

Autonomous Motivation Stimulates Volunteers' Work Effort: A Self-Determination Theory Approach to Volunteerism

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Abstract Although today's nonprofit organizations make a strong appeal to volunteers, they often have difficulties with attracting and retaining these free labor forces. In this sense, studying the motivation of volunteers and its effects proves useful. In the present article, we investigate the relationship between volunteers' motivation and their self-reported work effort, while relying on the Self-Determination Theory. The results indicate a positive link between volunteers' autonomous motivation and work effort. Moreover, this relationship holds for each person in our sample, irrespective of the organization in which she/he is volunteering. Implications for future research, as well as the practical impact of these findings, are discussed.

Résumé Bien que les organisations sans but lucratif recourent énormément de nos jours aux volontaires, elles rencontrent souvent des difficultés pour attirer et retenir ces effectifs bénévoles. C'est à cet égard que l'étude de la motivation des volontaires et des effets de celle-ci s'avère utile. Dans le présent article, nous étudions la relation entre la motivation des volontaires et les efforts de travail dont ils font eux-même état, tout en nous appuyant sur la Théorie de l'autodétermination. Les résultats indiquent un lien positif entre la motivation autonome des volontaires et l'effort de travail. En outre, cette relation existe pour chaque personne dans notre échantillon, indépendamment de l'organisation où elle fait du volontariat. Les implications pour la recherche future, ainsi que l'impact pratique de ces constatations, font l'objet d'une discussion.

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Zusammenfassung Obwohl Nonprofit-Organisationen heutzutage einen eindringlichen Appell an ehrenamtlich Tätige richten, haben sie doch oftmals Schwierigkeiten, diese freien Arbeitskräfte anzuziehen und zu halten. In diesem Sinne erweist es sich als nützlich, die Motivation ehrenamtlich Tätiger und deren Auswirkungen zu untersuchen. In dem vorliegenden Beitrag betrachten wir das Verhältnis zwischen der Motivation ehrenamtlich Tätiger und den von ihnen angegebenen Arbeitseinsatz, wobei wir uns auf die Selbstbestimmungstheorie stützen. Die Ergebnisse lassen eine positive Verbindung zwischen der autonomen Motivation der ehrenamtlich Tätigen und dem Arbeitseinsatz erkennen. Außerdem trifft dieses Verhältnis auf alle Personen in unserer Stichprobe zu, unabhängig von der Organisation, für die sie ehrenamtlich tätig sind. Die Implikationen für zukünftige Forschungen sowie die praktischen Auswirkungen der Ergebnisse werden diskutiert.

Resumen Aunque las organizaciones sin ánimo de lucro de la actualidad apelan con fuerza a los voluntarios, a menudo tienen dificultades para atraer y retener a estas fuerzas laborales gratuitas. En este sentido, resulta útil estudiar la motivación de los voluntarios y sus efectos. En el presente artículo, investigamos la relación entre la motivación de los voluntarios y el esfuerzo de trabajo notificado por ellos mismos, basándonos en la Teoría de la Auto-Determinación. Los resultados indican un vínculo positivo entre la motivación autónoma de los voluntarios y el esfuerzo de trabajo. Asimismo, esta relación se mantiene para cada persona de nuestra muestra, independientemente de la organización en la que realiza el voluntariado. Se tratan las implicaciones para futuras investigaciones, así como también el impacto práctico de estos hallazgos.

Keywords Volunteering · Self-determination · Motivation · Work effort

Introduction

All over the world people dedicate themselves on behalf of others, social movements, communities, and for the benefit of the society as a whole (Snyder and Omoto 2008). In Belgium, a recent investigation of volunteering activity indicates up to 1.4 million people volunteering (on a total of about 11 million inhabitants), depending on the type of activities that are included as volunteer work (Loose et al. 2007). Although volunteering refers to a wide range of different activities (Wilson 2000), a number of commonalities within the group of volunteers can be derived. In this sense, we define volunteering as performing an activity out of free will, on a regular basis and for the benefit of people outside the own household or family circle, without being remunerated for this work (although certain benefits or reimbursements are allowed) (Hartenian 2007; Ziemek 2006). Moreover, in the remainder of this article, we consider volunteers as people providing unpaid help within a formal structure—such as volunteering in a nonprofit organization (NPO)—although being free of formal obligations.

Volunteerism is of particular importance in today's civil society (Lindenmeier 2008). Given their dependence on a limited amount of resources, NPOs often have to rely on a substantial volunteer force (Grube and Piliavin 2000). However, a growing imbalance of supply and demand forces these organizations to scrutinize their strategies for attracting and retaining their volunteers (Bussell and Forbes 2002). In addition, both volunteers and NPOs went through substantive changes during the last decades, affecting the motivational style of volunteers and other relevant outcomes (Hustinx and Lammertyn 2003; Vantilborgh et al. 2011). Expanding our knowledge on the motivation of today's volunteers and its effects is therefore of utmost importance.

Considered as a conceptually different construct (Brown and Peterson 1994), effort is proven to be the energetic result of an unobservable, underlying motivation (e.g., Ilgen and Klein 1989; Naylor et al. 1980), which gives rise to a series of observable behaviors. A number of empirical studies have already shown a positive relationship between effort and work-related behaviors and attitudes such as performance (Brown and Leigh 1996; Brown and Peterson 1994; Cook et al. 2000; Karatepe et al. 2006; Mengüç 1996) and job satisfaction (Brown and Peterson 1994; Mengüç 1996; Yoon et al. 2001). In this sense, stimulating effort can be considered a strategic and essential task of contemporary (NPO) managers, and an important issue in volunteer research.

In the present study, we approach volunteers' work effort from a motivational point of view by linking this outcome to the motivation for volunteering. Motivational psychologists have already examined why a sizeable part of the population engages voluntarily in activities aimed at the welfare of others. Besides examining the motives underlying volunteering (e.g., Butcher 2010; Clary et al. 1998; Clary et al. 1996; Finkelstein et al. 2005; O'Brien et al. 2010; O'Dwyer and Timonen 2009; Okun et al. 1998), they have described the benefits of volunteering as experienced by the volunteers themselves. Volunteering relates positively to, for instance, mental health (Musick and Wilson 2003; O'Brien et al. 2010; Thoits and Hewitt 2001), physical strength (Musick et al. 1999; Warburton and Peel 2008), and overall life satisfaction (Harlow and Cantor 1996). Based on the *Self-Determination Theory* (SDT; Deci and Ryan 1985; Ryan and Deci 2000a), we might expect these relationships to be influenced by people's motivation for voluntary work. In this study, we will therefore investigate the relationship between volunteers' type of motivation and their effort in view of their volunteer work. In this way we will contribute to the volunteer literature in three unique ways. First, we investigate the effect of volunteers' motivation on work effort, a relevant but still understudied outcome variable in volunteering studies. Although it may be suggested that the first and most important task is to attract and select promising volunteers, this is not always obvious in practice. Since NPOs have to find their work forces in a narrowing group of people, attracting volunteers becomes increasingly challenging. Therefore, expanding knowledge on the creation of optimally stimulating climates—resulting in positive outcomes such as volunteers' work effort—is of practical importance to contemporary NPO managers. Hence, we will contribute to the literature by investigating the motivational mechanisms underlying work effort. In this way, we enable the link between work effort and actual behavior (De Cooman et al. 2009). Finally, studies on volunteering most often are

confined to homogeneous samples, such as university students (e.g., DeVoe and Pfeffer 2007; Finkelstein 2009), which raises questions on the external validity of their findings. In contrast, we aimed for a sample of volunteers stemming from multiple health care organizations.

A theoretical overview of SDT (Deci and Ryan 1985, 2000) will be given. We further explain different outcomes related to the type of motivation, including applications to volunteerism. After having presented our study details, the final part of this article discusses the results and gives some limitations and recommendations for further research.

The SDT

Since a first publication in 1985 (Deci and Ryan 1985), SDT has proven its usefulness in several domains, such as academics (e.g., Vansteenkiste et al. 2006), work (e.g., Gagné and Deci 2005), sports (e.g., Gagné et al. 2003), parental education (e.g., Assor et al. 2004), politics (e.g., Koestner et al. 1996; Losier and Koestner 1999), and many others. The idea that humans have a natural tendency towards growth, self-construction, and inner coherence is central to this theory (Deci and Ryan 2000). In particular, people actively seek for challenges, strive to extend their knowledge, and want to learn new skills. Since people continuously interact with their social context, the environment can either stimulate, hinder, or block this positive feature of human nature (Ryan and Deci 2000b). According to SDT, growth, integrity and psychological well-being stem from the degree to which innate basic psychological needs for autonomy, competence and relatedness are satisfied (for a complete review of basic psychological needs, see Deci and Ryan 2000). SDT's conceptualization of autonomy refers to a sense of volition—being able to choose the own acts and to behave in line with the personal values and identity (deCharms 1968; Deci and Ryan 2000). Although autonomy as defined in SDT refers to freedom and choice, it cannot be confused with a feeling of independence and individualism; these concepts should rather be considered as orthogonal concepts (Chirkov et al. 2003; Deci and Ryan 2002). Moreover, people have an innate desire to belong—to feel part of a social group (Deci and Ryan 2000). They want to feel related to other human beings; to “love and care, and to be loved and cared for” (Baumeister and Leary 1995; Deci and Ryan 2000). A last fundamental need in SDT is the need for competence (Deci and Ryan 2000; White 1959). While people interact with their social environment, they want to feel effective. By searching for optimal challenging activities, they create the feeling of mastering their world. Since it is likely that people will freely retake activities that fulfill these needs, contextual factors that enhance perceptions of autonomy, competence and relatedness will enhance *self-determined motivation* (Grouzet et al. 2004).

The basic assumption of SDT is the belief that the *quality* of motivation is at least as important as the *quantity* of motivation (Deci and Ryan 1985). Regarding *quality of motivation*, the theory starts from the basic distinction between *intrinsic* and *extrinsic* motivation (Ryan and Deci 2000a). When people are intrinsically motivated to engage in an activity, they find the activity inherently interesting and enjoyable. In contrast, whenever people undertake action because they can gain

something that is separable from the activity, they show an extrinsic form of motivation. Although research on motivation has long been dominated by the assumption of extrinsic as the impoverished counterpart of intrinsic motivation (e.g., deCharms 1968)—stating that extrinsic motivation will always result in negative outcomes—SDT argues that extrinsic motivation can be subdivided in different forms. Some of them indeed lead to negative outcomes, but others do result in adaptive behavior and performance (Ryan and Deci 2000a). Although people benefit more from being intrinsically motivated, most of the activities they undertake are driven by extrinsic reasons, which can be distinguished into: *external regulation*, *introjected regulation*, *identified regulation*, and *integrated regulation* (Ryan and Deci 2000a). The theory further states that these different types of motivation can be aligned along a continuum according to the degree to which the behavior gets *integrated* and *internalized*, that is, the extent to which the regulation of the behavior is internal and, in its extreme form, the extent to which the reason or goal for doing the activity is absorbed in the self (Ryan and Connell 1989).

External regulation is present when behaviors are performed to satisfy an external demand, to receive a reward that is contingent on the behavior, or to avoid punishment. When people volunteer to get others' approval, they are externally regulated. The reason for engaging in volunteer work is thus completely external to the self (Deci and Ryan 2000). *Introjected regulation* in turn refers to (partially) internally regulated behaviors that are still perceived as controlling since they are performed to avoid guilt or anxiety, or simply to prove something. The individual still feels pressured to engage in the activity since the activity is not, or very little, internalized. People volunteering because they would otherwise feel ashamed of themselves show an introjected regulation of the volunteering activity. When dedicating efforts into the volunteering activity has personal significance to the volunteer, the activity is *identified regulated*. Identified regulation refers to behavior that is performed because its importance is recognized by the actor. The activity is almost entirely integrated in the self, thereby producing a sense of choice and psychological freedom (Deci and Ryan 1985). The most qualitative type of extrinsic motivation is regulation through *integrated motivation*, such as volunteering because it allows one to reach other important life values. Although the performed behavior is in line with the individual's values and sense of self, thus integrated and internalized, the behavior in itself is not interesting, which makes it different from *intrinsic motivation*. When intrinsically motivated, people volunteer out of free will, because they enjoy the feeling of being a volunteer.

As already mentioned, these types of motivation can be put on an autonomy continuum (Ryan and Connell 1989), ranging from non-regulation or no self-determination (i.e., amotivation) to intrinsic regulation or self-determination (i.e., intrinsic motivation) (Fig. 1). Moreover, external regulation and introjected regulation are often considered as *controlled* types of motivation, whereas identified regulation, integrated motivation, and intrinsic motivation are seen as representations of *autonomous* motivation (Grouzet et al. 2004; Ryan and Deci 2000b). Self-determined or autonomous motivation refers to engaging in an activity out of free will or with a sense of choice, whereas controlled motivation refers to engaging in an activity because the activity is linked to a desired consequence (Ryan and

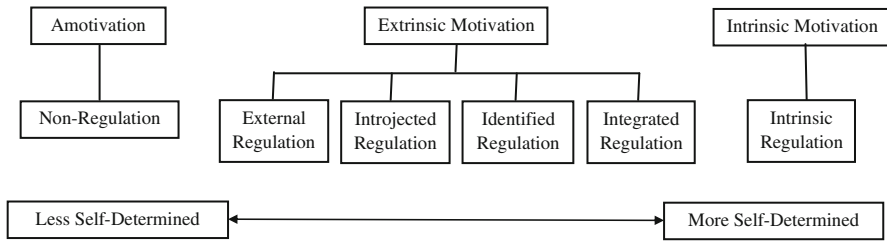


Fig. 1 The types of motivation and regulation within self-determination theory, along with their placement along the continuum of relative self-determination (from Deci and Ryan 2008, p. 17)

Deci 2002). Since autonomous motivation is related to basic need satisfaction, and controlled motivation is often associated with need frustration, both will result in qualitatively different functioning (see Van den Broeck et al. 2008a for an overview). Although autonomous and controlled motivations are based on different regulatory processes, both are intentional and thus at odds with *amotivation* (Deci and Ryan 1985).

Type of Motivation and Outcomes

A range of studies have investigated the type of motivation as related to different attitudinal and behavioral outcomes. In general, they demonstrate autonomous and controlled motivation to have a different impact on the actor and her/his environment.

In general, autonomous (forms of) motivation lead to positive outcomes such as performance (e.g., Baard et al. 2004), psychological well-being (e.g., Baard et al. 2004; Levesque et al. 2004), academic achievements (e.g., Grolnick et al. 1991; Soenens and Vansteenkiste 2005), pro-environmental behaviors (e.g., Pelletier et al. 1998), work engagement (e.g., Deci et al. 2001) and job satisfaction (e.g., Bono and Judge 2003; Richer et al. 2002). Analogies can be found within the field of volunteering. Stukas et al. (1999), for example, showed that the positive relationship between past and future volunteering will be disturbed when feelings of obligation arise. In other words, when people feel they have the choice to engage in volunteering, for example because they can decide which activity to perform for an NPO, they will show more engagement in the volunteering activity (Gagné 2003). Moreover, a recent study on Romanian volunteers has shown that autonomous motivation can be stimulated by offering an autonomy supportive volunteering climate, in which volunteers' needs are satisfied (Haivas et al. 2012). Less positive outcomes will occur when basic psychological needs are thwarted and controlled types of motivation get the upper hand (Deci and Ryan 2000; Ryan and Deci 2000b). Vansteenkiste et al. (2005) indicated that Chinese students who show a controlled study motivation are more likely to drop out, to be less concentrated, and to participate in bullying behavior. Furthermore, the negative influence of controlled motivation seems to hold within the work context. A study of Van den Broeck et al. (2008b), for example, established the relation between job demands (workload, emotional and physical demands, work-home interference) and burnout to be

partially mediated by need frustration. Summarized, it can be concluded that autonomous motivation leads to positive outcomes in many areas, whereas the opposite is true for controlled motivation.

Present Research

Research on SDT applied to volunteerism is rather scarce. To the best of our knowledge, only one study has involved performance of volunteers, in which Organizational Citizenship Behavior was considered a measure of volunteer performance (Millette and Gagne 2008). However, in our opinion, volunteer performance is not limited to “extra-role” behavior. Following De Cooman et al. (2009, p. 266) “work effort is situated between actual motivation and performance”. Effort is a well-known concept in the organizational literature, though the lack of an unambiguous definition hindered the development of a reliable measurement. However, since De Cooman et al. (2009) developed and validated the Work Effort Scale (WESC), and proved work effort to be positively correlated with performance, we are able to investigate the relationship between motivation type and effort in volunteers. In line with previous literature, we expect the following results:

H1 Autonomous motivation will be positively related to work effort of volunteers.

H2 Controlled motivation will be negatively related to work effort of volunteers.

Method

Sample

Our sample contained 206 Dutch speaking volunteers from four Belgian NPOs ($N_1 = 50$; $N_2 = 51$; $N_3 = 50$; $N_4 = 55$), all active in the health care sector. 84 male and 121 female volunteers (1 missing answer), with a mean age of 52.45 years ($SD = 16.15$), completed a survey questionnaire. 61.7% of the respondents lived together, of whom 76.4% were married. Most of the respondents had no dependants (77.2%). The majority of the sample was either retired (38.8%) or active as a paid employee in an organization (34.5%). The remaining 26.7% covers students (5.8%), self-employed (1.5%), housemen/housewives (10.7%) and persons entitled to social benefits (7.8%). 49% had a volunteer experience of more than five years and 43.7% volunteered an average of two to four hours a week. Whereas 88.3% received no compensation for their volunteering activities, 51.9% could rely on a reimbursement of made expenses.

Measures

Volunteer Motivation

The motivation to volunteer was measured using the Motivation at Work Scale-R (MAWS-R) (Gagné et al., 2012), also inspired by the self-regulatory scales of Ryan

and Connell (1989) and Vansteenkiste et al. (2009). The different motivational constructs as described in SDT (Deci and Ryan 1985, 2000) were measured through 21 items, asking the participants to rate the reasons for doing volunteer work on a scale from 1 (*not at all because of this reason*) to 7 (*exactly because of this reason*): external regulation (three items, e.g., “Because others put pressure on me”, $\alpha = .87$), introjected regulation (four items, e.g., “Because it makes me feel proud of myself”, $\alpha = .84$), identified regulation (five items, e.g., “Because what I do in this job has a lot of personal meaning to me”, $\alpha = .84$), integrated regulation (three items, e.g., “Because I am made for this type of work”, $\alpha = .78$), and intrinsic motivation (four items, e.g., “Because I enjoy this work very much”, $\alpha = .86$). We removed one item from the original external regulation scale (“Because others will appreciate me more”; item-total correlation of .34) and one item from the integrated regulation scale (“Because I actualize myself fully through this work”; item rejected because of a cross-loading) to increase the internal reliability of their respective scales. As previous research has shown, external and introjected regulations are representations of controlled motivation, whereas identified, integrated and intrinsic motivations are representations of autonomous motivation (Gagné et al. 2010). Consequently, we created a *controlled motivation variable* ($\alpha = .75$) by averaging across external and introjected items, and an *autonomous motivation variable* ($\alpha = .87$) by averaging across identified, integrated and intrinsic items, as already has been done in previous research (e.g., Vansteenkiste et al. 2004).

Work Effort

We measured respondents’ levels of work effort using the WESC developed and validated by De Cooman et al. (2009). In this instrument, respondents judge 10 statements (e.g., “I think of myself as a hard worker”) regarding the way they deal with their work as volunteers, on a scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). This scale appeared to be internally consistent in our sample ($\alpha = .87$).

Analysis

To test the effect of motivation on volunteers’ work effort, we performed a multilevel regression (MR) analysis in R using the lme4 package. This approach enabled us to take into account the *nested structure* of our data. Indeed, since our respondents are volunteers from four different organizations, the organization might account for dependencies between the responses of volunteers belonging to the same organization. Approaching the data from a multilevel point of view is a suitable way to take the effects of both the individual subjects as well as the organizations into account. Moreover, since SDT suggests that autonomous motivation will *universally* lead to adaptive outcomes—and controlled motivation to maladaptive outcomes—we expected the effect of motivation on work effort to be invariant across the four organizations.

We fitted three models: in each model the volunteers were nested within their respective organization. In the first one, the intercept of the model was allowed to vary across organizations, while the slope was the same for all organizations

(i.e., the absolute level of work effort varies between organizations, while the relationship between work effort and motivation is the same). In the second model, the intercept was organization-independent, but the slopes varied as a function of the organization (i.e., the absolute level of work effort is similar between the organizations, while the relationship between work effort and motivation is organization-dependent). In the third and final model, both intercept and slopes depended on the particular organization (i.e., the absolute level of work effort, as well as the relationship between work effort and motivation, is different between organizations).

The three models were compared using the Bayesian Information Criterion (BIC), which represents the balance between the number of parameters (i.e., model complexity) and the fit of the model to the data. In general, the smaller the BIC value, the better the model. We grand mean centered the independent variables to improve the interpretability of the model (Aiken et al. 1991).

Results

Correlations between the study variables, as well as their means and standard deviations, are presented in Table 1. The mean autonomous motivation was higher than the mean controlled motivation ($M_a = 4.95$, $SD_a = 1.10$; $M_c = 1.75$, $SD_c = .78$; $t(186) = 36.76$, $p < .001$). Men scored higher on controlled motivation than women ($F(1, 201) = 13.93$; $p < .001$), whereas women expressed slightly more autonomous forms of motivation in their volunteer work ($F(1, 89) = 4.24$; $p < .045$). Correlation analysis revealed a significant positive relation between autonomous and controlled motivation ($r = .24$; $p < .01$). As expected, autonomous motivation was positively correlated with work effort ($r = .45$; $p < .01$). In contrast, controlled motivation and work effort were unrelated ($r = .062$; n.s.).

Table 2 compares the three proposed models. The first model includes a random (i.e., organization-dependent) intercept, two fixed predictors (i.e., autonomous motivation and controlled motivation) and two fixed control variables (i.e., sex and age) (BIC = 452.7). The second model has a fixed intercept, two fixed control variables (i.e., sex and age) and two predictors (i.e., autonomous motivation and controlled motivation) that are allowed to vary between the organizations (BIC = 474.1). In the last, and most complex, model both the intercept and predictors

Table 1 Means, standard deviations and intercorrelations of study variables

	M	SD	1	2	3	4
Sex	1.59	.49				
Age	52.45	16.15	-.016			
Controlled motivation	1.75	.78	-.26*	.053		
Autonomous motivation	4.95	1.10	.14	.001	.24*	
Work effort	5.78	.85	.13	.072	.062	.45*

* $p < .01$

Table 2 Three computing models

	Random	Nonrandom	BIC value
Model 1			
Intercept	X		448.2
Slope		X	
Model 2			
Intercept		X	454.4
Slope	X		
Model 3			
Intercept	X		454.4
Slope	X		

(i.e., autonomous motivation and controlled motivation) are organization-dependent or random (BIC = 474.1). The BIC identifies the first model as the one that fits the data best. In this model, controlled motivation ($\beta = -.03$; $t = -.36$, n.s.), as well as sex ($\beta = .03$; $t = .39$, n.s.) and age ($\beta = .01$; $t = .20$, n.s.), do not explain variance in work effort. Autonomous motivation on the other hand is positively related to work effort ($\beta_a = .35$; $t = 6.90$, $p < .001$). Moreover, the relationship between autonomous motivation and work effort appears to be organization-independent, whereas the intercept, or base work effort, does differ between organizations ($\beta_1 = 5.87$, $\beta_2 = 5.67$, $\beta_3 = 5.96$, $\beta_4 = 5.23$). In particular, between-organizations differences in base work effort of the organizations explained 11.28% of the variance in work effort.

In sum, as hypothesized, autonomous motivation positively influences work effort, that is, the more autonomously motivated the volunteer, the more this volunteer puts effort in her/his volunteer work. Moreover, this relationship appears to be the same across volunteers of different organizations. This fully complies with SDT, although no effects of controlled motivation on work effort could be retrieved. The only difference that can be found is that when the autonomous motivation is average, individuals volunteering in different organizations differ in their work effort.

Discussion

We investigated the relationship between the type of motivation (i.e., autonomous versus controlled motivation) and volunteer work effort. We also examined whether this relationship is affected by the organization in which one volunteers. With regard to autonomous motivation, we expected that autonomous motivation would positively explain work effort of volunteers (Hypothesis 1). We hypothesized the opposite to be true for the relationship between controlled motivation and work effort (Hypothesis 2). To test these relationships, we conducted a study in a group of volunteers from four different organizations.

Our results suggest that with more autonomous, or self-determined, motivation, volunteers will dedicate more effort to their volunteer work. This supports Deci and Ryan's (1985; Ryan and Deci 2000a) SDT with respect to how the type of

motivation influences various outcomes. According to SDT, all people have an innate need for autonomy, competence and relatedness (Deci et al. 2001). Satisfaction of these needs affects their motivation, development and well-being. Moreover, autonomously regulated behaviors are thought to result in better outcomes since those behaviors involve greater need satisfaction (Deci and Ryan 2000). Our results support this reasoning. However, one nuance should be made. Although we expected controlled motivated behavior to result in less work effort, we were not able to find any relationship between both. Previous research indicates that this is not an isolated phenomenon. According to Millette and Gagné (2008) certain job characteristics affect outcomes such as job satisfaction only via autonomous motivation, whereas there is no relationship with controlled motivation. A similar finding was obtained by Gagné et al. (2010). They concluded that looking at the bright side of life is positively correlated with autonomous motivation and leads to desirable work outcomes such as high job satisfaction, well-being and good health. However, controlled forms of motivation were uncorrelated to these antecedents and outcomes. Moreover, the volunteers in our study are volunteering out of interest, rather than because they experience an external pressure. The mean age of our respondents further indicates that our sample probably involves traditional volunteers, who often hold a collective style of volunteering (i.e., volunteers who feel as if they owe something to the society) (Hustinx and Lammertyn 2003). Doing the same study in a younger—more reflexive—group of volunteers may yield a (negative) link between controlled motivation and work effort, since this new type of volunteers mainly engages itself in volunteering for external reasons such as self-interest (Hustinx and Lammertyn 2003). Further research could also elaborate on the variables influencing the relationships shown in the current study, such as (1) how organizational characteristics may affect the relationship between autonomous motivation and work effort, and (2) how the relationship between autonomous motivation and work effort may vary on an individual level of analysis. Regarding the organizational differences in work effort, one could take a look at the context in which the volunteers perform their activities (Johns 2006). Indeed, the work climate of volunteers could positively influence volunteer related attitudes and behaviors, through the stimulation of need satisfaction (Gagné 2003; Gagné and Deci 2005; Boezeman and Ellemers 2009; Haivas et al. 2012). On the other hand, work effort may possibly be influenced by the structure of the organization. For example, when volunteers cooperate with paid workers, and status differences between both get the upper hand, volunteers' work effort may be negatively affected via the thwarting of the competence need (Boezeman and Ellemers 2009; Netting et al. 2004). Note, however, that the degree to which people volunteer next to paid workers will closely depend on the degree to which the NPO is professionalized (Vantilborgh et al. 2011). In addition, the relationship between autonomous motivation and work effort on the individual level could be scrutinized. In this regard, approaching the relationship from a temporal point of view is of special interest (Roe 2008). One may, for instance, expect within-person differences according to the context (paid work or volunteer work, for example) or the situation (during meetings with other volunteers or outside those meetings, for example) in which one is active (Vallerand 2000).

In summary, we are the first to demonstrate the relation between type of motivation and work effort of volunteers. However, some limitations should be kept in mind. First, the results are based on a correlational design, which implies that it cannot exclude the possibility that work effort influences motivation, instead of the other way around. However, given that previous experimental research indicated autonomous motivation to cause better outcomes (Grouzet et al. 2004; Lepper and Cordova 1992), we do not see reasons in this study of volunteers why this should be the case. Second, data were gathered with self-reported measures, hence social desirability could have influenced the results. Despite the anonymity granted to the respondents, common method variance may still have biased our findings. To reduce the probability that scores on one variable influenced scores on other variables, future research should collect the data at several points in time (Podsakoff et al. 2003). Third, in future research it may be a good idea to broaden the sample to various (volunteer) jobs in different industries.

Conclusion

The present study is of theoretical as well as practical value. From a theoretical point of view, our results replicate past results on SDT using a volunteering sample from four different organizations. Moreover, we are the first to relate volunteers' work effort to autonomous and controlled motivation. In particular, regardless of the NPO, being autonomously motivated had a positive effect on the work effort of volunteers. However, future research may expand on the reasons why significant differences in work effort between organizations exist. From a practical point of view, we are convinced of the importance of our findings because creating optimally performing volunteers is an important goal for NPO managers (Bussell and Forbes 2002). Our results indicate that managers in NPOs can influence their volunteers' performance by creating an autonomy-stimulating volunteering climate. Ingredients of such climates are: the consideration and valuation of personal needs of volunteers, the creation of challenging tasks by the management, the offering of sufficient choice and space to allow personal decisions, the encouragement of volunteers to take initiatives, and the provision of constructive feedback (Deci et al. 1989; Deci et al. 1994; Deci et al. 1999). Furthermore, it can be concluded from our results that volunteers benefit from environments in which they are offered a good reason for doing their tasks, a finding which highlights the importance of communication in which the personal feelings of the volunteers about these tasks are recognized by the manager. They also seem to benefit from environments in which they have to cooperate with others and in which they are encouraged to identify with their volunteer group (Gagné and Deci 2005; Van Knippenberg and Van Schie 2000). These are by no means environments where everything that needs to be done is specifically outlined and regulated without any room for personal influence by the volunteer. The management of the volunteering group really benefits from a more personal as well as a social approach. This confirms the important role to play by the manager. Therefore, training and development investments related to these managers' autonomy-supportive role are certainly

things that NPOs ought to consider, since it will enhance their volunteers' motivation and, consequently, their efforts.

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