

Perceived Organizational Support, Motivation, and Engagement Among Police Officers

Nicolas Gillet, Isabelle Huart, Philippe Colombat, and Evelyne Fouquereau
Université François-Rabelais de Tours

Using self-determination theory (Deci & Ryan, 2008) as a guiding theoretical framework, the present research tested a model that incorporates (a) police officers' perceptions of organizational and supervisor support (i.e., the degree to which organizations or supervisors value the police officers' contributions and care about their well-being); (b) global, domain specific (i.e., work) and situational (i.e., in a training session) motivation; and (c) engagement. The hypothesized model was tested using two samples of police officers. In Study 1, results revealed that work motivation was significantly related to both intraindividual (global motivation) and contextual (organizational support) factors. In addition, self-determined work motivation was positively related to work engagement. Using a cross-sectional design with multiple measurement points, these results were replicated at the situational level (i.e., in a training session) in Study 2. The present results underscore the importance of understanding the mechanisms through which work engagement can be enhanced. Specifically, to improve police officers' work engagement, organizations and supervisors must attempt to promote the police officers' self-determined motivation.

Keywords: motivation, engagement, perceived organizational support, self-determination theory, police officers

Police officers simultaneously have to face the evolution of crime, their institution, the legal requirements, and the ambivalence of the demands of the citizens. These citizens often want more security and stiffer penalties for the authors of offenses but paradoxically when the same persons become authors of offenses they dispute very often police actions. "So, police officers act in an everyday life always more demanding and complex, which does not correspond any more to their expectations" (Meylan, Boillat, & Morel, 2009, p. 10).

The difficulty of police work has resulted in an increase of the proposed in-service training for police officers. These training sessions address diverse areas of concern, including areas related to legal, information technology, and security matters. . . The issue of training has become so significant that, for the past 30 years, practicing psychologists have been working closely with police forces, distinguishing themselves from nonspecialized trainers, psychologists intervening in training initiatives aim to bring new knowledge in human sciences to police officers. Moreover, the issue of police officers' motivation is also recurrent for psychologists. These practitioners (psychologists) are confronted with the difficulty of maintaining a sufficient level of motivation and engagement during training sessions.

Psychologists regularly try to estimate police officers' motivation and engagement due to the nature of police work itself. Frequent situations of aggressiveness and violence bring to light how much the question of police officer motivation and engagement should be investigated. Examining the determinants of work motivation and engagement is thus an important topic for researchers and practitioners alike. Our first objective in the present research is to show that psychologists can, through their actions, contribute to the development of police officers' work engagement through the strengthening of their self-determined motivation. More specifically, our purpose is to show that self-determined motivation is a mediating variable in the relationship between, on the one hand, organizational support (Study 1) and support from trainers (Study 2) and, on the other hand, work engagement.

Along with these interventions in training sessions, psychologists intervene systematically in the procedures of selection of the police officers. They try to identify, using questionnaires, individual factors that may subsequently determine police officers' motivation and engagement. Our second objective is to show that the evaluation of police officers' global motivation (i.e., a general

This article was published Online First December 10, 2012.

NICOLAS GILLET earned his PhD in 2008 in Sport Psychology (University of Reims Champagne-Ardenne, France). He currently teaches at the University François-Rabelais of Tours (France) as an associate professor. His research interests include motivation, well-being, and performance in the work domain.

ISABELLE HUART has completed the PhD in psychology at the University François-Rabelais of Tours. She is now an associate professor at the University François-Rabelais of Tours. Her research interests include motivation and moral orientation.

PHILIPPE COLOMBAT has completed the PhD in haematology at the University François-Rabelais of Tours. He is now a full professor at the University François-Rabelais of Tours. His research interests include management and quality of working life.

EVELYNE FOUQUEREAU earned her PhD in Social and Work Psychology at the University François-Rabelais of Tours, France. She currently teaches at the University François-Rabelais of Tours (France) as a full professor. Her research interests include management, motivation, psychological health and psychosocial transitions in the work domain.

CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Nicolas Gillet, Psychologie des Âges de la Vie E.A. 2114, Département de Psychologie, Université François-Rabelais de Tours, UFR Arts et Sciences Humaines, 3 rue des Tanneurs, 37041 Tours Cedex 1, France. E-mail: nicolas.gillet@univ-tours.fr

motivational orientation) and contextual motivation (i.e., motivation in a specific broad life domain) during recruitment or reclassification processes may be of interest to psychologists, as these dimensions should then be positively related to work engagement (Study 1) and engagement in vocational training (Study 2).

Work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). *Vigor* is characterized by high levels of energy while working, even in cases where performance is challenging. *Dedication* is characterized by strong involvement in one’s work and a sense of significance, enthusiasm, inspiration, pride, and challenge. *Absorption* is characterized by being fully concentrated on and engrossed in one’s work, whereby time passes quickly.

Meyer and Gagné (2008) have recently suggested that self-determination theory (Deci & Ryan, 2008) is particularly suitable for investigating the influence of motivation on engagement in the work domain. Specifically, self-determination theory distinguishes between self-determined motivation and controlled motivation. Self-determined motivation refers to engaging in an activity out of pleasure; that is, volition or choice. In contrast, controlled motivation is defined as engaging in an activity through internal pressure (e.g., sense of obligation, shame) or external pressure (e.g., punishment). Self-determination theory posits that self-determined motivation should lead to the most positive outcomes, while controlled motivation and amotivation (i.e., absence of motivation) should predict the most negative outcomes (see Deci & Ryan, 2008). Although much of the research within this framework has been conducted outside of the workplace (e.g., in education or sports settings), Gagné and Deci (2005) have shown that self-determination theory is a useful approach to understanding the motivational bases for effective organizational behavior (see also Lynch, Plant, & Ryan, 2005). Indeed, self-determined work motivation has consistently been associated with positive outcomes such as performance (e.g., Gillet, Berjot, & Paty, 2010), organizational citizenship behavior (e.g., Kuvaas & Dysvik, 2009), and satisfaction (e.g., Gagné et al., 2010; Lam & Gurland, 2008).

As suggested by Meyer and Gagné (2008), “by adapting self-determination theory as a guiding framework, academic researchers have an opportunity to leapfrog practice to lead new developments in engagement theory, research, and practice” (p. 62). Based on self-determination theory, the purpose of the present research was thus to identify and explain the underlying mechanisms promoting engagement at both contextual (i.e., in the work context) and situational (i.e., in a training session) levels. Specifically, using two different methodologies (i.e., single and multiple measurement points), we tested a model that incorporated police officers’ perceptions of organizational support, supervisor support, motivation, and engagement in work activities (Study 1), and in a training session (Study 2).

The Hierarchical Model of Intrinsic and Extrinsic Motivation

In line with self-determination theory (Deci & Ryan, 2008), the first postulate of the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997, 2007) posits that self-determined motivation, controlled motivation, and amotivation must all be considered in order to provide a complete analysis of motivational

processes. The second postulate states that these three constructs exist at three levels of generality; from the highest to the lowest, these are the global, contextual, and situational levels. Global motivation refers to a general motivational orientation to interact with the environment in a self-determined, controlled, or amotivated way. Contextual motivation refers to an individual’s motivation in a specific broad life domain (e.g., work, education, and sport). Finally, situational motivation refers to a motivational state experienced by individuals in a particular activity at a given time.

Determinants of Workers’ Motivation

The Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) also posits that motivation at any level can result from both environmental and individual difference factors. First, Gagné and Deci (2005) argued that a supportive work environment should enhance self-determined motivation at the contextual level (i.e., work motivation). Hence, Gagné et al. (2010) looked at the role of perceived organizational support (i.e., the degree to which employees believe that their organization values their work and cares about their well-being; see Eisenberger & Stinglhamber, 2011) in the prediction of workers’ motivation according to self-determination theory. In a sample of 881 pilots working for a commercial airline company, Gagné et al. (2010) showed that perceived organizational support was positively linked to self-determined motivation. Tremblay, Blanchard, Taylor, Pelletier, and Villeneuve (2009) also found that both organizational support and work climate were significantly linked to self-determined work motivation.

Hypothesis 1: Perceptions of organizational support will be positively related to self-determined work motivation.

A second source of influence on contextual motivation arises from individual differences. Thus, Vallerand (1997) considered that contextual motivation could be influenced by global motivation (i.e., the top-down effect). Several studies in sport (e.g., Gillet, Vallerand, Amoura, & Baldes, 2010) and education (e.g., Lavigne & Vallerand, 2010) have confirmed the top-down effect from the contextual to the situational levels. However, there is a lack of research investigating the impact of global motivation on contextual motivation in the work domain. Indeed, to the best of our knowledge, only one study has looked at the top-down effect with a sample of workers. Lam and Gurland (2008) examined the effect of autonomy orientation on self-determined work motivation. In line with the postulate of the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997), Lam and Gurland’s (2008) results revealed that autonomy orientation positively predicted self-determined work motivation.

Hypothesis 2: Global self-determined motivation will positively predict self-determined work motivation.

Motivational Outcomes

The last postulate of the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) posits that motivation has affective, cognitive, and behavioral consequences. Employee engagement (Bakker, Schaufeli, Leiter, & Taris, 2008) represents one of the key outcomes in the work domain (see Meyer & Gagné,

2008) because it is positively related to job involvement, organizational commitment, and job satisfaction (e.g., Hallberg & Schaufeli, 2006; Schaufeli, Taris, & Van Rhenen, 2008). Recent studies have looked at the impact of work motivation on engagement (e.g., de Lange, Van Yperen, Van der Heijden, & Bal, 2010). However, only a few studies in the work domain have been conducted within the self-determination framework (e.g., Vansteenkiste et al., 2007). In a sample of clerical and administrative workers from a health insurance organization, Parker, Jimmieson, and Amiot (2010) found that self-determined work motivation was positively correlated with engagement variables (i.e., vigor, dedication, and absorption). These results are consistent with previous research in different settings that showed that self-determined motivation leads to positive outcomes (e.g., Mouratidis, Vansteenkiste, Sideridis, & Lens, 2011).

Hypothesis 3: Self-determined work motivation will positively predict work vigor, dedication, and absorption.

As mentioned, we investigated the role of global motivation and perceived organizational support in the prediction of work motivation, in addition to investigating the relationships between self-determined work motivation and work engagement. The hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) posits that the effects of global motivation on work outcomes are mediated by work motivation. In line with this postulate and with previous findings in the work domain (Lam & Gurland, 2008), we hypothesized that self-determined work motivation would be a significant mediator in the relationship between global self-determined motivation and work engagement.

Hypothesis 4: Self-determined work motivation will fully mediate the effects of global self-determined motivation on work vigor, dedication, and absorption.

Last, we hypothesized that work motivation would only be a partial mediator of the relationships between perceived organizational support and work engagement, as other organizational and personal factors besides motivation could mediate these links. Indeed, organizational support theory identifies eight key processes for the positive links between perceived organizational support and favorable outcomes (e.g., work engagement; see Eisenberger & Stinglhamber, 2011). As mentioned above, perceived organizational support has been positively associated with self-determined motivation (Gagné et al., 2010) and self-determined motivation has been significantly and positively related to work engagement (e.g., Parker et al., 2010). In addition, a positive relationship between perceived organizational support and work engagement has been found in numerous studies (e.g., Rich, LePine, & Crawford, 2010). Therefore, we hypothesized that perceived organizational support would have both direct and indirect (via self-determined work motivation) effects on work engagement.

Hypothesis 5a: Perceived organizational support will be positively related to work vigor, dedication, and absorption.

Hypothesis 5b: Self-determined work motivation will partially mediate the effects of perceived organizational support on work vigor, dedication, and absorption.

The Present Research

Police work demands considerable energy and autonomy. It involves analysis, observation, and action. Successful outcomes require officers to be perspicacious when confronted by the various difficulties the job entails. In spite of the many problems faced by police—a work environment characterized by violence, conflict, and threats—officers' willingness to engage and persist in their work is frequently observed. This paradoxical observation underlies our interest in this particular professional group. Based on suggestions made by Meyer and Gagné (2008), the main purpose of the present research was to conduct two studies in order to test an integrative model dealing with how perceived organizational and supervisor support, and self-determined motivation, influence work engagement. Specifically—based on the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) and the earlier research described above—Study 1 investigated how police officers' global self-determined motivation and perceived organizational support predicted their self-determined work motivation. In addition, we looked at the role of self-determined work motivation as a predictor of work engagement.

To enhance the validity and generalization of the hypothesized model, Study 2 sought to replicate the results of Study 1 at the situational level (i.e., in a training session). Replicating the results of Study 1 at a lower level of generality would provide important evidence for the validity of the proposed model. Furthermore, Study 2 improved upon Study 1 by using a cross-sectional design with multiple measurement points and also included control variables that allowed us to look more closely at changes in engagement.

Although researchers have started to devote empirical attention to the motivation-engagement relationship in the work context (e.g., Parker et al., 2010), few studies have included both determinants (e.g., organizational support, global motivation) and outcomes (e.g., engagement) of work motivation. In addition, there has been a lack of research exploring the combined role of contextual factors and global motivation in the prediction of contextual motivation. Finally, more research is needed to examine whether perceived organizational support influences work engagement, especially concerning the mediating role of self-determined motivation. Indeed, recent investigations using organizational support theory (e.g., Panaccio & Vandenberghe, 2009; see Eisenberger & Stinglhamber, 2011, for a review) have shown that perceived organizational support has indirect effects (e.g., via affective commitment) on different work outcomes (e.g., performance). However, no research has examined how self-determined motivation could explain the relationship of contextual (i.e., perceived organizational support) and individual (i.e., global motivation) factors to work engagement. Thus, while a number of investigations have empirically demonstrated the validity of one or more paths of the hypothesized model, no research has tested the overall model. We believe that this is an original model that could lead to important theoretical and applied benefits for police officers.

Study 1

The purpose of Study 1 was to test a model incorporating perceived organizational support, global and contextual motivation, and work engagement. First, police officers' perceptions of organizational support positively predict their self-determined work motivation. Second, based on the top-down effect (Vallerand, 1997), police officers' global self-determined motivation pos-

itively influences their self-determined work motivation (i.e., at the contextual level). Third, police officers' self-determined work motivation predicts their work vigor, dedication, and absorption. Fourth, self-determined work motivation fully mediates the effects of global self-determined motivation on work engagement. Last, perceived organizational support has both direct and indirect (via self-determined work motivation) effects on work engagement.

Method

Participants and Procedure

Participants were 170 French policemen, 62 policewomen, and 3 participants who did not specify gender. There are important organizational differences between French and Anglo-Saxon police forces. The French National Police is organized around a centralized architecture and is very dependent on government. It meets all police missions in areas such as investigation, public safety, and order-maintenance. Moreover, the hyper-hierarchical organization of French police (with a pyramidal structure) distinguishes it from Anglo-Saxon police forces that favor a more horizontal scheme (Alain & Pruvost, 2011). Actually, Anglo-Saxon countries experienced extreme decentralization in the 1950s (Brodeur, 2003). The criminal investigation and business intelligence services are linked to a central service while all public security functions are performed by municipal police. The French police organization described in the present research is more similar to organizations such as the Federal Bureau of Investigation (FBI) than to the average local police force (municipal police).

The mean age of the participants was 41.14 years ($SD = 7.44$) and the average length of service in the police force was 17.92 years ($SD = 7.80$). There were 350 national police officers who were asked to complete a questionnaire via an online survey (response rate = 48.6%). They were informed that there were no right or wrong answers and that their answers would be kept confidential. IP addresses were checked to detect potential duplicate responders, and no such duplicates were identified. Participation was voluntary and no incentive was offered to take part in the study. Each participant took 10 to 15 min to complete the questionnaire.

Measures

Global motivation. Global motivation was assessed with the 18-item version of the Global Motivation Scale (Guay, Mageau, & Vallerand, 2003). This scale assesses intrinsic motivation, identified regulation, introjected regulation, external regulation, and

amotivation toward life in general. All items are measured on a seven-point Likert scale ranging from 1 (*does not correspond at all*) to 7 (*corresponds exactly*). This scale showed acceptable reliability and validity in past research (e.g., Guay et al., 2003; Stephan, Fouquereau, & Fernandez, 2008). The subscales were combined in a composite index of self-determined motivation (e.g., Grolnick & Ryan, 1987; Ryan & Connell, 1989). This index reflects the extent to which workers' motivation is more or less self-determined. It was created by summing each intrinsic motivation item multiplied by +2, each identified regulation item by +1, each introjected and external regulations item by -1, and each amotivation item by -2. Thus, higher scores on this index reflect a more self-determined motivation.

Perceived organizational support. Perceived organizational support was measured with an eight-item version of the Perceived Organizational Support Scale developed by Eisenberger, Huntington, Hutchison, and Sowa (1986). All responses were given on a 7-point Likert scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Past studies have provided strong evidence for the unidimensional structure, construct validity, and internal consistency of this scale (see Rhoades & Eisenberger, 2002).

Contextual motivation. Work motivation was assessed with the Motivation at Work Scale—Revised (Gagné et al., 2011). This scale comprises 19 items and measures five forms of motivation: intrinsic motivation (3 items), identified regulation (3 items), introjected regulation (4 items), external regulation (6 items), and amotivation (3 items). Items are rated on a seven-point Likert scale ranging between 1 (*corresponds not at all*) and 7 (*corresponds exactly*). As with global motivation, the five subscales were combined in an index of self-determined motivation (see Vallerand, 2007).

Engagement. Engagement was assessed using the nine-item Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006). The nine items of the UWES-9 are grouped into three subscales reflecting the underlying dimensions of engagement: vigor (3 items), dedication (3 items), and absorption (3 items). Answers are given on a seven-point Likert scale from 0 (*never*) to 6 (*always*). Results of previous studies showed that the UWES-9 constitutes a valid and reliable tool to assess work engagement (e.g., Schaufeli et al., 2006; Seppälä et al., 2009).

Results

Preliminary Analyses

Means, standard deviations, and Cronbach's alpha coefficients for all measures are presented in Table 1. All scales used in the

Table 1

Means, Standard Deviations, Alpha Reliabilities, and Correlations for Study Variables (Study 1)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Global self-determined motivation	4.72	4.10	.83					
2. Perceived organizational support	3.78	1.38	.14	.89				
3. Contextual self-determined motivation	7.52	5.80	.40**	.31**	.81			
4. Vigor	3.92	1.65	.25**	.43**	.70**	.91		
5. Dedication	4.06	1.71	.34**	.36**	.81**	.84**	.92	
6. Absorption	4.00	1.61	.24*	.36**	.77**	.84**	.84**	.92

Note. Alpha coefficients are reported on the diagonal.

* $p < .01$. ** $p < .001$.

present study displayed adequate levels of reliability (alphas ranged from .81 to .92). As expected, global self-determined motivation and perceived organizational support were positively correlated with contextual self-determined motivation. In addition, contextual self-determined motivation and perceived organizational support were positively associated with vigor, dedication, and absorption (see Table 1).

Main Analyses

Because of the relatively small sample in the present study, we did not test a latent variable model. Thus, the proposed model was tested through a path analysis using LISREL 8.30[®] (Jöreskog & Sörbom, 1996). It contained two exogenous variables (i.e., global self-determined motivation and perceived organizational support) and four endogenous variables (i.e., contextual self-determined motivation, vigor, absorption, and dedication). Paths were specified according to the hypotheses mentioned above. Because the correlations between vigor, absorption, and dedication were substantial (see Table 1), the three variables were free to covary with each other. All estimated paths were significant and the goodness of fit of the model was adequate. Indeed, the chi-square value was not significant, $\chi^2(df = 4, N = 203) = 5.55, p = .23$, and the other fit indices were also satisfactory: CFI = 1.00, IFI = 1.00, GFI = .99, and RMSEA = .04 [.00–.12]. Figure 1 displays the results of the path analysis. Global self-determined motivation and perceived organizational support positively predicted contextual self-determined motivation ($R^2 = .22$), which in turn positively predicted vigor ($R^2 = .55$), dedication ($R^2 = .67$), and absorption ($R^2 = .61$). In addition, perceived organizational support was positively related to the three dimensions of work engagement.

Discussion

The results of Study 1 provided support for the hypothesized model and thus yielded additional support for self-determination theory (Deci & Ryan, 2008) and the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997). First, the present results revealed that both global motivation and perceived organizational support predicted contextual motivation. Second, work vigor, absorption, and dedication were significantly and positively predicted by self-determined work motivation. Third, as hypothesized, self-determined work motivation fully mediated the effects of global self-determined motivation on work vigor, dedication, and absorption. Last, self-determined work motivation was a partial mediator of the relationships between perceived organizational support and the three dimensions of work engagement.

Study 2

The results of Study 1 provided support for the hypothesized model. However, there was only a single measurement point, while multiple measurement points would more accurately test whether the proposed model could account for changes in work vigor, absorption, and dedication. In addition, the validity and generalization of the proposed model would be enhanced if it were shown to be applicable at the situational level (i.e., during a training session) and for another source of support (i.e., supervisor support).

In the last 30 years, training has been developed within the French national police force. Questions have always been raised about police officers' motivation and engagement in training sessions, leading to the development of new teaching methods and

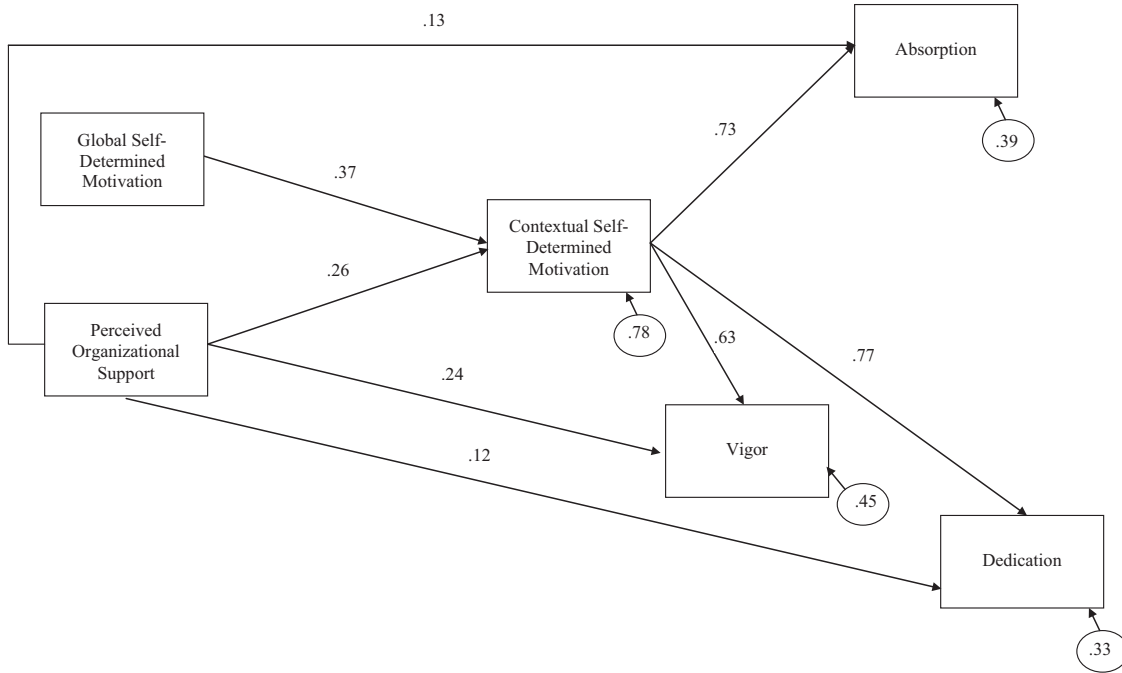


Figure 1. Results of the structural equation modeling (Study 1). All coefficients were standardized and were significant ($p < .05$). For the sake of clarity, covariances among error terms are not shown.

discussion about the place and role of trainers. Training courses have thus been improved in order to maintain engagement in the profession (Fougier, 2002). Police officers' motivation to engage in training actions is self-determined or controlled (Carré, 2001), and the type of motivation influences their engagement during the training course. Several authors (e.g., Galland & Bourgeois, 2006) insist on the idea that police officers' motivation during training is determined by individual factors (e.g., personality) and situational factors (e.g., aspects of the learning situation such as teaching tools). Consequently, police officers' self-determined motivation and engagement in training sessions could be strengthened if the trainer (situational factor) knew how to heighten officers' awareness, encourage them to participate, recognize their skills, and show them the importance of the subject in question. Self-determined contextual motivation (individual factor) could also have an impact on situational self-determined motivation and engagement in a training course.

The purpose of Study 2 was thus to replicate the results of Study 1 at a lower level of generality using a cross-sectional design with multiple measurement points. Specifically, contextual motivation was assessed at the beginning of the training session, and engagement at Time 2 (i.e., halfway through the training session). Moreover, motivation for the training session (i.e., situational motivation), perceived supervisor support, and engagement in the training session were assessed on the last day of the session. It was hypothesized that contextual self-determined motivation (individual factor) and perceived supervisor support (situational factor) would positively predict situational self-determined motivation. In addition, it was hypothesized that situational self-determined motivation would be positively related to vigor, dedication, and absorption at Time 3, even if the effects of prior engagement were controlled. We controlled for initial engagement to show that self-determined motivation predicts changes in work engagement.

Method

Participants and Procedure

The sample consisted of 115 policemen and 32 policewomen involved in continuous vocational training. The age of the participants ranged from 24 to 57 years, with a mean age of 38.05 years ($SD = 6.24$). Average length of service in the police was 15.16 years ($SD = 6.54$). This study involved three time points. At the beginning of the training session (i.e., Time 1), a research assistant administered a questionnaire to assess work motivation. Halfway through the session (i.e., Time 2), the same person administered a questionnaire to assess engagement. Last, at the end of the training session (i.e., Time 3), three questionnaires were handed out to the participants that covered (a) motivation for the training session, (b) engagement in the session, and (c) perceived support from trainers during the session. Training sessions were proposed by the French national police force and focused on juridical aspects and ability to cope with stress or sexual aggressions. Session times varied from three days to five days in length. To ensure anonymity and confidentiality, Time 1, Time 2, and Time 3 cases were matched on the basis of day and month of birth. Questionnaires were completed in the same classroom under the supervision of a research assistant and required approximately five minutes to complete at Time 1 and Time 2, and 10 min at Time 3. Each participant was given his or her own booklet to complete

individually. Participation was voluntary and participants were assured that their answers would be kept confidential. They were also offered the option to withdraw from the study at any time. No participants withdrew from the study.

Measures

Contextual motivation. The Motivation at Work Scale (Gagné et al., 2010) was used to assess intrinsic motivation, identified regulation, introjected regulation, and external regulation toward work at Time 1. This scale comprises 12 items and responses are made on a 7-point scale ranging from 1 (*does not correspond at all*) to 7 (*corresponds exactly*). This scale has demonstrated acceptable reliability and validity in past research (Gagné et al., 2010). As in Study 1, the four subscales were combined in an index of self-determined motivation (e.g., Grolnick & Ryan, 1987). Specifically, the self-determination index was created using the following formula: $2 \times \text{Intrinsic Motivation} + 1 \times \text{Identified Regulation} - 1 \times \text{Introjected Regulation} - 2 \times \text{External Regulation}$.

Perceived supervisor support. Police officers' perceptions of support from trainers during the training session were measured with the same eight-item version of the Perceived Organizational Support Scale (Eisenberger et al., 1986) used in Study 1. The scale was modified in the present study to assess perceived supervisor support. Specifically, we replaced "the organization" with "the trainers" (see Shanock & Eisenberger, 2006).

Situational motivation. Participants' situational motivation for the training session was assessed with an adapted version of the Situational Motivation Scale (Guay, Vallerand, & Blanchard, 2000). This scale typically measures four types of motivation (i.e., intrinsic motivation, identified regulation, external regulation, and amotivation) to engage in a task (in this case, the training session). In addition, four items assessing introjected regulation (e.g., "Because I would feel bad not doing it") were also added to the scale. The Situational Motivational Scale has demonstrated acceptable levels of reliability and validity in past research (e.g., Gillet et al., 2010; Guay et al., 2000). The five subscales were also combined in an index of self-determined motivation (see Vallerand, 2007). Thus, each item was weighted according to the position of the five forms of motivation on the self-determination continuum: +2 for intrinsic motivation items, +1 for identified regulation items, -1 for introjected regulation and external regulation items, and -2 for amotivation items.

Engagement. Participants' engagement in the training session was assessed with the same scale used in Study 1 (i.e., UWES-9; Schaufeli et al., 2006) but the word "work" was replaced with "training session" for each item (e.g., "I am enthusiastic about the training session").

Results and Discussion

Preliminary Analyses

Means, standard deviations, and Cronbach's alpha coefficients for all measures are presented in Table 1. All measures had an acceptable level of internal consistency with all values above .70. The Pearson correlations between all variables are presented in Table 2. As expected, contextual self-determined motivation and

Table 2
Means, Standard Deviations, Alpha Reliabilities, and Correlations for Study Variables (Study 2)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Contextual self-determined motivation	2.69	4.24	.78								
2. Perceived support from formers	5.83	0.60	.08	.79							
3. Situational self-determined motivation	7.78	4.83	.22**	.30***	.75						
4. Vigor (T2)	3.91	0.96	.58***	.14	.20*	.88					
5. Dedication (T2)	4.10	1.11	.60***	.08	.19*	.86***	.89				
6. Absorption (T2)	4.01	0.94	.45***	.16	.07	.71***	.78***	.84			
7. Vigor (T3)	3.77	0.95	.18*	.31***	.72***	.34***	.30***	.27**	.86		
8. Dedication (T3)	3.76	1.09	.09	.26**	.73***	.17*	.23**	.23**	.82***	.86	
9. Absorption (T3)	3.85	1.10	-.03	.26**	.60***	.10	.12	.19*	.80***	.86***	.92

Note. Alpha coefficients are reported on the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

perceptions of support from trainers during the training session were positively correlated with situational self-determined motivation. Moreover, situational self-determined motivation was positively associated with vigor, dedication, and absorption assessed at Time 3.

Main Analyses

As in Study 1, the proposed model was tested through a path analysis using LISREL 8.30 (Jöreskog & Sörbom, 1996). It contained five exogenous variables (i.e., contextual self-determined motivation, perceived support from trainers, as well as vigor, absorption, and dedication assessed at Time 2) and four endogenous variables (i.e., situational self-determined motivation, vigor, absorption, and dedication assessed at Time 3). Paths were specified according to the hypotheses mentioned above. As in Study 1, vigor, absorption, and dedication at Time 3 were free to covary

with each other. All estimated paths were significant and the goodness of fit of the model was adequate. Indeed, the chi-square value was not significant, $\chi^2 (df = 25, N = 141) = 31.34, p = .18$, and the other fit indices were also satisfactory: CFI = .99, IFI = .99, GFI = .95, and RMSEA = .04 [.00–.09]. Figure 2 displays the results of the path analysis. Contextual self-determined motivation and perceptions of support from trainers positively predicted situational self-determined motivation ($R^2 = .12$), which in turn predicted changes in vigor ($R^2 = .56$), dedication ($R^2 = .54$), and absorption ($R^2 = .39$).

In the present study, we used a cross-sectional design with multiple measurement points in order to look at changes in engagement and examine the role of work motivation and perceived supervisor support as determinants of situational motivation (i.e., motivation to engage in the training session). Overall, the results of Study 2 provided strong empirical support for the hypothesized

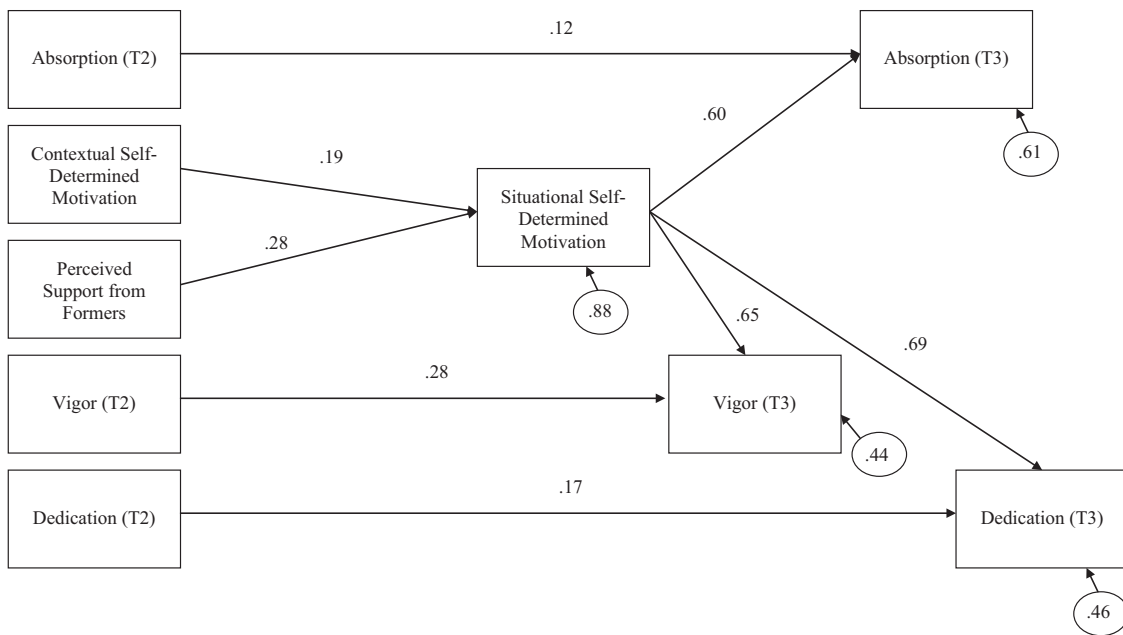


Figure 2. Results of the structural equation modeling (Study 2). All coefficients were standardized and were significant ($p < .05$). For the sake of clarity, covariances among error terms are not shown.

model. Indeed, as in Study 1, we found support for the top-down effect (Vallerand, 1997) between contextual motivation and situational motivation. The present results also confirm that perceived supervisor support was positively associated with self-determined motivation. Last, situational self-determined motivation predicted engagement in the training session at Time 3, even when prior engagement was controlled for (i.e., Time 2). Therefore, our results reveal that the hypothesized model is valid at two levels of generality (i.e., contextual and situational levels), for two sources of support (i.e., perceived organizational support and perceived supervisor support), and that self-determined motivation predicts changes in work vigor, absorption, and dedication.

General Discussion

The aim of this study was to identify the mechanisms underlying police officers' engagement in their professional activity and in training. More specifically, using self-determination theory as a guiding framework (Deci & Ryan, 2008), our aim was to examine the links between perceptions of organizational support, self-determined motivation, and engagement in the workplace. The model was supported in two studies at contextual (Study 1) and situational (Study 2) levels.

We found that perceived organizational support (Study 1) and perceived supervisor support (Study 2) were positively related to self-determined motivation. These findings are in line with past research (e.g., Tremblay et al., 2009) showing that perceived organizational support positively predicts self-determined motivation, and highlights the role of social factors as motivational determinants. The present findings also supported the postulate that the level of generality of a particular outcome is a function of the level of generality of the motivation that produced that particular outcome (see Vallerand, 1997). Thus, in Study 1, contextual motivation (and not global motivation) was found to affect a contextual outcome (i.e., work engagement). In addition, in Study 2, a situational outcome (i.e., engagement in the training session) was predicted by situational motivation (and not contextual motivation). This is the first research to test and support this hypothesis in the work context.

Results from both studies also provided support for the top-down effect proposed by the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997). These results are consistent with prior studies in work (Lam & Gurland, 2008) and sport (e.g., Gillet et al., 2010) settings, which found that motivation at a given level was influenced by motivation at the proximal level higher up in the hierarchy. Of major importance is that the results of Study 2 are the first to test and support the top-down effect from contextual to situational motivation in the work domain. Thus, further research is needed to replicate these findings. Last, the present research showed that the effects of social and individual factors on self-determined motivation can take place simultaneously.

The present findings supported the significant and adaptive influence of self-determined motivation on engagement. More precisely, the results of Study 1 revealed that self-determined work motivation positively predicted work engagement. Of major importance are the results of Study 2 that replicated those of Study 1 at a lower level of the hierarchy (situational level) while using a cross-sectional design with multiple measurement points that al-

lowed us to control for prior engagement. These findings are in line with past research on the role of motivation in the prediction of engagement in the work setting (e.g., Parker et al., 2010). More generally, the present results provided support for the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997), SDT postulates, and many other studies in various settings (see Deci & Ryan, 2008) that have shown that the more self-determined the motivation, the more adaptive the outcomes.

In sum, our results showed that perceived organizational and trainer support have a significant effect on police officers' contextual and situational self-determined motivation. Moreover, this study showed that self-determined motivation predicts engagement in work activities and in a training session. Thus, police officers who feel that they are supported by their organization (e.g., recognition, approval, appreciation of work) show higher levels of self-determined motivation and work engagement. Consequently, support from trainers and organizational support, together with regular communication and knowledge sharing, should all be developed within the national police force. The present findings have some practical implications for promoting police officers' engagement. Management efforts devoted to enhancing police officers' perceptions of organizational and trainer support may offer positive outcomes in terms of higher self-determined motivation and work engagement. Psychologists could thus design programs that include more participant-centered activities, and emphasize cooperative activities and fairness. Rhoades and Eisenberger (2002) showed that job conditions and fairness increase perceived organizational support. Likewise, emphasizing the importance of perceived organizational support through the establishment of career management systems could promote access to training, skills development, and clearly defined job changes. These approaches should enable police officers to perceive more clearly the importance of human capital and how to best develop it within their own institutions (Allen, Shore, & Griffeth, 2003).

This research also showed that contextual motivation was determined by global motivation. Although we have already stressed the importance of high self-determined motivation in the prediction of police officers' work engagement, it seems that this aspect should be considered during the recruitment process by including a global motivation scale in the selection procedure. It is clearly in the interest of the police force to recruit people with strong self-determined motivation at the global level, as this predicts strong self-determined work motivation, which is, in turn, positively related to work engagement. Yet, it should also be recalled that work engagement is positively related to positive emotions, innovation and creativity, physical and mental health, and performance (for reviews, see Bakker, 2011; Halbesleben, 2011). The results of Study 2 also point out that police officers' self-determined work motivation could be retained as a selection criterion to participate in a training session, as this contextual motivation is positively associated with self-determined motivation and engagement in the training session.

Certain limitations should be taken into consideration when interpreting the results of the present research. First, our design was correlational in nature. Thus, we cannot infer causality from the results. Further research using experimental designs should be conducted in order to gain a better understanding of the effects of organizational support, supervisor support, and motivation on work engagement. Second, only one outcome of self-determined

motivation (i.e., work engagement) was assessed in the present research. Future studies should examine the role of organizational factors and self-determined motivation in predicting police officers' well-being (e.g., positive affect, vitality), ill-being (e.g., negative affect, anxiety, depression), and organizational citizenship behaviors. Another limitation relates to the potential response biases of police officers answering questions of motivation and engagement from an external investigator in the context of a nonmandated training. Despite assurances of anonymity, participants may have felt compelled to respond in certain ways. Future research should control for social desirability response bias and use multiple assessment methods (e.g., objective measures). Last, our sample comprised only French police officers. Further research with police officers from different cultures is needed to replicate and extend the results.

Taken together, the present findings contribute to a better understanding of the role of organizational support, supervisor support, and police officers' motivation in the prediction of their work engagement. More specifically, organizational and managerial factors, together with individual characteristics, are involved in predicting work engagement. As work engagement is beneficial both for the police officers themselves and for the organization, police organizations and trainers should support police officers in order to strengthen their self-determined motivation and engagement in their professional activities.

References

- Alain, M., & Pruvost, G. (2011). Police: Une socialisation professionnelle par étapes [Police: Stages of professional socialization]. *Déviante et Société, 35*, 267–280. doi:10.3917/ds.353.0267
- Allen, D., Shore, L., & Griffeth, R. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management, 29*, 99–118. doi:10.1177/014920630302900107
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science, 20*, 265–269. doi:10.1177/0963721411414534
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*, 187–200. doi:10.1080/02678370802393649
- Brodeur, J. P. (2003). *Les visages de la police* [The different faces of police]. Montréal, Canada: Les Presses de l'Université de Montréal.
- Carré, P. (2001). *De la motivation à la formation* [From motivation to training]. Paris, France: L'Harmattan.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/Psychologie Canadienne, 49*, 14–23. doi:10.1037/0708-5591.49.1.14
- de Lange, A. H., Van Yperen, N. W., van der Heijden, B., & Bal, P. M. (2010). Dominant achievement goals of older workers and their relationship with motivation related outcomes. *Journal of Vocational Behavior, 77*, 118–125. doi:10.1016/j.jvb.2010.02.013
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500–507. doi:10.1037/0021-9010.71.3.500
- Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organizational support: Fostering enthusiastic and productive employees*. Washington, DC: American Psychological Association Books. doi:10.1037/12318-000
- Fougier, G. (2002). L'impossible réforme de la police [The impossible police reform]. *Pouvoirs, 102*, 97–116. doi:10.3917/pouv.102.0097
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*, 331–362. doi:10.1002/job.322
- Gagné, M., Forest, J., Gilbert, M.-H., Aubé, C., Morin, E., & Malorni, A. (2010). The Motivation at Work Scale: Validation evidence in two languages. *Educational and Psychological Measurement, 70*, 628–646. doi:10.1177/0013164409355698
- Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van den Broeck, A., Aspel, A. K., . . . Wang, Z. (2011). *Validation evidence in ten languages for the Revised Motivation at Work Scale*. Manuscript submitted for publication.
- Galland, B., & Bourgeois, E. (2006). *Se motiver à apprendre* [Motivation to learn]. Paris, France: PUF.
- Gillet, N., Berjot, S., & Paty, E. (2010). Profils motivationnels et ajustement au travail: Vers une approche intra-individuelle de la motivation. *Le Travail Humain: A Bilingual and Multi-Disciplinary Journal in Human Factors, 73*, 141–162. doi:10.3917/th.732.0141
- Gillet, N., Vallerand, R. J., Amoura, S., & Baldes, B. (2010). Influence of coaches' autonomy support on athletes' motivation and sport performance: A test of the hierarchical model of intrinsic and extrinsic motivation. *Psychology of Sport and Exercise, 11*, 155–161. doi:10.1016/j.psychsport.2009.10.004
- 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. doi:10.1037/0022-3514.52.5.890
- Guay, F., Mageau, G. A., & Vallerand, R. J. (2003). On the hierarchical structure of self-determined motivation: A test of top-down, bottom-up, reciprocal, and horizontal effects. *Personality and Social Psychology Bulletin, 29*, 992–1004. doi:10.1177/0146167203253297
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the assessment of the situational intrinsic and extrinsic motivation: The Situational Motivation Scale (SIMS). *Motivation and Emotion, 24*, 175–213. doi:10.1023/A:1005614228250
- Halbesleben, J. R. B. (2011). The consequences of engagement: The good, the bad, and the ugly. *European Journal of Work and Organizational Psychology, 20*, 68–73. doi:10.1080/1359432X.2010.514327
- Hallberg, U., & Schaufeli, W. B. (2006). "Same same" but different? Can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist, 11*, 119–127. doi:10.1027/1016-9040.11.2.119
- Jöreskog, K., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago, IL: Scientific Software.
- Kuvaas, B., & Dysvik, A. (2009). Perceived investment in employee development, intrinsic motivation, and work performance. *Human Resource Management Journal, 19*, 217–236. doi:10.1111/j.1748-8583.2009.00103.x
- Lam, C. F., & Gurland, S. T. (2008). Self-determined work motivation predicts job outcomes, but what predicts self-determined work motivation? *Journal of Research in Personality, 42*, 1109–1115. doi:10.1016/j.jrp.2008.02.002
- Lavigne, G., & Vallerand, R. J. (2010). The dynamic processes of influence between contextual and situational motivation: A test of the hierarchical model in a science education setting. *Journal of Applied Social Psychology, 40*, 2343–2359. doi:10.1111/j.1559-1816.2010.00661.x
- Lynch, M. F., Plant, R. W., & Ryan, R. M. (2005). Psychological needs and threat to safety: Implications for staff and patients in a psychiatric hospital for youth. *Professional Psychology: Research and Practice, 36*, 415–425. doi:10.1037/0735-7028.36.4.415
- Meyer, J. P., & Gagné, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 1*, 60–62. doi:10.1111/j.1754-9434.2007.00010.x

- Meylan, S., Boillat, P., & Morel, A. (2009). Epuisement professionnel en contexte policier: Le rôle des valeurs [Burnout in the police context: The role of values]. *Ethique Publique, 11*, 31–43. doi:10.4000/ethiquepublique.96
- Mouratidis, A., Vansteenkiste, M., Sideridis, G., & Lens, W. (2011). Vitality and interest-enjoyment as a function of class-to-class variation in need-supportive teaching and pupils' autonomous motivation. *Journal of Educational Psychology, 103*, 353–366. doi:10.1037/a0022773
- Panaccio, A., & Vandenberghe, C. (2009). Perceived organizational support, organizational commitment and psychological well-being: A longitudinal study. *Journal of Vocational Behavior, 75*, 224–236. doi:10.1016/j.jvb.2009.06.002
- Parker, S. L., Jimmieson, N. L., & Amiot, C. E. (2010). Self-determination as a moderator of demands and control: Implications for employee strain and engagement. *Journal of Vocational Behavior, 76*, 52–67. doi:10.1016/j.jvb.2009.06.010
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*, 698–714. doi:10.1037/0021-9010.87.4.698
- Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*, 617–635. doi:10.5465/AMJ.2010.51468988
- 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. doi:10.1037/0022-3514.57.5.749
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*, 701–716. doi:10.1177/0013164405282471
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*, 71–92. doi:10.1023/A:1015630930326
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review, 57*, 173–203. doi:10.1111/j.1464-0597.2007.00285.x
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A., & Schaufeli, W. B. (2009). The construct validity of the Utrecht Work Engagement Scale: Multisample and longitudinal evidence. *Journal of Happiness Studies, 10*, 459–481. doi:10.1007/s10902-008-9100-y
- Shanock, L.R., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied Psychology, 91*, 689–695.
- Stephan, Y., Fouquereau, E., & Fernandez, A. (2008). The relation between self-determination and retirement satisfaction among active retired individuals. *The International Journal of Aging & Human Development, 66*, 329–345. doi:10.2190/AG.66.4.d
- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Ville-neuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational research. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 41*, 213–226. doi:10.1037/a0015167
- Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (pp. 271–360). New York, NY: Academic Press.
- Vallerand, R. J. (2007). A hierarchical model of intrinsic and extrinsic motivation for sport and physical activity. In M. S. Hagger, & N. L. D. Chatzisarantis (Eds.), *Self-determination theory in exercise and sport* (pp. 255–279). Champaign, IL: Human Kinetics.
- Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction, and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology, 80*, 251–277. doi:10.1348/096317906X111024

Received February 1, 2012

Revision received July 9, 2012

Accepted July 16, 2012 ■