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# Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on volunteer engagement

Valérie Millette · Marylène Gagné

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**Abstract** We conducted a field study to test the applicability of the job characteristics model (JCM) in volunteer organizations and examine the impact of job characteristics on volunteer motivation, satisfaction and intent to quit, as well as test a measure of volunteer performance. One hundred and twenty-four volunteers completed measures of job characteristics, motivation, satisfaction, and intent to quit. Supervisors rated volunteer task performance and organizational citizenship behaviors (OCB). Results showed that job characteristics were related to volunteers' autonomous motivation, satisfaction and performance. Autonomous motivation acted as a mediator in the relationship between job characteristics and satisfaction. The theoretical and practical implications of these findings are discussed.

**Keywords** Volunteer motivation · Self-determination theory · Autonomous motivation · Performance · Satisfaction · Intent to quit · Job characteristics model

# Introduction

Volunteerism has been defined as unpaid help provided in an organized manner to parties to whom the worker has no obligations (Musick and Wilson 1997). Because volunteering does not result in direct personal tangible gains (e.g., salary), non-profit organizations must find other means to motivate their volunteers to work well, and to

V. Millette · M. Gagné (⊠)

Department of Management, John Molson School of Business, Concordia University, 1455 de Maisonneuve W., Montreal, QC, Canada H3G 1M8 e-mail: mgagne@jmsb.concordia.ca keep them. Surprisingly, much of the research on volunteer motivation has focused on what motivates people to start volunteering. Even knowing that the motivation to join and the motivation to continue volunteering are distinct (Pearce 1993) and that organizations must work ever harder to retain their long-serving volunteers because of their ever growing scarcity (Davis-Smith 1998), very few researchers have assessed the impact of motivation on the length of volunteers' stay with an organization (e.g., Clary and Snyder 1991; Gagné 2003; Omoto and Snyder 1995), and the impact of motivation on volunteers' performance has never been investigated to our knowledge. We examined how the design of volunteer work is related to volunteers' motivation, satisfaction, intent to leave the organization, and performance.

While the job characteristics model (JCM; Hackman and Oldham 1975) has been used in a vast variety of paid work settings over the years, testing it in the volunteer sector is new. Also, since there is little agreement on what constitutes volunteer performance, and no attempts have yet been made at measuring it, we tested a measure of volunteer performance using well-known concepts from organizational behavior, namely the distinction between organizational citizenship behaviors (OCB) and task performance.

The job characteristics model

Hackman and Lawler (1971) identified three "critical psychological states" that a job should enhance if it is to be internally motivating. They are the experienced meaning-fulness of the work, the experienced responsibility for work outcomes, and the knowledge of results. Hackman and Oldham (1975) worked backward to identify five job

characteristics that would increase the experience of the three psychological states: (1) skill variety, the degree to which a job requires a variety of activities in carrying out the work; (2) task identity, the degree to which a job requires completion of a whole and identifiable piece of work; (3) task significance, the degree to which the job has a substantial impact on the lives of other people; (4) autonomy, the degree to which the job provides substantial freedom, independence, and discretion; and (5) feedback from the job, the degree to which carrying out the work activities provides direct and clear information about performance effectiveness.

Hackman and Oldham (1976) proposed that while the effects of each characteristic could be examined individually, an overall Motivating Potential Score (MPS) was more useful. The MPS is designed as a multiplication of the core job dimensions as they relate to the critical psychological states.

$$MPS = [(Skill variety + Task identity + Task significance)/3] \times [Autonomy] \times [Feedback]$$
(1)

Jobs high in MPS have been associated with positive outcomes, such as internal work motivation and performance (Oldham et al. 1976), and objectively manipulating the MPS in a field experiment has led to higher levels of intrinsic satisfaction and job involvement (Orpen 1979).

#### Self-determination theory

Self-determination theory (SDT; Deci and Ryan 1985, 2000) proposes that different types of motivation, varying in degree of self-determination, underlie human behavior. Intrinsic motivation refers to engaging in an activity for its own sake, because one finds it enjoyable and interesting. Extrinsic motivation refers to engaging in an activity for instrumental reasons, such as acquiring a reward. Beyond this simple dichotomy, SDT expands the concept of extrinsic motivation by theorizing that there are autonomous and controlled types of extrinsic motivation that can be aligned along a continuum of increasing internalization. The most controlled form of extrinsic motivation, external regulation, represents behavioral engagement based on external pressures and demands or trying to attain a contingent reward (Ryan and Deci 2000). Cases of external regulation are becoming more frequent in young volunteers, as volunteering has become a requirement for high school graduation in some states (Astin et al. 1999). Next lies introjected regulation, which is partly internalized extrinsic motivation. It represents engagement out of egoinvolvement or self-worth contingencies. As Wuthnow and Hodgkinson (1990) pointed out, many people see volunteerism as a way to prove to themselves and others that they are nice and decent human beings.

Next is *identified regulation*, a more autonomous type of extrinsic motivation, where a person engages in an activity because the activity is personally meaningful and valued. Even though a behavior motivated through identification is volitional, its purpose is to achieve an outcome that is separable from the behavior. For this reason, the motivation is still extrinsic, but is associated with positive outcomes such as persistence (Losier and Koestner 1999). Individuals who volunteer because it is for a good cause are regulating their behavior through actions with which they identify. At the right end of the continuum lies intrinsic motivation, where people engage in an activity because it is enjoyable and interesting. It is the most self-determined form of motivation and is associated with positive outcomes like persistence, performance quality (Baard et al. 2004), goal attainment (Sheldon and Elliot 1998), and positive feelings (Csikszentmihalyi 1997).

Additional evidence for the particular ordering of the types of motivation stems from evidence of an underlying quasi-simplex pattern (Ryan and Connell 1989), where the constructs are ordered according to their conceptual similarity. Variables deemed more similar will be more highly positively correlated than those that are more discrepant. This allows for the use of a "relative autonomy index" (Ryan and Connell 1989), which weighs each type of motivation according to its degree of autonomy. This index has been widely used in educational contexts (Goudas et al. 1994; Grolnick and Ryan 1987; Ryan and Connell 1989). The RAI is computed as follows, and represents a relative level of autonomous motivation, such that positive scores indicate stronger autonomous motivation and negative scores represent stronger controlled motivation.

$$RAI = 2 \text{ (intrinsic)} + 1 \text{ (identified)} - 1 \text{ (introjected)} - 2 \text{ (external)}$$
(2)

Job characteristics and autonomous motivation

The JCM is consistent with SDT in its intent to foster internal motivation (Gagné and Deci 2005). Just as SDT claims that autonomy is a basic psychological need, autonomy is also an important job characteristic and a psychological need in JCM. As well, the job characteristics have been positively associated with intrinsic motivation (Gagné et al. 1997). Based on these results, we propose that:

**H1:** MPS will be positively associated with autonomous motivation.

While the JCM sees internal motivation as an outcome, SDT claims that motivation is a mediator that will lead to other outcomes, such as satisfaction or performance. We propose, based on the work of Eby et al. (1999), who showed that intrinsic motivation is a mediator in the relationship between job characteristics and outcomes, that autonomous motivation will mediate the links between MPS and each of the following outcomes.

# Satisfaction

Loher et al. (1985) found a meta-analytic correlation of .39 between job characteristics and job satisfaction. Support for job characteristics effects can be found in the volunteerism literature as well. Okun and Eisenberg (1992) suggested that volunteers are more likely to be satisfied when their activities are varied. Dailey (1986) showed that volunteers working on a political campaign were more committed when their work encouraged autonomy and provided feedback. Based on these findings, we expect that:

**H2a:** MPS will be positively associated with volunteer work satisfaction.

**H2b:** Autonomous motivation will mediate the link between MPS and satisfaction.

## Intent to quit

In defining volunteer engagement, we chose to focus on measures that indicate sustained engagement, and included both a quantitative operationalization (i.e., intent to quit) and a qualitative one (i.e., performance appraisal). Workplace research on engagement has used constructs such as absenteeism and turnover. For example, Johns (1978) and Orpen (1979) have shown that, although small, a negative relationship between MPS and absenteeism exists. Similarly, job enrichment has been shown to have thwarting effects on turnover (McEvoy and Cascio 1985). Studies in the volunteer sector, however, have focused primarily on the amount of time spent volunteering and quit intentions. Research has shown a clear link between volunteers' satisfaction, their intentions to guit and their actual behavior of leaving the organization (e.g., Omoto and Snyder 1995). This view is congruent with the assertion that having internally motivating work is what keeps volunteers from leaving (Wright et al. 1995). Based on this, we expect that:

**H3a:** MPS will be negatively associated with intent to quit volunteering.

Cappellari and Turati (2004) have argued that extrinsic motivation tends to "lower the voluntary labor supply" (p. 619). Similarly, Snyder and Omoto (2001) reported that volunteers who act based on internal motives are less likely to end their volunteer work than those who feel external pressure to volunteer. Based on this, we propose that:

**H3b:** Autonomous motivation will mediate the link between MPS and intent to quit.

To this day, most volunteering research has only focused on quantitative outcomes such as quit intent (Cnaan and Cascio 1999; Pearce 1983), which do not take into account the quality of that engagement in terms of what volunteers actually do during the time they spend volunteering. Farmer and Fedor (2001) explained that this reliance on attendance variables is based on the assumption that, just by being there, volunteers contribute something to the organization but that in reality, contribution levels are highly uneven. Volunteers can at times exert little effort and even become a burden to the organization. For these reasons, we attempted measure volunteer job performance.

## Volunteer performance

We used a general definition of performance from the organizational behavior literature. Borman and Motowidlo (1993) suggested that it is important to distinguish between formal expected performance, referred to as task-related performance, and organizational citizenship behavior (OCB). OCB is an "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that, in the aggregate, promotes the effective functioning of the organization" (Organ 1988, p. 4). While some researchers have argued that OCB and volunteerism are similar and share many correlates (Penner et al. 1997), we do not know whether volunteer performance can be equated with OCB or if there is a distinction to be made between in-role performance and OCB even in volunteer work. While not every organization working with volunteers does so, Volunteer Canada (2001) recommends that volunteers be given a written task description before they begin their engagement with an organization. Based on this premise, behaviors that go above and beyond such task descriptions could be OCB. However, Wolfe-Morrison (1994) showed that whether employees perform OCB depends on how broadly they define their jobs. She found that employees who believe that some OCBs form part of their responsibilities are more likely to perform them. This is even more likely to be the case in a volunteering environment, where job descriptions tend to be more fluid. Therefore, we tested the factorial structure of a commonly used performance measure in OB in a volunteer context.

Job characteristics have been shown to influence OCB (Farh et al. 1990; Organ 1990). Kopelman's (1985) review also reported that job characteristics have a sizable effect

on task performance. Based on these findings, we propose that:

**H4a:** MPS will be positively associated with task performance.

H5a: MPS will be positively associated with OCB.

Another stream of research has shown that work motivation is also associated with performance. Laboratory experiments as well as field studies have shown that autonomous motivation is associated with more effective performance, especially on complex tasks (Amabile 1982; Burton et al. 2006; McGraw and McCullers 1979). None of this research has distinguished task performance and OCB, none has examined motivation as a mediator between job characteristics and performance, and no SDT research has yet examined volunteer performance. Therefore, we propose that:

**H4b:** Autonomous motivation will mediate the link between MPS and task performance.

**H5b:** Autonomous motivation will mediate the link between MPS and OCB.

### Method

# Participants

We sent questionnaires to 230 volunteers and their 24 supervisors at a community clinic in a large metropolitan area. These volunteers helped the local population by visiting seniors, coaching new mothers, tutoring school kids, driving seniors to their appointment, making presentations on elder abuse, and organizing events. We sent questionnaires to an additional 70 volunteers and their one coordinator (who had close contact with them) from another volunteer organization in the same area that works in partnership with another community clinic and offers services to seniors (volunteers do friendly visits, grocery shopping or accompany seniors to medical appointments). Finally, a sample of 15 volunteers and their coordinator from another volunteer center was added. These volunteers all worked as placement counsellors or receptionists in the office.

## Procedure

Two questionnaires with return envelopes were distributed. The first one was mailed to all 315 volunteers and asked them to provide a self-assessment of their motivation, satisfaction, intent to quit and perception of their tasks' characteristics. Questionnaires were pre-identified by a participant number. The questionnaires were received by the second author, who took note of the identification number and communicated it to the first author, who then called the participants who had not completed the survey yet to ask them to participate. The identification number also allowed us to ask the supervisors of the volunteers who participated in the study to complete a questionnaire. The second questionnaire was distributed in person to the supervisors, and asked supervisors to rate participants' task performance and OCB.

#### Measures

The volunteer questionnaire included the following measures, and started with demographic questions concerning age, gender, and level of education.

## Job characteristics

Volunteers' task perceptions were measured using Hackman and Oldham's (1975) Job Diagnostic Survey (JDS). Eight items asked volunteers to rate the job characteristics on a 1 (very inaccurate) to 7 (very accurate) point scale. Another seven statements had individual anchors that were adapted to each job dimension. The scores on each subscale (i.e. three items per subscale or job dimension) were aggregated into an index measure of Motivation Potential (MPS). Cronbach alphas ranged from .56 to .80 and are comparable to the ones from the original study (Hackman and Oldham 1975), which reported values ranging from .59 to .71. They also reported good discriminant validity between the dimensions as well as evidence of being able to distinguish between jobs with the JDS and the MPS. Item samples are "My volunteer work requires me to use a number of complex or high level skills" (skill variety), "My task is arranged so that I do not have the chance to do an entire identifiable task from beginning to end" (task identifiability, reversed), "This volunteer job is one where a lot of other people can be affected by how well the work gets done" (task significance), "This volunteer job denies me any chance to use my personal initiative or judgment in carrying out the work" (autonomy, reversed), and "The volunteer work itself provides very few cues about whether or not I am performing well" (feedback, reversed).

# Motivation

We created a volunteer motivation scale by modifying items from two sources. We borrowed items from Gagné (2000) which initially measured reasons for engaging in prosocial behaviors that we modified to pertain to volunteering. We also borrowed items from the Motivation towards the Environment Scale (Pelletier et al. 1998) that we also modified to pertain to volunteering. Items were answers to the question "Why did you volunteer in the last 6 months?" and were rated on a 1 (Completely disagree) to 7 (Completely agree) scale. The scale included the following subscales: three items for external regulation, four items for introjection, four items for identification, and three items for intrinsic motivation. We subjected the data scale to a factor analysis with maximum likelihood estimation and direct oblimin rotation. We eliminated items with poor loadings to end up with three items per subscale. The final model yielded four eigenvalues above 1 with a good fit to the covariance matrix,  $\chi^2$  (24) = 20.41, ns. However, the rotated pattern matrix showed that some of the items had poor loadings on their respective factors and some weak cross-loadings (see Table 1). Nonetheless, we kept this final structure as it was the best psychometric structure we were able to get. Internal reliabilities for each subscale were  $\alpha = .42$  for external regulation,  $\alpha = .81$  for introjection,  $\alpha = .71$  for identification, and  $\alpha = .75$  for intrinsic motivation. The external regulation subscale was problematic as two out of three items were skewed negatively and had high kurtosis because most people answered 1 or 2 on these items (i.e., did not endorse them highly). The items for each subscale were averaged, and their means, standard deviations, and intercorrelations are reported in Table 2. Volunteers reported being most intrinsically motivated, followed by identification, introjection and external regulation. The pattern of correlations between the subscales followed a quasi-simplex structure. External regulation was unrelated to the other types of motivation (probably because of its low internal consistency). Introjection was highly positively related to identification (r = .50) and more modestly with intrinsic motivation (r = .29). Identification was positively related to intrinsic motivation (r = .49). RAI scores were computed for each volunteer. On average, volunteers reported being relatively autonomously motivated, and scores ranged from -3 to 18.

#### Intent to quit

Turnover intentions have been shown to be, by far, the best predictor of actual turnover (Breukelen et al. 2004). Volunteers rated the two following items: "It is likely that I will leave this organization within the next year" and "I frequently think about leaving this organization" on a 1 (not at all true) to 7 (very true) point scale (adapted from Cammann et al. 1983, as cited in Chen et al. 1998). The correlation between the items was .67.

## Satisfaction

The satisfaction measure was adapted from Hackman and Oldham's (1975) Job Diagnostic Survey, who define job satisfaction as "an overall measure of the degree to which the employee is satisfied and happy with the job" (p. 162). They found positive relations between the job characteristics and job satisfaction with paid workers. It includes three items, one of which ("I frequently think of quitting this job") was not used as it replicated an item from the "Intent to quit" measure. The other two items were "generally speaking, I am very satisfied with this volunteer job" and "I am generally satisfied with the kind of work I do in this volunteer job". The correlation between them was .73.

#### Task performance and OCB

Supervisors rated the task performance and OCB performed by volunteers in the past year using 12 items from

 Table 1
 Volunteer motivation scale items and factor loadings on their respective factors

Why do you volunteer?	Factor 1	Factor 2	Factor 3	Factor 4
Ext 1) So other people would approve of me	.99			
Ext 2) For the recognition I get from others	.40			
Ext 3) Because my friends and family insist that I do	.08	.24	26	
Intro 1) Because I would really feel bad about myself if I didn't		.76		
Intro 2) Because I would feel guilty if I didn't		.82		
Intro 3) Because it makes me feel proud and like a worthy person		.60		
Ident 1) Because it really feels personally important for me to do			.23	.29
Ident 2) Because volunteering has become a fundamental part of who I am			.68	
Ident 3) Because volunteering is part of the way I've chosen to live my life			.74	
Intrin 1) Because it is fun				.55
Intrin 2) Because it is interesting and enjoyable for me to volunteer				.81
Intrin 3) For the enjoyment I feel when I volunteer in this organization				.82

	Μ	SD	1	2	c,	4	5	9	L	8	6	10	11	12	13
1. SV	4.01	1.67													
2. TI	4.89	1.43	.15 <sup>+</sup>												
3. TS	5.04	1.33	.52***	.22*											
4. Aut.	4.99	1.45	.37***	.39***	.22*										
5. Feed.	4.67	1.36	.39***	.34**	.37***	$.16^{+}$									
6. MPS	116.7	68.32	.64***	.54***	.57***	.67***	.72***								
7. Ext.	1.92	1.01	02	.01	14	.07	14	-00							
8. Intrj.	3.40	1.81	01	14	.14	.05	06	.01	.10						
9. Ident.	4.83	1.58	.15 <sup>+</sup>	-00	.19*	.05	.05	.15*	$16^{*}$	.50***					
10. Intr.	4.93	1.47	.19*	03	.30***	.23**	.17 <sup>+</sup>	.28**	04	.29***	.49***				
11. RAI	7.46	4.39	.19*	.01	.28**	.12	.22*	.28**	59***	08	.56***	.74***			
12. Sat.	5.96	1.01	.27**	.23**	.35***	.33***	.22*	.41***	22*	.03	.23**	.33***	.39***		
13. Quit	2.39	1.47	.04	07	20*	01	.03	08	.17+	18*	20*	$17^{+}$	19*	28**	
14. Perf.	5.87	1.03	.21*	.07	.11	.25**	80.	.25**	03	02	60.	.07	.10	.19*	23*
N = 124,	except for	performa	N = 124, except for performance, $N = 113$	3											
Note. SV	= skill var	iety; TI :	= task ident.	Note. SV = skill variety; TI = task identity; TS = task significance; Aut. = autonomy; Feed. = feedback from the job; MPS = motivating potential score; Ext. = external regulation;	k significanc	e; Aut. = a	utonomy; Fe	eed. = feedb	ack from the	; job; MPS =	= motivating	potential sc	ore; Ext. =	external re;	gulation

Table 2 Means, standard deviations, and correlations of all variables

scale except for Quit, MPS and RAI  $^+$  p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

the Williams and Anderson (1991) 21-item scale of in-role and OCB performance with a 1 (not true) to 7 (very true) point scale (see Appendix). They found that task performance and OCB, although they were correlated in the .50 range, still fell on different factors that were related differentially to outcomes. OCB was related to workers' perceptions of task characteristics and the work climate, whereas task performance was not. We selected only items that pertained to volunteer work. Task performance was measured with four items ( $\alpha = .76$ ), and OCB was measured with eight items ( $\alpha = .86$ ). The correlation of .61 between the two constructs indicates that they were closely related. We conducted a factor analysis with maximum likelihood estimation on the 12 performance items, and only one Eigenvalue higher than 1 was found, and all items loaded onto one factor, which ranged between .34 and .94. A two-factor solution did not fit the data. This indicates that only one construct represented volunteer performance. We therefore merged them ( $\alpha = .91$ ) to test H4 and H5.

## Results

## Descriptive statistics

We obtained 143 out of the 315 volunteer surveys we sent (45% response rate). Out of those 143, 14 did not complete the survey entirely, and five had not completed it at all, replying only to let us know that they were no longer involved with the organization. Therefore, 124 volunteer surveys were used in analyses. Out of those, 68% were women and average age was 53-years-old (range 15 to 89years-old). A majority of volunteers (60%) had obtained a university degree, and 68% of them had been involved with the organization for at least a year, while 37% had been for over 2 years. A total of 113 complete performance assessments were collected from 23 supervisors. All variables were normally distributed. We tested for systematic differences in means and correlations across the four organizations and across the supervisors and found none. Therefore, we did not control for those variables.

Table 2 shows the descriptive statistics for the variables included in this study. Volunteers perceived their volunteer work to be moderately high in MPS, although the MPS varied greatly (out of a possible range of 1–343, scores varied between 3.26 and 326.67 in this sample). We examined the MPS scores by roles, and found that MPS captured the inherent differences in volunteers' job characteristics and, as such, was an appropriate measure to use in testing our hypotheses regarding job design. For example, receptionists had an average MPS of 80.58, while new mother coaches had an average MPS of 228.67. Volunteers

reported being generally satisfied with their work and did not intend to quit. Finally, their supervisors rated them as being high performers both in terms of task performance and OCB. The correlations presented in Table 2 provide information about the support received for our hypotheses concerning simple effects. For mediational hypotheses, we conducted multiple regression analyses.

## Hypothesis 1

There was a significant positive correlation between MPS and RAI, supporting *H1*, r = .28, p < .01. Interestingly, MPS was significantly correlated with intrinsic motivation, r = .28, p < .001, and only marginally with identified motivation, r = .15, p < .10.

#### Hypothesis 2

Supporting *H2a*, MPS was positively correlated with satisfaction. To test for mediation, we first found that both MPS alone,  $R^2 = .17$ ,  $\beta = .41$ , p < .001, and RAI alone,  $R^2 = .15$ ,  $\beta = .39$ , p < .001, accounted for significant variations in satisfaction. MPS also accounted for significant variations in RAI, as reported above. Finally, the relationship between the MPS and satisfaction when the RAI was added to the equation, F(2,121) = 20.07, p < .001, dropped slightly but was still significant,  $\beta = .33$ , p < .001, while RAI was significant as well,  $R^2 = .08$ ,  $\beta = .30$ , p < .001. Thus we can talk about partial mediation. Together, MPS and RAI accounted for 25% of the variance in satisfaction. We found that the effect of MPS on satisfaction through RAI was significantly different from zero, Sobel = 2.31, p < .05.

Demographic variables were used to test for possible interaction effects with the main variables included in this study. While tests were run with all these variables, only one interaction effect was found between gender and RAI,  $R^2 = .03$ ,  $\beta = -.53$ , p < .05. Women's level of satisfaction tended to be more affected by their level of autonomous motivation than men's.

# Hypothesis 3

No support was found for H3a, as MPS was uncorrelated with intent to quit, r = -.08, ns, although there was a significant negative relation with task significance, r = -.20, p < .05. Since no relationship was found between intent to quit and MPS, mediation between these variables was not tested for. Therefore, H3b was not supported. However, there was a negative and significant correlation between RAI and intent to quit, r = -.19, p < .05.

#### Hypotheses 4 and 5

There was a significant positive correlation between MPS and total performance, supporting H4a, r = .25, p < .01, but not with RAI, r = .10, ns. There was therefore no support for H4b.<sup>1</sup>

# Discussion

One goal of this study was to test a model whereby the job characteristics of volunteer work are related to volunteers' autonomous motivation, their work satisfaction, their intent to quit and their performance. We found that job characteristics were positively related to autonomous motivation, although this effect was relatively small  $(R^2 < 10\%)$ . Moreover, autonomous motivation did not mediate many of the effects of job characteristics on outcomes. Examining correlations between job characteristics and the different types of motivation, we observe that only intrinsic motivation is significantly correlated with most of the job characteristics. Identified motivation shares some, but none of the characteristics are associated with external or introjected regulation. These results concur with those found by Gagné et al. (1997), although they only measured intrinsic motivation. We can conclude that while it may be useful to redesign volunteer jobs, this endeavor is likely to increase only people's sense of interest and enjoyment in their work. Although the JCM argues that the job characteristics would also influence the meaningfulness of one's work, the current study did not yield strong evidence for this when looking at correlations with identified motivation. One thing is for sure, the job characteristics did not influence the controlled types of motivation. Gagné et al. (2007, Unpublished manuscript) recently reported that only autonomous motivation was related to need satisfaction and to important organizationally related outcomes. On the other hand, controlled motivation yielded null results. So it seems that we should especially concentrate on fostering autonomous motivation to attain positive outcomes.

We believe that autonomous motivation might be more strongly influenced by other work-related factors, such as supervisory styles, peer interactions, recognition, and rewards. This may be why Oldham et al. (1976) argued that job characteristics would have stronger effects on job attitudes when workers are satisfied with other contextual aspects of their work. Orpen (1979) found that contextual satisfaction indeed moderated links between job characteristics and job attitudes, but did not moderate links to performance. Future research could examine how different work characteristics, such as job characteristics, supervision and reward systems may individually and interactively affect autonomous motivation. SDT and the JCM also propose that work motivation is affected by need satisfaction or psychological states, so such mediating variables could be studied to further examine links between job characteristics and the different types of motivation.

We did find in one case that autonomous motivation mediated the significant link between job characteristics and job satisfaction. This result implies that redesigning volunteers' tasks is likely to significantly increase volunteers' satisfaction, as 17% of the variance in satisfaction was accounted for by job characteristics, and yet another 18% was accounted for by autonomous motivation. Interestingly, external regulation (negatively) also drove this effect. Thus, satisfaction was not only a function of finding meaning in, and enjoying one's work, but also a function of *not* being driven by external pressure and rewards. This supports self-determination theory's assertion that working (or in this case, volunteering) out of pressure is likely to decrease work-related positive experiences (Deci and Ryan 1985).

An alternative explanation is available, however. Wilson (2000) stated that some volunteers may feel that they are expected or ought to be enjoying themselves. According to Exchange Theory, "when volunteers say how much they benefit from serving others, they could simply be engaging in 'reciprocity talk', in which they articulate their need to complete the transaction by indicating how much they enjoy the work so that a balance is restored to the relationship" (Wuthnow 1991, p. 95). Asking volunteers to rate their satisfaction before they rate their motivation could shed light on the issue. We did reverse the order of these two scales in two of the four organizations to which we sent questionnaires. The mean satisfaction scores for both subsets were not significantly different (Subset 1: M = 6.24, SD = .70; Subset 2: M = 5.74, SD = 1.25), so satisfaction was not affected by the order of the questions. Since our findings are consistent with those of other researchers who found that the JCM relates strongly to satisfaction (Loher et al. 1985), and since Wilson (2000) concluded that Exchange Theory is probably too 'utilitarian' to be of much use in a voluntary setting, we trust that our results reflect the true experiences of our sample of volunteers. To resolve this issue definitely, we could use experimental designs to avoid common method bias or observe and manipulate

<sup>&</sup>lt;sup>1</sup> We ran the analyses separately on performance and OCB. Supporting *H4a*, MPS was positively correlated with task performance, r = .29, p < .01. However, because RAI was unrelated to task performance, r = .09, ns, it was not possible to test for mediation, therefore *H4b* was not supported. Weak support was found for *H5a*, as MPS was marginally correlated with OCB, r = .17, p < .10. RAI was unrelated to OCB, r = .08, ns, therefore, *H5b* was not supported.

unconscious motives (Lévesque and Pelletier 2003). For example, one could supraliminally prime autonomous or controlled motivation and observe effects on helping or volunteer behavior and satisfaction with the act.

Autonomous motivation was more strongly related to satisfaction in women than in men. We have no theoretical explanation for this gender effect, and found no precedent in the literature. Intent to quit was unrelated to the job characteristics, but it was negatively related to autonomous motivation. Again, the lack of contribution of job characteristics could indicate that other work climate factors, like supervision or rewards could explain fluctuations in autonomous motivation. Orpen (1979) on the contrary found that manipulating job characteristics yielded lower absenteeism and turnover rates in paid workers. This is perhaps a difference between paid and volunteer work. Indeed, our results support Bussell and Forbes' (2002), suggestion that "despite efforts by volunteer groups to develop intrinsic and extrinsic rewards, it has to be recognized that volunteers do leave because of factors outside the volunteer organization's control" (p. 251). This is an important reality in the volunteer sector, since lower time commitments (often just a couple of hours a week) allow volunteers to leave without much disruption to their lives (Pearce 1993). Some of our volunteers commented that they were leaving for personal or medical reasons, which had nothing to do with their motivation or satisfaction levels (35% of our respondents were over 70years-old). Gagné (2003), however, showed that actual volunteer turnover can be predicted by the degree to which managers encouraged participation, offered choices, and listened to the volunteers. While the present study looked at the autonomy inherent in the volunteers' jobs, it did not take into consideration other environmental aspects, such as supervision, that can also affect feelings of autonomy.

Another goal of our study was to examine the concepts of task performance and organizational citizenship behavior. To that end, we used a measure validated with paid workers to examine its applicability and validity in this context. We found that in the volunteer context, the two constructs are not easily distinguishable. They are highly correlated, load onto one factor and relate to many variables in the same way. Even if we found them to have different correlations with outcomes, such that job characteristics related positively with task performance and only marginally to OCB, and that only OCB related to intent to quit, we tested our hypotheses with a conglomerate indicator. Total performance was positively related to the job characteristics, but it was not related to motivation. Although job characteristics positively influenced the performance of volunteers, we found no evidence that it was because of higher autonomous motivation. But reverse causality is possible as well: perceptions of task characteristics could have been influenced by people's performance, such that performing well could influence perceptions of the tasks.

But perhaps the sampling of volunteer jobs we had did not vary enough on cognitive complexity to be able to capture effects on autonomous motivation. Previous reviews have concluded that autonomous motivation can increase performance on complex tasks, but have a smaller effect on simple tasks (Gagné and Deci 2005). Even if a high MPS score is one indicator of how complex one's job can be, it may not capture the full range of cognitive complexity that work can take. By manipulating job characteristics, Orpen (1979) found an effect on job satisfaction and involvement, but did not find effects on job performance either.

It is also important to address the question of why volunteers would "voluntarily" show up for work if they do not intend to make considerable efforts. First, we must remember that performance is a function of both motivation and ability (Lewin 1935), as well as having the opportunity to engage in appropriate action (Blumberg and Pringle 1982). Therefore, it is possible that capable and motivated individuals would not contribute to an organization because their work is not organized in a way that allows them to do so to the best of their abilities; hence the relevance of examining job design or the match between skills and job complexity. Volunteers are also more likely than paid workers to be given the opportunity to learn skills on the job, and this may affect performance ratings.

This preliminary work was a first attempt to measure volunteer work performance and our results have shown the value and pertinence of doing this. Our measure will need to be further tested and polished in different volunteer contexts, but most importantly, future work needs to examine whether task performance and OCB is one and the same thing in the context of volunteer work. OCB, even in the workplace, is still a rather messy construct. The definition of OCB in organizational behavior has been so criticized that Organ (1997) redefined it as no longer being "extra-role" and as possibly leading to rewards. It was now "performance that supports the social and psychological environment in which task performance takes place" (p. 95). Vey and Campbell (2004) showed that OCB items "actually tap into behaviors considered in-role by [both] employees and supervisors" (p. 1). Lam et al. (1999) found that supervisors perceived OCB to be more in-role than did subordinates. This could imply that the supervisors in our study may not have distinguished between in-role performance and OCB, since they generally have a positive view of volunteers.

#### Limitations

The limitations of our study include the fact that it was crosssectional, which means that the direction of the relationships that were found can only be hypothesized from previous research and theory. Experimentally manipulating job design or volunteer motivation, or longitudinally examining the effects of job design (or change in job design) on subsequent motivation, would help address this limitation. Another limitation is the relatively small sample size and the homogeneity of our volunteers. There are literally thousands of different roles that volunteers can play, and a wide variety of people from all walks of life who fill these roles, but to our knowledge, this is the largest number of volunteer roles that have been included in any study to date. The measure of volunteer work motivation also needs to be improved. The internal consistency of the external regulation subscale was especially low. New items for each subscale should be tested in conjunction with the present ones to create a more psychometrically solid scale.

Implications for practice and recommendations

The most obvious implication of these findings is that job design is one useful tool to enhance volunteer autonomous motivation, satisfaction and engagement. Hackman and Oldham (1975) provide easily applicable guidelines to increase a job's MPS. To increase skill variety, create less monotonous jobs by combining tasks and establish contacts between the volunteer and the client or co-workers. We would also advise to offer volunteers the opportunity to learn new skills. To increase task identity, combine tasks and use team work. To increase task significance, use team work and establish contacts between volunteers and other involved parties. We would also advise to ensure that volunteers know how their work helps accomplish the mission of the organization (which means having a clearly stated mission and job descriptions). To increase autonomy, establish relationships with clients and give decision-making power to volunteers. This requires that volunteers have enough information and support to make adequate decisions. Otherwise, it may be better to set goals collaboratively. Finally, to increase feedback from the job, establish contacts with clients and make sure the organization provides feedback on individual performance and overall organizational effectiveness. We suggest that future experimental research use these techniques to build experimental studies to further investigate the effects of job design on volunteer motivation, satisfaction, turnover, and performance.

Overall, this study provides a basis for future investigations of volunteer motivation and continued engagement. It not only demonstrated that we can use assessments of volunteer performance to ensure organizational success, but that we can also influence this performance, as well as the volunteers' satisfaction and retention, by enhancing the design of their jobs. The study also pointed to needed research on other factors that should be added to this model, such as supervision and reward or recognition systems (which are likely to be different in the volunteer sector). It is through this research that volunteers' continued engagement will be better understood and fostered through adequate structure and support so they keep contributing to society in such a needed manner.

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# Appendix

Volunteer performance

In his/her role as a volunteer, \_\_\_\_\_: *Task performance* 

- 1. Fulfills responsibilities specified in the job description.
- 2. Neglects aspects of the job he/she is obligated to perform. (r)
- 3. Performs tasks that are expected of him/her.
- 4. Adequately completes assigned duties.

Organizational citizenship behavior

- 1. Is a good team player.
- 2. Goes out of his/her way to help new volunteers.
- 3. Conserves and protects organizational property.
- 4. Has an attendance record which is above the norm.
- 5. Passes along information to other volunteers.
- 6. Gives advance notice when unable to show up.
- 7. Complains about insignificant things. (r)
- 8. Adheres to informal rules devised to maintain order.

#### References

- Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43, 997–1013.
- Astin, A. W., Sax, L. J., & Avalos, J. (1999). Long-term effects of volunteerism during the undergraduate years. *The Review of Higher Education*, 22, 187–202.
- Baard, P. P., Deci, E. L, & Ryan, R. M. (2004). The relation of intrinsic need satisfaction to performance and well-being in two work settings. *Journal of Applied Social Psychology*, 34, 2045– 2068.
- Blumberg, M., & Pringle, C. (1982). The missing opportunity in organizational research: Some implications for a theory of work motivation. Academy of Management Review, 7, 560–569.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion space to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel*

selection in organizations (pp.71-98). San Francisco, CA: Jossey-Bass.

- Breukelen, W. V., Van Der Vlist, R., & Steensma, H. (2004). Voluntary employee turnover: Combining variables from the traditional turnover literature with the theory of planned behavior. *Journal of Organizational Behavior*, 25, 893–914.
- Burton, K. D., Lydon, J. E., D'Alessandro, D. U., & Koestner, R. (2006). The differential effects of intrinsic and identified motivation on well-being and performance: Prospective, experimental and implicit approaches to self-determination theory. *Journal of Personality and Social Psychology*, 91, 750–762.
- Bussell, H., & Forbes, D. (2002). Understanding the volunteer market: The what, where, who and why of volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 7, 244–257.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). The Michigan organizational assessment questionnaire: Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change: A guide to methods, measures, and practices (pp. 71–138). New York, NY: Wiley.
- Capellari, L., & Turati, G. (2004). Volunteer labor supply: The role of workers' motivations. Annals of Public and Cooperative Economics, 74, 619–643.
- Chen, X.-P., Chun, H., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology*, 83, 922–931.
- Clary, E. G., & Snyder, M. (1991). A functional analysis of altruism and prosocial behavior: The case of volunteerism. In M. S. Clark (Ed.), *Review of personality and social psychology, vol. 12: Prosocial behavior* (pp.119–148). Thousand Oaks, CA: Sage Publications.
- Cnaan, R. A., & Cascio, T. A. (1999). Performance and commitment: Issues in management of volunteers in human service organizations. *Journal of Social Service Research*, 24, 1–35.
- Csikszentmihalyi, M. (1997). Finding flow: The psychology of engagement with everyday life. New York, NY: Basic Books.
- Dailey, R. C. (1986). Understanding organizational commitment for volunteers: Empirical and managerial implications. *Journal of Voluntary Action Research*, 15, 19–31.
- Davis-Smith, J. (1998). The 1997 national survey of volunteering. London: National Centre for Volunteering.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and selfdetermination in human behavior. New York, NY: Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). When rewards compete with nature: The undermining of intrinsic motivation and selfregulation. In C. Sansone & J. M. Harackiewick (Eds.), *Intrinsic* and extrinsic motivation: The search for optimal motivation and performance (pp. 13–54). San Diego, CA: Academic Press.
- Eby, L. T., Freeman, D. M., Rush, M. C., & Lance, C. E. (1999). Motivational bases of affective organizational commitment: A partial test of an integrative theoretical model. *Journal of Occupational and Organizational Psychology*, 72, 463–484.
- Fahr, J., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction. *Journal of Management*, 16, 705–722.
- Farmer, S. M., & Fedor, D. B. (2001). Changing the focus on volunteering: An investigation of volunteers' multiple contributions to a charitable organization. *Journal of Management*, 27, 191–211.
- Gagné, M. (2000). The role of autonomy support and autonomy behavior in the internalization of autonomous regulation for prosocial behavior. Unpublished dissertation, University of Rochester.

- Gagné, M. (2003). The role of autonomy support and autonomy orientation in the engagement of prosocial behavior. *Motivation* and Emotion, 27, 199–223.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26, 331–362.
- Gagné, M., Forest, J., Gilbert, M.-H., Aubé, C., Morin, E., & Malorni, A. (2007). *The motivation at work scale: Validation in two languages*. Unpublished manuscript, Concordia University.
- Gagné, M., Sénécal, C. B., & Koestner, R. (1997). Proximal job characteristics, feelings of empowerment, and intrinsic motivation: A multidimensional model. *Journal of Applied Psychology*, 27, 1222–1240.
- Goudas, M., Biddle, S. J. H., & Fox, K. R. (1994). Perceived locus of causality, goal orientations, and perceived competence in school physical education classes. *British Journal of Educational Psychology*, 64, 453–463.
- Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52, 890–898.
- Hackman, J. R., & Lawler, E., III (1971). Employee reactions to job characteristics. *Journal of Applied Psychology Monograph*, 55, 259–285.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159–170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16, 250–279.
- Johns, G. (1978). Attitudinal and nonattitudinal predictors of two forms of absence from work. *Organizational Behavior and Human Performance*, 24, 431–444.
- Kopelman, R. E. (1985). Job redesign and productivity: A review of the evidence. *National Productivity Review*, 4, 237–255.
- Lam, S. S., Hui, C., & Law, K. S. (1999). Organizational citizenship behaviors: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology*, 84, 594–601.
- Lévesque, C., & Pelletier, L. G. (2003). On the investigation of primed and chronic autonomous and heteronomous motivational orientations. *Personality and Social Psychology Bulletin*, 29, 1570–1584.
- Lewin, K. (1935). A dynamic theory of personality. New York: McGraw-Hill.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology*, 70, 280–289.
- Losier, G. F., & Koestner, R. (1999). Intrinsic versus identified regulation in distinct political campaigns: The consequences of following politics for pleasure versus personal meaningfulness. *Personality and Social Psychology Bulletin*, 25, 287–298.
- McEvoy, G. M., & Cascio, W. F. (1985). Strategies for reducing employee turnover: A meta-analysis. *Journal of Applied Psychology*, 70, 342–353.
- McGraw, K. O., & McCullers, J. C. (1979). Evidence of a detrimental effect of extrinsic incentives on breaking a mental set. *Journal of Experimental Social Psychology*, 15, 285–294.
- Musick, M., & Wilson, J. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694–714.
- Oldham, G. R., Hackman, J. R., & Pearce, J. L. (1976). Conditions under which employees respond positively to enriched work. *Journal of Applied Psychology*, 6, 395–403.
- Okun, M. A., & Eisenberg, N. (1992). Motives and intent to continue organisational volunteering among residents of a retirement community area. *Journal of Community Psychology*, 20, 183–187.
- 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.

- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Research in Organizational Behavior*, 12, 43–72.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10, 85–97.
- Orpen, C. (1979). The effects of job enrichment on employee satisfaction, motivation, involvement, and performance: A field experiment. *Human Relations*, *32*, 189–217.
- Pearce, J. L. (1983). Job attitude and motivation differences between volunteers and employees from comparable organizations. *Journal of Applied Psychology*, 68, 646–652.
- Pearce, J. (1993). Volunteers: The organizational behavior of unpaid workers. New York, NY: Routledge.
- Pelletier, L. G., Tuson, K. M., Green-Demers, I., Noels, K., & Beaton, A. (1998). Why are you doing things for the environment? The motivation towards the environment scale (MTES). *Journal of Applied Social Psychology*, 28, 437–468.
- Penner, L. A., Midili, A. R., & Kegelmeyer, J. (1997). Beyond job attitudes: A personality and social psychology perspective on the causes of organizational citizenship behavior. *Human Performance*, 10, 111–131.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749–761.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American Psychologist*, 55, 68–78.
- Sheldon, K. M., & Elliot, A. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons for

goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin, 24, 546–557.* 

- Snyder, M., & Omoto, A. M. (2001). Basic research and practical problems: Volunteerism and the psychology of individual and collective action. In W. Wonsinska, R. B. W Cialdini, D. Barrett, & J. Reyknowski (Eds.), *The practice of social influence in multiple cultures* (pp. 287–307). Mahwah, NJ: Lawrence Erlbaum Associates.
- Vey, M. A., & Campbell, J. P. (2004). In-role or extra-role organizational citizenship behavior: Which are we measuring? *Human Performance*, 17, 119–135.
- Volunteer Canada. (2001). A matter of design: Job design theory and application to the voluntary sector. Retrieved May 14, 2005 from: http://www.volunteer.ca/volunteer/pdf/MatterofDesignEng. pdf
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601–618.
- Wilson, J. (2000). Volunteering. Annual Review of Sociology, 26, 215–240.
- Wolfe-Morrison, E. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. Academy of Management Journal, 37, 1543–1567.
- Wright, N. D., Larsen, V., & Higgs, R. (1995). Consumer satisfaction and the marketing of volunteerism: The case of the Appalachian Mountain Housing. *Journal of Consumer Satisfaction*, 8, 88– 197.
- Wuthnow, R., & Hodgkinson, V. A. (1990). Faith and philanthropy in America: Exploring the role of religion in America's voluntary sector. San Francisco, CA: Jossey-Bass.
- Wuthnow, R. (1991). Acts of compassion: Caring for others and helping ourselves. Princeton, NJ: Princeton University Press.