societal well-being. Particularly, the amount of funds raised by the volunteers has implications that extend beyond to the organization context to the broader community being served by the non-profit organization. Given that non-profit organizations often rely on the fundraising efforts of volunteers in order to meet their annual targets, it is important to assess the fundraising performance of volunteers. Specifically, researchers and practitioners should examine whether volunteers attained, surpassed, or failed to reach their fundraising goals. This financial data would provide an objective index of whether volunteer motivation predicts fundraising performance.

**Hypothesis 5: Motivation will significantly predict fundraising performance among volunteers.**

5a. **Autonomous motivation will predict fundraising goals that are achieved or surpassed.**

5b. **Controlled motivation will predict unachieved fundraising goals.**

**Overview of the Current Investigation**

The current investigation aimed to develop and test a comprehensive model that links volunteer motivation to both individual and organizational outcomes. Although similar findings have been demonstrated in employee samples (Deci & Ryan, 2004; Gagné, Chendli, Forest, & Koestner, 2008), studies exploring these relationships among volunteer samples are scarce (Omoto, Snyder, & Martino,
A recent cross-sectional study examined how the self-determination theory perspective on volunteer motivation predicts volunteer work engagement and turnover intention (Haivas et al., 2013). However, these findings have yet to be tested longitudinally. Furthermore, previous research has not assessed how volunteer motivation, as conceptualized by self-determination, impacts outcomes such as the psychological well-being, organizational commitment, and the fundraising performance of volunteers. Therefore, this research has several merits. First, using a volunteer sample extends the generalizability of previous findings among employee samples. Second, the longitudinal within person approach provides a novel research contribution, as the findings highlight how fluctuations in volunteers’ motivation (in addition to the differences in motivation between volunteers) impact volunteer functioning and organizational outcomes. Accordingly, the current investigation contributes to the advancement of knowledge in the field.

**Method**

**Participants**

The current study utilized a sample of volunteers fundraising for Cystic Fibrosis Canada, a non-profit organization that raises money for cystic fibrosis research and care. Specifically, these volunteers were organizing campaigns for Shinerama, the largest post-secondary fundraiser in Canada. The volunteers selected to organize these fundraising campaigns tend to get involved with Shinerama for different reasons. For example, some volunteers may chose to run the campaign because they are devoted to Cystic Fibrosis Canada’s mission, while others may be
required to do so because it is part of their student union position portfolio. Thus, these individuals are bound to differ in their motives for volunteering.

Specifically, 72 Shinerama volunteers from 40 universities across Canada participated in the study, providing a total of 587 data points. Whereas 33% of the sample were the sole Campaign Director at their universities, 67% had co-leaders from the same university. Of the sample, 63% were female, 36% were male and 1% did not indicate their gender. The average age of participants was 20 years with ages ranging from 18 to 37 years and 73% of the sample was Caucasian. In return for their participation, volunteers were entered into a raffle for a chance to win a $1000 donation towards their fundraising campaign.

 Procedure

A longitudinal research design was used to examine volunteer motivation and outcome variables over the course of the volunteers’ fundraising campaigns, which took place for a span of five months (May-September). Participants were recruited through two means. First, an electronic advertisement (see Appendix A) was emailed to the 85 Shinerama Campaign Directors using Cystic Fibrosis Canada’s email server. Second, a verbal advertisement was announced at the 2013 Shinerama National Conference to all potential participants. These recruitment efforts were effective with a response rate of 85%. Following informed consent (see Appendix B), volunteers responded to a battery of online questionnaires (see Appendices C-J),
as well as a demographics questionnaire (see Appendix I). The electronic questionnaires were emailed to participants every three weeks for a total of nine time intervals. While the baseline questionnaire was completed prior to any training sessions at the National Conference in May, the remaining surveys were delivered following the conference. The participants completed their final questionnaire after “Shine Day”, the largest secondary fundraiser, which marked the completion of their Shinerama fundraising campaigns in September. Since motives can vary over time both across and within individuals (Dalal & Hulin, 2008), these time points allowed for examination of fluctuations in volunteer variables as they occurred during pivotal points of the volunteers’ fundraising campaigns. Participants completed the series of measures in the same order as they are listed below on Qualtrics, a private research software company that provides a server to collect data through online surveys. Following completion of each survey, participants received electronic feedback (see Appendix J).

**Measures**

**Self-determined motivation.** The Motivation at Work Scale-Revised (MAWS-R; Gagné, et al., 2012) was used to assess volunteer motivation as conceptualized by self-determination theory (see Appendix C). The scale assessed the five types of regulation: external regulation as measured by four items (e.g., “I volunteer because others put pressure on me”), introjected regulation as measured by four items (e.g., “I volunteer because otherwise I will feel guilty”), identified regulation as measured by four items (e.g., “I volunteer because it is useful to put
effort in my volunteer work”), integrated regulation as measured by four items (e.g., “I volunteer because this volunteer work fits perfectly well with my life goals”) and intrinsic regulation as measured by four items (e.g., “I volunteer because this volunteer work aligns with my interests”). These 20-items were rated on a scale from 1 (strongly disagree) to 7 (strongly agree). Following guidelines by Vansteenkiste, Lens, De Witte, De Witte, and Deci (2004), the external and introjected regulation items were averaged to create a controlled motivation variable. Additionally, the autonomous motivation variable comprised an average of the identified and intrinsic regulation items (Vansteenkiste et al., 2004). Due to recent recommendations in the literature (Gagné et al., 2014), the integrated regulation subscale was not included in the composite score, as it is reported to share overlapping variance with identified and intrinsic regulation to the point that it cannot be statistically differentiated (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). In the current study, autonomous motivation had a Cronbach’s alpha of .90 and controlled motivation had a Cronbach’s alpha of .83.

**Psychological well-being.** The General Health Questionnaire (GHQ-12; Goldberg, 1972) was used to measure the volunteers’ levels of psychological well-being (see Appendix E). Each of the 12 items (e.g., “Have you been feeling unhappy and/or depressed?) were assessed on a 7-point scale ranging from 1 (not at all) to 7 (all of the time). Mäkikangas, Feldt, Kinnunen, Tolvanen, Kinnunen, and Pulkkinen (2006) demonstrated the questionnaire’s ability to predict short-term changes in levels of psychological well-being over time. Cronbach’s alpha for the 12-item
version of this scale has varied between .81 and .89 (Mäkikangas et al.) and the internal consistency reliability coefficient for the current study was .90.

**Volunteer work engagement.** The shortened version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006) was used to measure engagement among volunteers (See Appendix F). The concise 9-item version was selected over the original measure due to recommendations made in past research (Seppala et al., 2009). Furthermore, it was revised such that the terms “working” and “work” were replaced with “volunteering” and “volunteer”. The scale assessed the three aspects of work engagement: vigor as measured by three items (e.g., “When volunteering, I feel bursting with energy”), dedication as measured by three items (e.g., “I am proud of the volunteer work that I do”), and absorption as measured by three items (e.g., “I feel happy when I am volunteering intensely”). Volunteers indicated how often the items apply to them on a 7-point scale from 1 (never) to 7 (always). The revised scale had a Cronbach’s alpha of .93.

**Organizational commitment.** The Organizational Commitment Questionnaire (OCQ; Allen & Meyer, 1990) was used to examine the types of organizational commitment Shinerama volunteers have towards Cystic Fibrosis Canada (see Appendix G). The scale was adapted for the purpose of the current study such that the term “organization” was either replaced with “Cystic Fibrosis Canada” or “non-profit organization” for each item. The revised 16-item questionnaire assessed whether volunteers experience affective commitment (e.g., “Cystic Fibrosis Canada has a great deal of personal meaning for me”) and/or continuance
commitment (“It would be very hard for me to leave Cystic Fibrosis Canada right now, even if I wanted to”). Participants responded to each item on a 5-point scale ranging from 0 (strongly disagree) to 4 (strongly agree). The questionnaire has been shown to have good construct validity (Allen & Meyer, 1996) and the internal consistency reliability coefficients in the current study were .89 for affective commitment, and .74 for continuance commitment. These are in line with previous research demonstrating a range from .74 to .87 for affective commitment, and .73 to .81 for continuance commitment (Dunham, Grube, & Castaneda, 1994).

**Turnover intention.** A 4-item measure developed by Kellloway, Gottlieb, and Barham (1999) was used to assess volunteer turnover intension (See Appendix H). This measure was adapted for the purpose of the present study such that the term “organization” was replaced with “Cystic Fibrosis Canada” (e.g., "I am thinking about leaving Cystic Fibrosis Canada"). Additionally, the term “work” was changed to “volunteer” (e.g., “I intend to ask people about other volunteer opportunities"). Each statement was rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The revised scale had a Cronbach’s alpha of .81, which is slightly lower than previous reports of .92 (Kellloway et al., 1999).

**Demographics.** Participants provided basic demographic information on their gender, age, ethnicity, and location of residence, as well as the university they attended (see Appendix K).
**Fundraising performance.** Cystic Fibrosis Canada provided additional data such as the financial goals set for each campaign and their fundraising totals. Based on this data, a percentage was calculated to indicate how much of the goal they attained or surpassed through their fundraising campaigns. Specifically, a value of 100% indicated that volunteers reached their goal, values less than 100% implied that volunteers failed to achieve their goal while values over 100% demonstrated that they surpassed their goal.

**Results**

**Preliminary Analyses**

All analyses were conducted using IBM SPSS software. First, the dataset was cleaned so that all variables were standardized with the exception of time points. Assumptions were also checked and the Mahalanobis Distance values implied that there were no multivariate outliers. Additionally, all Cook’s Distance values were below 1. Descriptive statistics and intercorrelations among all variables are shown in Table 1. As illustrated, volunteer motivation significantly related to each of the outcome variables such that autonomous motivation was positively correlated with psychological well-being, volunteer work engagement, and affective commitment, and negatively correlated with turnover intention. In contrast, controlled motivation was negatively correlated with psychological well-being, volunteer work engagement, as well as continuance commitment, and positively correlated with turnover intention. For the most part, the correlations presented in Table 1 were consistent with expectations.
Descriptive statistics are also reported in Table 2, in which the volunteers are grouped by region. Rates of volunteerism were highest in Ontario (28%), Nova Scotia (21%), New Brunswick (17%), as well as British Columbia (15%); and lowest in Manitoba (5%), Saskatchewan (4%), Alberta (3%), Prince Edward Island (3%), Newfoundland (3%), and Quebec (1%). These results are inconsistent with Statistics Canada’s findings that rates of volunteerism tend to be higher in rural than urban regions (Vezina & Crompton, 2012).

**Primary Analyses**

Multilevel modeling (MLM), also commonly referred to as growth curve models in longitudinal designs (Singer & Willett, 2003), was used to analyze the data. Multilevel models include effects that are both fixed and random, which are distinguished through a hierarchy of levels. Specifically, the correlated measurements occur at the lower level unit for each upper level unit (Schneider, 2013). In the current study, measurement time points comprised the level-1 units (within person), which were nested within the volunteers that comprised the level-2 units (between person). Given that repeated measurements per participant result in correlated error terms, which violate the assumptions of statistical analyses such as between-subject ANOVA and multiple regression models (Seltman, 2000), the multilevel mixed model approach for repeated measures was appropriate, as it avoids Type I errors and biased parameter estimates (Peugh, 2010). Furthermore, multilevel modeling uses robust estimation by default, so this statistical approach utilized all
available information in the dataset despite the fact that there were 61 missing data points.

To confirm that the use of multilevel modeling was suitable for this longitudinal study, interclass correlations (ICC) for each variable were computed for the between-person variables of the restricted models. ICC calculations for the predictor variables showed that 79% of the variance in autonomous motivation was between volunteers and 82% of the variance in controlled motivation was between volunteers. ICC calculations for the outcome variables are presented in Table 3 and demonstrate that 73% of psychological well-being variance, 78% of volunteer work engagement variance, 77% of affective commitment variance, 66% of continuance commitment variance, and 70% of turnover intention variance occurred across volunteers. Given that all ICC values exceeded .40, a common occurrence in longitudinal research (Spybrook, Raudenbush, Liu, Congdon, & Martinez, 2008), multilevel modeling is a fitting statistical approach.

Analyses were first run on the restricted models in which levels were specified without predictors and then on the random intercept models, which included all predictors (Heck, Thomas, & Tabata, 2010). The estimate of fit was specified at the -2 restricted log likelihood. As demonstrated in Table 3, the -2 restricted log likelihood values decreased from the restricted models to the random intercept models for each of the variables. Thus, the random intercept models provided a better fit to the data.
Additionally, effect sizes were calculated using the pooled variance method (Snijders & Boskers, 1999), which compared the percent of variance accounted for by the random intercept models in relation to the restricted models. As illustrated in Table 3, the effect sizes for the random intercept psychological well-being, volunteer work engagement, affective commitment, and turnover intention models were moderate, at .33, .57, .62, and .35, while the effect sizes for the random intercept continuance commitment model was small, at .05.

For all equations, time, autonomous motivation, controlled motivation, as well as the interaction terms for time and autonomous motivation, and time and controlled motivation, were entered as the fixed predictors. Time was inserted as the repeated variable, and both the participants’ IDs and universities were specified as the subject variable. As depicted in Table 4, a series of multilevel mixed model repeated measures analyses were performed to test the effects of volunteer motivation (autonomous, controlled) on volunteer outcomes (psychological well-being, volunteer work engagement, organizational commitment, turnover intention, fundraising performance) over time.

**Hypothesis Testing**

For psychological well-being, there was a significant effect of time, $F(1, 509.13) = 10.03, p = .002, (B = 0.21, SE = 0.01, 95% CI [0.01, 0.03])$. Thus, the psychological well-being of volunteers changed over time. There was also a significant person-level effect of motivation such that autonomously motivated volunteers experienced increased psychological well-being, $F(1, 569.54) = 21.73, p$
and volunteers with controlled motivation experienced decreased psychological well-being, $F(1, 570.87) = 13.76, p < .001, (B = -0.18, SE = 0.50, 95% CI [-0.28, -0.09]).$ However, there was no significant interaction of time and autonomous motivation, $F(1, 508.10) = .01, p = .91, (B = -0.00, SE = 0.01, 95% CI [-0.02, 0.01]),$ nor time and controlled motivation, $F(1, 507.68) = .00, p = .97, (B = -0.00, SE = 0.01, 95% CI [-0.02, 0.01]).$

For volunteer work engagement, time was not a significant predictor, indicating that individuals’ engagement in their volunteer work did not differ over time, $F(1, 505.98) = .61, p = .44, (B = 0.00, SE = 0.01, 95% CI [-0.01, 0.02]).$ There was a significant effect of autonomous motivation such that autonomously motivated volunteers experienced increased volunteer work engagement, $F(1, 571.08) = 55.40, p < .001, (B = 0.35, SE = 0.05, 95% CI [0.26, 0.44]).$ However, controlled motivation did not significantly predict volunteer work engagement, $F(1, 572.51) = .45, p = .50, (B = 0.03, SE = 0.05, 95% CI [-0.06, 0.12]).$ There was also no significant interaction of time and autonomous motivation, $F(1, 504.69) = .66, p = .41, (B = 0.01, SE = 0.01, 95% CI [-0.01, 0.02]),$ nor time and controlled motivation, $F(1, 504.69) = .53, p = .47, (B = -0.01, SE = 0.01, 95% CI [-0.02, 0.01]).$

For affective commitment, there was a significant effect of time, $F(1, 495.02) = 46.71, p < .001, (B = 0.05, SE = 0.01, 95% CI [0.04, 0.06]).$ Thus, the volunteers’ levels of affective commitment changed over time. There was also a significant person-level effect of autonomous motivation, as autonomously motivated volunteers experienced increased affective commitment, $F(1, 561.95) = 26.01, p <$
Additionally, time and autonomous motivation significantly interacted such that changes in autonomous motivation were related to changes in affective commitment, $F(1, 493.33) = 8.60, p = .004, (B = 0.02, SE = 0.01, 95\% CI [0.01, 0.04])$. The same predictors were used when continuance commitment was specified as the outcome. There was a similar effect of time on continuance commitment, as volunteers’ levels of continuance commitment significantly changed over time, $F(1, 506.16) = 13.35, p < .001, (B = -0.03, SE = 0.01, 95\% CI [-0.05, -0.01])$. There was also a significant person-level effect of controlled motivation such that volunteers with controlled motivation experienced increased continuance commitment, $F(1, 570.08) = 15.81, p < .001, (B = 0.25, SE = 0.06, 95\% CI [0.13, 0.37])$. Finally, there was a significant interaction of time and controlled motivation such that changes in controlled motivation corresponded with changes in continuance commitment, $F(1, 504.38) = 11.21, p = .001, (B = -0.03, SE = 0.01, 95\% CI [-0.05, -0.01])$.

For turnover intention, there was a significant effect of time, $F(1, 505.23) = 7.36, p = .007, (B = 0.02, SE = 0.01, 95\% CI [0.01, 0.03])$, as the volunteers’ intent to quit changed over time. There was also a significant person-level effect of motivation such that autonomously motivated volunteers experienced decreased turnover intention, $F(1, 571.69) = 10.11, p = .002, (B = -0.16, SE = 0.05, 95\% CI [-0.25, -0.06])$, and volunteers with controlled motivation experienced increased turnover intention, $F(1, 571.99) = 5.04, p = .02, (B = 0.11, SE = 0.05, 95\% CI [0.01, 0.21])$. However, there was no significant interaction of time and autonomous motivation, $F$
(1, 504.95) = .11, \( p = .74 \), (\( B = 0.00, SE = 0.01, 95\% \text{ CI} [-0.02, 0.01] \)), nor time and controlled motivation, \( F (1, 503.83) = .07, p = .79 \). (\( B = 0.00, SE = 0.01, 95\% \text{ CI} [-0.01, 0.02] \)).

When fundraising performance was specified as the dependent variable, the data were aggregated to the university-level in order to account for each university’s fundraising goal and outcome. Specifically, each individuals’ scores on autonomous and controlled motivation were averaged across the nine data collection points for universities with one respondent. However, when universities had multiple respondents, these scores were averaged across individuals. The aggregated scores for autonomous and controlled motivation were entered as the predictors and the percentage of the goal achieved was calculated for the criterion. A multiple regression analysis demonstrated that autonomous motivation (\( \beta = .53, p < .001 \)) significantly predicted fundraising goals that were achieved or surpassed, \( F (1, 585) = 59.62, p < .001 \). However, controlled motivation (\( \beta = .07, \text{ns} \)) did not significantly predict fundraising performance, \( F (1, 578) = 1.10, p = .29 \).

**Discussion**

The purpose of the present study was to determine how volunteer motivation predicts individual and organizational outcomes. To date, the majority of research examining the effects of work-related motivation has focused on employee samples (Gagné & Bhave, 2010; Gagné & Deci, 2005; Van den Broeck, 2013). Thus, the current research extends the generalizability of previous studies by examining these relationships in a sample of volunteers. Moreover, previous research on volunteerism
has been largely cross-sectional in nature, so this longitudinal study contributes to the literature through both its replication and extension of previous findings, as well as its novel results.

Consistent with the study’s first hypothesis, motivation predicted psychological well-being among volunteers such that volunteers with autonomous motivation experienced increased psychological well-being and volunteers with controlled motivation experienced decreased psychological well-being. This provides empirical support for Weinstein and Ryan’s (2010) theoretical assumption that the volunteer work itself does not necessarily lead to increased psychological health, but rather, the motives of the volunteers predict psychological well-being. As demonstrated in the current study, not all volunteers experienced psychological benefits from volunteering and, in fact, some individuals had low levels of psychological well-being despite the fact that they were volunteering. As such, psychological well-being differs as a function of volunteer motivation. These results provide only partial support for the first hypothesis, as there was no significant interaction between time and motivation when predicting psychological well-being. In other words, changes in motivation did not correspond with changes in psychological well-being.

The current study also replicated and extended findings from Haivas and colleagues (2013) on the relationship between volunteer motivation and volunteer work engagement. Specifically, the findings were consistent in that volunteers with autonomous motivation experienced enhanced volunteer work engagement. Unique
to the current research, this finding was supported over time. Thus, not only do engaged volunteers view their volunteer work as inherently interesting and enjoyable, but they also continue to carry out their volunteer work with a sense of volition. However, unlike previous findings, controlled motivation was not a significant predictor of volunteer work engagement. Furthermore, the interaction between time and motivation was not a significant predictor of volunteer work engagement. Thus, the second hypothesis was only partially supported.

The third hypothesis based on the relationship between volunteer motivation and organizational commitment was fully supported. As expected, autonomously motivated volunteers had high levels of affective commitment whereas volunteers with controlled motivation had high levels of continuance commitment. Therefore, individuals enjoyed volunteering for the non-profit organization when they independently sought out the volunteer work. However, when volunteers felt pressure to volunteer, they tended to stay with the non-profit organization due to perceived obligation. These findings were supported over time, as changes in autonomous motivation corresponded with changes in affective commitment and changes in controlled motivation were associated with changes in continuance commitment.

As expected, volunteer motivation predicted turnover intention such that volunteers with autonomous motivation experienced decreased turnover intention and volunteers with controlled motivation experienced increased turnover intention. This contradicts Haivas and colleagues’ (2013) finding that there is no significant
relationship between volunteer motivation and turnover intention. However, this only provides partial support for the fourth hypothesis, as there was no significant interaction between time and motivation when predicting turnover intention.

Unique to the present study, findings demonstrated that autonomous motivation significantly predicted fundraising performance among volunteers. However, controlled motivation was not a significant predictor. Thus, the fifth hypothesis was partly supported. The fact that autonomously motivated volunteers were more likely to meet or surpass their fundraising goals demonstrates that volunteer motivation can impact financial outcomes for non-profit organizations. However, there are potential third variables that may contribute to this relationship. For example, the campaign environment may influence whether volunteers meet their fundraising goals. When Shinerama is engrained in the university’s culture, volunteers would be more likely to have successful fundraisers. Additionally, weather can play a large role in whether or not a fundraiser is well attended. Accordingly, some of these factors may have interfered with the unsupported expectation that volunteers with controlled motivation would be less likely to achieve their fundraising goals.

**Limitations and Directions for Future Research**

Although this study has the potential to improve volunteerism for non-profit organizations, there are at least two limitations that need to be acknowledged. First, the findings may not generalize to other volunteer populations. For instance, data collection occurred in universities across Canada with a primarily Caucasian
demographic that is not representative of other cultures. Kemmelmeier, Jambor, and Letner (2006) suggested that volunteerism should be viewed as a cultural phenomenon. Consistent with previous research (Allik & Realo, 2004), Kemmelmeier et al. demonstrated that individualistic cultures engaged in more volunteer work than collectivistic cultures. Furthermore, the regulations conceptualized in self-determination theory differ in the degree to which they fit along the individualism-collectivism spectrum. For instance, identified and intrinsic regulation are highly individualistic in nature. Given that these motives do not reflect collectivism, it is possible that different regulations such as external regulation would be more common in collectivistic cultures. Therefore, a direction for future research would be to explore whether this model holds true for a more diverse sample consisting of volunteers of various ethnicities across different cultures.

The sample of the current study is also limited in generalizability due to the age of the volunteers. A study by Clary and Snyder (1991), which utilized the functional approach to volunteer motivation, asserts that the importance of volunteers’ motives varies as a function of age. Previous research demonstrated that individuals who volunteer in order to conform to the norms of significant others are often younger in age (Fischer & Schaffer, 1993). Specifically, as volunteers get older, this social motive becomes less important to them. Moreover, older individuals tend to volunteer due to feelings of guilt (Fischer, Mueller, & Cooper, 1991). Although these studies used a different theory of volunteer motivation (i.e., the functional approach), it is likely that the findings would hold true for volunteer
motivation as theorized by self-determination theory, as these motives are similar to external and introjected regulation. As such, it is possible that the findings of this research may differ across age groups. Specifically, external regulation could be more prominent in younger samples, as student volunteers are more likely to engage in mandatory volunteer work in order to fulfill a university program requirement. Since the current study’s sample consisted of young volunteers, this research should be replicated in a sample of older volunteers.

Although the longitudinal design allows for assessment of the directionality of the relationships, there is still the chance of common method variance. That is, the variance may be attributable to the mode of measurement (e.g., questionnaire) as opposed to the underlying constructs (e.g., volunteer motivation) being measured (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). This second limitation could potentially occur, as the majority of the utilized measures were self-report questionnaires in which participants may have given socially desirable responses. To address this concern, it is recommended that future research endeavors incorporate further objective measures and other-rated data. For example, the number of hours individuals spend volunteering would provide an additional objective index. Since each Shinerama Campaign Director is assigned to a Campaign Advisor that monitors the campaign’s progress, this is a potential source of other-rated data. Although these individuals work closely with the Shinerama Campaign Directors throughout their fundraising campaigns, it is difficult to gauge levels of psychological well-being in others (Schaufeli, Taris, & van Rhenen, 2007). Therefore, the Campaign Advisors
could provide ratings for other variables such as perceived levels of volunteer work engagement and organizational commitment expressed by the Shinerama volunteers they supervise.

**Practical Implications**

This area of research has practical implications for recruiting, retaining, and motivating volunteers in the non-profit sector. First, non-profit organizations can improve their recruitment efforts. For instance, the findings suggest that volunteer work should not be mandatory, as the volunteers recruited through this tactic would express controlled motivation, which leads to low psychological well-being, high continuance commitment and increased turnover intention. This research also has the potential to advance personnel selection practices. Specifically, non-profit organizations such as Cystic Fibrosis Canada could conduct structured interviews to select volunteers with autonomous motivation. Furthermore, management theorists (e.g., Hall & Lawler, 1970) have suggested that jobs be designed such that the tasks enhance levels of autonomous motivation. Thus, non-profit organizations could also adapt this strategy by matching the volunteers’ experiences to their motives and through satisfying their basic psychological needs. For example, when volunteers’ motives for volunteering correspond with their needs satisfaction (e.g., volunteers with autonomous motivation have their need for autonomy met while volunteering), these volunteers should experience more positive outcomes. Finally, the findings of this research could be applied through facilitated training sessions at the conferences volunteers attend. Designing workshops aimed at raising autonomous motivation will
VOLUNTEER MOTIVATION AND OUTCOMES

not only benefit the volunteers, but also the non-profit organizations they work for.

As a result, volunteers should have fulfilling experiences and continue their
general work in the non-profit sector.
References


Ryan, & K. M. Sheldon (Eds.), Handbook of autonomy in cross-cultural context (pp. 163–190). New York, NY: Springer.


doi:10.1177/0013164497057006009


Figure 1. The types of motivation and regulation within self-determination theory, along with their placement along the continuum of relative self-determination (Deci and Ryan 2008, p. 17.)
Table 1

*Descriptive Statistics and Intercorrelations among Variables*

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<td>-.17*</td>
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<td>.83</td>
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<td>-.46*</td>
<td>.90</td>
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<td>.05</td>
<td>.06</td>
<td>.11*</td>
<td>.70*</td>
<td>-.24*</td>
<td>.43*</td>
<td>.93</td>
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<td>-.06</td>
<td>.09*</td>
<td>.19*</td>
<td>.68*</td>
<td>-.41*</td>
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<td>.55*</td>
<td>.89</td>
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<td>Continuance</td>
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<td>-.04</td>
<td>.26*</td>
<td>.10*</td>
<td>.18*</td>
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<td>-.05</td>
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<td>.38*</td>
<td>.74</td>
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<td>Turnover</td>
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<td>.20*</td>
<td>-.11*</td>
<td>.04</td>
<td>-.47*</td>
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<td>-.39*</td>
<td>-.58*</td>
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<td>Fundraising</td>
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<td>.21*</td>
<td>.33*</td>
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<td>.27*</td>
<td>.05</td>
<td>-.26*</td>
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*Note.* *Correlation is significant at the 0.01 level (2-tailed).*
Table 2

Descriptive Data

<table>
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<th>Location</th>
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<th>Autonomous Motivation</th>
<th>Controlled Motivation</th>
<th>Fundraising Performance</th>
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<td>3.38 (.79)</td>
<td>64.50 (.51)</td>
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<tr>
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<td>5.80 (.78)</td>
<td>2.90 (.56)</td>
<td>94.26 (25.27)</td>
</tr>
<tr>
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<td>5.45 (.67)</td>
<td>3.97 (.99)</td>
<td>77.86 (25.80)</td>
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<td>New Brunswick</td>
<td>12</td>
<td>5.54 (.85)</td>
<td>3.37 (1.10)</td>
<td>109.67 (29.89)</td>
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<tr>
<td>Newfoundland</td>
<td>2</td>
<td>5.92 (.68)</td>
<td>2.65 (1.24)</td>
<td>71.63 (13.08)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>15</td>
<td>5.91 (.76)</td>
<td>3.24 (.87)</td>
<td>103.84 (20.57)</td>
</tr>
<tr>
<td>Ontario</td>
<td>20</td>
<td>5.63 (.61)</td>
<td>3.43 (.87)</td>
<td>95.45 (40.22)</td>
</tr>
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<td>6.10 (.25)</td>
<td>2.69 (.50)</td>
<td>85.00 (.00)</td>
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<tr>
<td>Quebec</td>
<td>1</td>
<td>6.79 (.23)</td>
<td>2.40 (.21)</td>
<td>122.00 (.00)</td>
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<td>Saskatchewan</td>
<td>3</td>
<td>5.89 (.40)</td>
<td>3.63 (1.10)</td>
<td>130.75 (16.65)</td>
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Table 3

*Multilevel Model Fit and ICC Summary*

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<th>Criterion</th>
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<td>-2LL</td>
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<td>Psychological well-being</td>
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<td>Volunteer engagement</td>
<td>835.32</td>
<td>.78</td>
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<tr>
<td>Affective commitment</td>
<td>1028.52</td>
<td>.77</td>
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<td>Continuance commitment</td>
<td>1097.77</td>
<td>.66</td>
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<tr>
<td>Turnover intention</td>
<td>845.97</td>
<td>.70</td>
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*Note:* <sup>a</sup>Effect size was calculated using the pooled variance method (Snijders & Boskers, 1999).
**Table 4**

*Multilevel Model Results Summary*

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<tr>
<th>Predictor</th>
<th>Psychological Well-Being</th>
<th>Work Engagement</th>
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<td>Time</td>
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<td>.00(.01)</td>
<td>.05**(0.01)</td>
<td>-.03**(.01)</td>
<td>.02**(0.01)</td>
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<tr>
<td>Autonomous</td>
<td>.23**(0.05)</td>
<td>.35**(0.05)</td>
<td>.27**(0.05)</td>
<td>.09(.06)</td>
<td>-.16**(0.50)</td>
</tr>
<tr>
<td>Controlled</td>
<td>-.18**(0.50)</td>
<td>.03(.05)</td>
<td>-.07(.05)</td>
<td>.25**(0.06)</td>
<td>.11*(0.50)</td>
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<td>Time X Autonomous</td>
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<td>.01(.01)</td>
<td>.02*(0.00)</td>
<td>.01(.01)</td>
<td>-.00(.01)</td>
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<td>-.01(.01)</td>
<td>-.00(.00)</td>
<td>-.03**(0.01)</td>
<td>.00(.01)</td>
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</table>

*Note.* Beta coefficients are reported along with the standard error values in the brackets.  
*p < .01, **p < .001.*
APPENDIX A

Study Advertisement

You are invited to participate in a study on volunteer motivation and retention being conducted by a Masters student at Saint Mary's University. In order to be eligible to participate, you must currently be volunteering for Cystic Fibrosis Canada’s Shinerama fundraiser. Participants who agree to participate in this study will be emailed a total of 11 short electronic surveys from May 6th until September 23rd that should take approximately 10 minutes each to complete depending on your speed.

Your responses will be kept confidential.

Please respond to this email if you would like to participate in the study. If you have any questions regarding this study please email Aleka MacLellan at aleka.maclellan@smu.ca or call 902-401-5292.

Your time and participation are greatly appreciated.

Certification:

This research has been reviewed and approved by the Saint Mary’s University Research Ethics Board. If you have any questions or concerns about ethical matters, you may contact the Chair of the Saint Mary's University Research Ethics Board at ethics@smu.ca or 902-420-5728.
Dear Shinerama Volunteer,

As a graduate student at Saint Mary's University, I am collecting data for my thesis in partial fulfillment for the Master’s of Science program in Industrial-Organizational (I-O) Psychology. Given my involvement on the Shinerama National Leadership Team, my research focuses on volunteerism for non-profit organizations.

This research study is open to individuals who are currently volunteering for Cystic Fibrosis Canada’s Shinerama fundraiser. It involves completing a total of 9 online surveys over the course of your fundraising campaign. Each survey will take approximately 10-15 minutes to complete depending on your speed. Subsequent surveys will be sent to you via email every two weeks until September 23rd.

Your participation is completely voluntary and you have the right to withdraw at any time without penalty or explanation prior to completing the online survey. If you would like to withdraw from this study, please email aleka.maclellan@smu.ca

Upon completion of each survey, you will be entered in a raffle for a chance to win a monetary donation of $1000 towards your Shinerama campaign. Email addresses will be collected only for the purpose of contacting participants and allocating ballots to be entered into the draw. This information will be separated from your responses in order to keep all information anonymous.

Certification:
This research has been reviewed and approved by the Saint Mary’s University Research Ethics Board. If you have any questions or concerns about ethical matters, you may contact the Chair of the Saint Mary's University Research Ethics Board at ethics@smu.ca or 902-420-5728.

Agreement:
I understand what this study is about and appreciate the risks and benefits. I have had adequate time to think about this and have had the opportunity to ask questions. I understand that my participation is voluntary and that I can end my participation at any time.

Please note that by clicking “I Consent” you are providing informed consent to participate.
APPENDIX C

Motivation at Work Scale-Revised
(Gagné, Forest, Vansteenkiste, Crevier-Brand, Van den Broeck, & Aspeli, 2012)

Instructions: Please answer another set of questions for why you volunteer. Using the 7-point scale below, please indicate the extent to which each reason for volunteering applies to you.

1        2               3            4          5               6          7
Strongly Disagree Strongly Agree

I put effort in my volunteering activities….
1. because others put pressure on me (e.g., supervisor, colleagues, family…)
2. because others force me to do it (e.g., supervisor, colleagues, family…)
3. because others will appreciate me more (e.g., supervisor, colleagues, family…)
4. to avoid being criticized by others (e.g., supervisor, colleagues, family…)
5. because it makes me feel proud of myself
6. because it makes me feel good about myself
7. because otherwise I will feel bad about myself
8. because otherwise I will feel guilty
9. because the volunteer work I do has a lot of personal meaning to me
10. because putting efforts in my volunteer work has personal significance to me
11. because it is useful to put effort in my volunteer work
12. because I personally consider it important to put efforts in my volunteer work
13. because I am made for this type of volunteer work
14. because this volunteer work is a vocation to me
15. because I actualize myself fully through this volunteer work
16. because this volunteer work fits perfectly well with my life goals
17. because I enjoy this volunteer work very much
18. because the volunteer work I do is interesting
19. because this volunteer work aligns with my interests
20. because the volunteer work I do is a lot of fun
**APPENDIX D**

*General Health Questionnaire*

(Goldberg, 1972)

**Instructions:** Please indicate the extent to which the following questions apply to you.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not At All</td>
<td>All The Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Have you been able to concentrate on whatever you’re doing?
2. Have you lost much sleep from worry?
3. Have you felt that you’re playing a useful part in things?
4. Have you felt capable of making decisions about things?
5. Have you felt under strain?
6. Have you felt that you couldn’t overcome your difficulties?
7. Have you been able to enjoy your normal day-to-day activities?
8. Have you been able to face up to your problems?
9. Have you been feeling unhappy and/or depressed?
10. Have you been losing confidence in yourself?
11. Have you been thinking of yourself as a worthless person?
12. Have you been feeling reasonably happy, all things considered?
APPENDIX E

Work Engagement Scale
(Schaufeli, Bakker, & Salanova, 2006)

Instructions: Please indicate the degree to which the following statements apply to you.

1  2  3  4  5  6  7

Never                                      Always

1. When volunteering, I feel bursting with energy.
2. When volunteering, I feel strong and vigorous.
3. I am enthusiastic about my volunteer work.
4. My volunteer work inspires me.
5. When I get up in the morning, I feel like volunteering.
6. I feel happy when I am volunteering intensely.
7. I am proud of the volunteer work that I do.
8. I get immersed in my volunteer work.
9. I get carried away when I’m volunteering.
APPENDIX F

Organizational Commitment Questionnaire
(Allen & Meyer, 1991)

Instructions: Indicate the extent to which you agree with the following statements.

0     1         2   3    4
Strongly Disagree            Strongly Agree

1. I would be very happy to spend the rest of my career with Cystic Fibrosis Canada.
2. I enjoy discussing Cystic Fibrosis Canada with people outside it.
3. I really feel as if Cystic Fibrosis Canada’s problems are my own.
4. I think that I could easily become as attached to another non-profit organization as I am to Cystic Fibrosis Canada.
5. I do not feel like ‘part of the family’ at Cystic Fibrosis Canada.
6. I do not feel ‘emotionally attached’ to Cystic Fibrosis Canada.
7. Cystic Fibrosis Canada has a great deal of personal meaning for me.
8. I do not feel a strong sense of belonging to Cystic Fibrosis Canada.
9. I am not afraid of what might happen if I quit my volunteer work without having another opportunity lined up.
10. It would be very hard for me to leave Cystic Fibrosis Canada right now, even if I wanted to.
11. Too much in my life would be disrupted if I decided I wanted to leave Cystic Fibrosis Canada now.
12. It wouldn’t be too costly for me to leave Cystic Fibrosis Canada now.
13. Right now, staying with Cystic Fibrosis Canada is a matter of necessity as much as desire.
14. I feel that I have too few options to consider leaving Cystic Fibrosis Canada.
15. One of the few serious consequences of leaving Cystic Fibrosis Canada would be the scarcity of available alternatives.
16. One of the major reasons I continue to volunteer for Cystic Fibrosis Canada is that leaving would require considerable personal sacrifices – another non-profit organization may not match the overall benefits I have here.
APPENDIX G

*Turnover Intention Scale*  
(Kelloway, Gottlieb, & Barham, 1999)

**Instructions:** Indicate the extent to which you agree with the following statements.

1. Strongly Disagree  
2.  
3.  
4.  
5. Strongly Agree

1. I am thinking about ending my volunteer work for Cystic Fibrosis Canada.
2. I am planning to look for a different form of volunteer work.
3. I intend to ask people about other volunteer opportunities.
4. I don't plan to volunteer for Cystic Fibrosis Canada much longer.
APPENDIX H

Demographics Questionnaire

1. Age: ______

2. Gender: [ ] Male  [ ] Female  [ ] Other

3. What is your ethnic background?
   - African-American _____
   - Arab _____
   - Chinese _____
   - Filipino _____
   - Japanese _____
   - Latin American _____
   - South Asian _____
   - Southeast Asian _____
   - West Asian _____
   - White (Caucasian) _____
   - Other _____

4. State the city and province you are currently residing in
   - City: ______________
   - Province: ______________

5. State your university: ______________
APPENDIX I

Feedback Letter

Thank you for your participation in this study on volunteer motivation and retention. The data you provided will be used as part of a Master’s thesis. The findings may be shared with the research community through conference presentations and journal articles.

Please be assured that all data will remain confidential. If you would like to receive a summary of the results of the study, please email the researcher and, upon completion of the study, a summary of the results will be emailed to you. Please note that providing your email address does not jeopardize your anonymity.

As with all research projects at Saint Mary's University involving human participants, this study was reviewed by and received research ethics approval through the Saint Mary's University Research Ethics Board. Should you have any comments or concerns about ethical matters, please contact the Chair of the Research Ethics Board at 902-420-5728 or ethics@smu.ca.

Thank you very much for your time. Your contribution to this research is very much appreciated.

If you have any questions regarding this study please email Aleka MacLellan at Aleka.MacLellan@smu.ca or 902-401-5292.

Saint Mary's University
Department: Psychology
REB File #13-100

In order to record your responses, please click on "NEXT". You will receive confirmation that your responses have been recorded on the next page.

Thank you for completing this questionnaire.
Research Ethics Board Certificate Notice

The Saint Mary’s University Research Ethics Board has issued an REB certificate related to this thesis. The certificate number is: 13-100.

A copy of the certificate is on file at:

Saint Mary’s University, Archives
Patrick Power Library
Halifax, NS
B3H 3C3

Email: archives@smu.ca
Phone: 902-420-5508
Fax: 902-420-5561

For more information on the issuing of REB certificates, you can contact the Research Ethics Board at 902-420-5728/ ethics@smu.ca.