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Lara Manganelli¹, Anaïs Thibault-Landry¹, Jacques Forest¹, and Joëlle Carpentier¹

Abstract

The Problem.

According to self-determination theory (SDT), employees can experience different types of motivation with respect to their work. The presence of the different types of motivation is important given that, compared with controlled regulation (introjected and extrinsic motivation), autonomous regulation (intrinsic and identified motivation) leads to a host of positive individual and organizational outcomes. Despite this empirically validated phenomenon, managers remain unaware of the outcomes of motivation in the workplace and of the practices that can foster autonomous regulation through psychological need satisfaction. The focus of the article will be to review relevant literature to reveal the benefits that SDT principles can bring to the workplace.

The Solution.

Managers are encouraged to promote autonomous regulation first by assessing their employees' motivation for a particular outcome and by structuring three elements of the work environment (job design, interpersonal relationships/leadership, and compensation) in such a way as to facilitate need satisfaction (autonomy, competence, and relatedness). Some questions we try to answer are as follows: What are the outcomes of different motivation types in the workplace? Why are an employee's basic psychological needs important to consider? What kinds of tools are available to assess employees' motivation with regard to their work? Which work practices are likely to encourage autonomous regulation?

¹Université du Québec à Montréal, Canada

Corresponding Author:

Jacques Forest, École des sciences de la gestion, Université du Québec à Montréal, 315 Rue Sainte-Catherine Est, Montreal, Québec, Canada H2X3X2. Email: forest.jacques@uqam.ca

The Stakeholders.

Employees, managers (individuals in direct contact with employees), leaders (individuals who oftentimes are in a position to influence organizational strategies and processes) and human resource development (HRD) practitioners interested in stimulating optimal functioning at work.

Keywords

self-determination theory, motivation, need satisfaction, well-being, performance

Self-determination theory (SDT) suggests that individuals experience different types of motivation with respect to their work. Considering the different reasons individuals invest effort into their job is important given that, compared with controlled regulation, autonomous regulation leads to a host of favorable outcomes, such as well-being and performance (Deci & Ryan, 2000; Gagné & Deci, 2005). Nevertheless, managers remain unaware of the effects of motivation and of the practices that can foster optimal motivation through psychological need satisfaction. Thus, the first aim of this article is to provide managers with an understanding of work motivation from the perspective of SDT and to review research findings regarding the outcomes of motivation in the workplace. Second, this article aims to help managers promote autonomous regulation by describing specific tools that can be utilized to diagnose employee motivation and by summarizing research regarding workplace practices (job design, interpersonal relationships and leadership, and compensation) that influence need satisfaction. Finally, research from distinct but related fields will be presented to provide insights into additional actions that can be taken to foster optimal motivation.

Motivation According to SDT

SDT differentiates between four types of motivation that, according to Deci and Ryan (2000) lie on a continuum ranging from autonomous to controlled regulation. A task that is inherently interesting may generate autonomous regulation because the task is pursued for its own sake, for the enjoyment and interest that it produces. For work tasks that are not inherently pleasurable, however, external factors may come into play to motivate the individual to perform the task. The factor that determines where on the continuum an individual's motivation lies is the extent to which these external factors have become integrated (or internalized) into an individual's sense of self. Thus, the more an external factor becomes internalized within the self, the more autonomous an individual's regulation becomes. For instance, a doctor motivated primarily by a belief that his or her job is important for society has internalized the value for the outcome of the activity into his or her sense of self, leading to a relatively autonomous type of motivation. Although the continuum perspective has, for several decades, served as a theoretical foundation for understanding motivation, it has recently been challenged by authors, revealing a lack of empirical support for this type of conceptualization. Specifically, Chemolli and Gagné (2014) argue that motivation is better defined as a

multidimensional construct in that the different types of motivation are actually conceptually distinct, each leading to different outcomes. Regardless of the perspective adopted, however, most authors agree that four primary types of motivation exist (e.g., Sheldon, Osin, Gordeeva, Suchkov, & Sychev, 2017).

Intrinsic motivation refers to carrying out a task for the sheer pleasure and enjoyment the task brings, whereas identified motivation refers to doing a task because it is in line with one's values and is perceived to be important. Controlled regulation, however, includes introjected motivation, which represents the motivation to carry out a task because of an internal pressure to behave or act in certain ways (e.g., to avoid feelings of guilt or to prove one's worthiness) and extrinsic motivation, which represents the most controlled type of motivation. Extrinsic motivation refers to an individual motivated by the pursuit of external rewards, such as money or prestige, or the avoidance of external forms of punishment, such as social sanctions. As will be demonstrated, the relative presence of autonomous and controlled regulation is associated with important workplace consequences.

Correlates of Autonomous and Controlled Motivation

A vast amount of research points to the conclusion that, compared with controlled regulation, autonomous regulation leads to a host of positive individual and organizational outcomes (Gagné & Deci, 2005). From a psychological standpoint, autonomously motivated employees experience greater well-being (Gagné et al., 2015), happiness (Deci & Ryan, 2008), and energy (Gagné et al., 2015) as well as lower levels of distress and burnout (Deci & Ryan, 2008; Fernet, Guay, & Senécal, 2004). With respect to workplace behavior, autonomous regulation is associated with greater performance and productivity (Baard, Deci, & Ryan, 2004; Trépanier, Forest, Fernet, & Austin, 2015). Specifically, autonomously motivated employees display greater persistence, concentration, effort, and engagement in their work tasks (Deci & Ryan, 2008; Haivas, Hofmans, & Pepermans, 2013). Moreover, they are more likely to fulfill the prescribed requirements of their role, cope with change more effectively, and display proactive and innovative work behaviors (Devloo, Anseel, De Beuckelaer, & Salanova, 2015; Gagné et al., 2015). Controlled regulation, on the contrary, is associated with impaired performance and persistence due to difficulties related to concentration and memory (Vallerand, 1997) as well as more physical complaints, psychological distress, and lower levels of engagement (Trépanier et al., 2015). Finally, from an organizational perspective, autonomously motivated employees have less work absences and lower turnover intentions and tend to be more strongly committed to their organization (Gagné et al., 2015). Given these importance consequences, the following section aims to help managers promote autonomous regulation.

Fostering Autonomous Regulation at Work

Measuring Employee Motivation

The Multidimensional Work Motivation Scale (MWMS; Gagné et al., 2015) is a useful tool to assess employee motivation as it has been validated across a wide range of

cultures, languages, and organizational contexts. The MWMS allows for the assessment of six dimensions of motivation, namely, amotivation (absence of motivation), intrinsic, identified, and introjected regulation as well as two subdimensions of extrinsic regulation (social and material extrinsic regulation). Thus, the scale can measure two subtypes of extrinsic motivation, namely, by material rewards (such as money) or by social rewards (such as prestige or social approval). The Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009) can also be used to assess the motivation types proposed by SDT. The WEIMS also measures integrated regulation, a form of motivation that is said to be more fully internalized than identified regulation. Although previous research typically reveals that it is difficult to statistically separate integrated regulation from identified and intrinsic regulation subscales, the scale nevertheless reveals satisfactory psychometric properties (Tremblay et al., 2009). Assessment tools such as the MWMS and the WEIMS can help managers evaluate the current motivation of their employees to implement more adapted practices and/or policies. This would be eased, for example, with the individualized interpreted self-report of the MWMS, where personal results are compared with a sample of more than 4,000 individuals. If the use of these questionnaires is too time-consuming or burdensome, using motivational interviewing techniques might be a good alternative (Vansteenkiste & Sheldon, 2006).

Need Satisfaction and Frustration

In order for managers to implement practices aimed at increasing autonomous regulation, an understanding of the antecedents of motivation is needed. According to SDT, the satisfaction of three psychological needs is essential to facilitate optimal workplace functioning (Deci & Ryan, 2000). The need for autonomy suggests that individuals must have a say in the way their work is carried out and be able to act in accordance with their values. The need for competence specifies that individuals must perceive that the work they do is important and leads to significant results, and the need for relatedness is expressed as the desire to have meaningful relationships with others (Deci & Ryan, 2000).

Employees working in environments that facilitate need satisfaction experience more positive work outcomes (Gagné & Deci, 2005). On the contrary, employees working in environments in which their needs are actively thwarted, whereby they experience feelings of rejection, incompetence, and/or oppression, are more likely to experience dysfunction at work (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011). Most importantly, autonomous regulation can be promoted by work contexts that encourage the satisfaction of the three basic psychological needs (Gagné & Forest, 2009). Three aspects of the work environment, namely, the way in which a job/work is designed (e.g., a job that provides autonomy in the way tasks are executed), the quality of the interpersonal relationships and leadership (e.g., organizational leaders who actively focus on satisfying employee psychological needs), as well as the compensation system in place (e.g., a system with decreased emphasis on payfor-performance schemes) can be structured in such a way as to facilitate employee

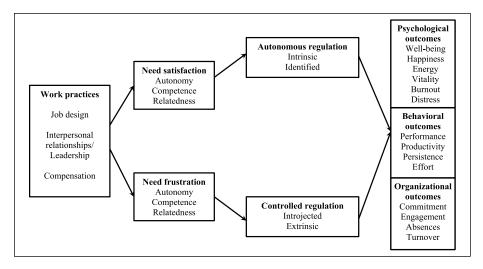


Figure 1. Hypothesized framework of the processes by which work practices may lead to various workplace outcomes.

need satisfaction and autonomous regulation. Figure 1 presents a summary of the research findings described in this article and proposes a framework through which work practices may lead to a number of workplace outcomes. It is important to note that this remains a hypothesized model and that a different causal ordering of constructs may also be possible.

Work Practices That Promote Need Satisfaction and Autonomous Regulation

lob design. Research suggests that organizations can act on five main job characteristics, namely, task variety, task identity, task significance, job autonomy, and feedback, to foster autonomous regulation (Hackman & Oldham, 1975). First, a job should provide employees with opportunities to work on a variety of tasks that require different skills and talents (task variety). Second, employees should have the possibility to perform all the tasks necessary to complete their job from beginning to end to see the final product of their work (task identity). Relatedly, a job should also allow employees to complete tasks that are meaningful and that have a significant impact on the organization (task significance), as well as the autonomy and freedom to make decisions and execute their job as they see fit (job autonomy). Finally, employees should receive direct and clear feedback about their effectiveness particularly from a supervisor and/ or colleagues (feedback). This feedback can be given in a need-supportive manner, not only when it is positive but also negative, by using perspective taking, giving choices of solutions paired with tips, based on clear expectations, given with a considerate tone of voice and which avoids personal-related statements; this is called changeoriented feedback (Carpentier & Mageau, 2013).

A substantial amount of research demonstrates that jobs structured according to these five characteristics are effective in satisfying individuals' basic psychological needs and, consequently, at increasing autonomous regulation and decreasing controlled regulation (Hadi & Adil, 2010; Trépanier et al., 2015; van Hooff & van Hooft, 2017).

In addition to these five work characteristics, job crafting, which allows employees to take an active role in initiating changes to their job according to their interests and values, also allows employees to satisfy their basic psychological needs (Slemp & Vella-Brodrick, 2014). Finally, a number of human resource management practices are also important correlates of employees' need satisfaction. Specifically, employees having access to career development, training, and mentoring opportunities in their job are more likely to satisfy their basic psychological needs (Marescaux, De Winne, & Sels, 2012).

Interpersonal relationships and leadership. An important factor that can influence autonomous regulation is whether managers (individuals in direct contact with employees) and leaders (individuals who oftentimes are in a position to influence organizational strategies and processes) adopt behaviors that directly support the satisfaction of the three psychological needs. Certain leadership styles, such as transformational (Fernet, Trépanier, Austin, Gagné, & Forest, 2015) and authentic leadership (Leroy, Anseel, Gardner, & Sels, 2015), if adopted skillfully, can help satisfy employees' psychological needs, which in turn may encourage autonomous regulation. Transformational leadership is defined as the adoption of behaviors that transform employees' values and mobilizes them to achieve organizational goals that transcend their own interests (Bass, 1985). Leaders and managers who engender this type of leadership tend to exhibit four important characteristics: (a) they are able to "walk the talk" and behave according to the high expectations they put forth (idealized influence), (b) they inspire by providing a vision and a sense of meaning to their employees' work (inspirational motivation), (c) they foster innovation by encouraging employees to challenge existing approaches (intellectual stimulation), and (d) they demonstrate genuine concern for the needs and feelings of their employees (individualized consideration). Highquality transformational behaviors have been found to facilitate the satisfaction of employees' psychological needs (Kovjanic, Schuh, & Jonas, 2013), promote autonomous regulation, as well as decrease controlled regulation (Fernet et al., 2015).

A number of other leadership characteristics are also likely to encourage employee need satisfaction. Authentic leadership style refers to leaders and managers who are able to enact their true selves in the workplace. Given that authenticity means being honest with oneself and about one's own strengths and weaknesses, displaying sincerity with others and behaving in a way that reflects personal values, leaders and managers who engender these behaviors make it more likely for employees to attain need satisfaction (Leroy et al., 2015). Moreover, highly skilled empowering leaders and managers (who share power with employees) who adopt behaviors such as highlighting the significance of work, providing participation in decision making, expressing confidence in employees' abilities, and removing bureaucratic hindrances to performance, also encourage autonomous regulation (Zhang & Bartol, 2010).

With respect to managers (individuals in direct contact with employees) specifically, high-quality supervisor-employee interactions, characterized by support, mutual trust, respect, and obligation are associated with need satisfaction and autonomous regulation (Baard et al., 2004; Graves & Luciano, 2013). Moreover, managers who (a) actively provide employees with choice and minimize surveillance (autonomy); (b) provide workers with resources and training as well as challenging tasks, objectives, and feedback (competence); and (c) have regular interactions with their employees, encourage cooperation, and validate their employees' emotions at work (relatedness), are more likely to foster need satisfaction and autonomous regulation (Gagné et al., 2015). Despite these findings, it is estimated that between 10% and 16% of workers experience abusive supervision (Namie & Namie, 2000), which refers to behaviors such as publicly ridiculing and humiliating employees, belittling employees through negative evaluations, threatening, and/or excluding subordinates (Tepper, 2000). Through such behaviors, abusive supervisors are less likely to encourage the satisfaction of employees' basic psychological needs (Lian, Ferris, & Brown, 2012). For instance, being belittled may lead employees' to doubt about their abilities and achievements and may reduce their sense of competence. Autonomy may be undermined as negative evaluations and threats may lead employees to adopt behaviors in line with what a supervisor desires to avoid the abusive behavior (Lepper & Greene, 1975). Finally, excluding behaviors may reduce relatedness need satisfaction as it communicates to an employee that he or she is not a respected member of the work group (Ferris, Brown, Berry, & Lian, 2008).

Compensation. A final element that may influence need satisfaction and autonomous regulation is an organization's compensation system. Most of the research on compensation has focused on the effects of performance contingent pay (i.e., pay based on meeting or exceeding job performance outcomes) on employee motivation. Findings suggest that, compared with mechanical or simple tasks, offering rewards (such as money) that are contingent on the performance of complex tasks (requiring a higher level of cognitive resources) or for which quality is important, decreases autonomous regulation (Frey & Jegen, 2005). The reason that contingent pay decreases autonomous regulation is that it has a tendency of narrowing employees' attention exclusively on work outcomes that are linked to pay, thus limiting autonomy in the way work is carried out (Balkins, Roussel, & Werner, 2015). Nevertheless, some authors do recognize that the negative effect of performance contingent pay can be reduced if the controlling aspects of pay are contained, for instance, by presenting performance goals in a more generalized way as to allow employees more discretion in selecting meaningful performance outcomes and the means to attain them (Balkins et al., 2015) and if pay informs the recipients about their level of competence, for instance, by allocating pay on an ex post basis (employee is not aware of the amount, form, and timing of a bonus; Balkins et al., 2015; Gagné & Forest, 2009). Recent research also sheds light on the fact that it is the informative and/or controlling meaning and interpretation of the reward (i.e., Is it need-thwarting or need-supportive), and not the reward itself, which is motivating or demotivating (Thibault Landry, Forest, Zigarmi, Houson, &

Boucher, 2017). Moreover, the scientific community urges researchers to focus their efforts on deciphering, from a motivational and not from an administrative point of view, when, if, and with whom pay is positive and negative (Deci, Olafsen, & Ryan, 2017).

A final aspect of compensation systems that appears to be an important predictor of motivation is justice (Gagné & Forest, 2008). When employees perceive that the processes used by an organization to arrive at pay decisions are fair and just, this increases the likelihood that their basic psychological needs are satisfied and consequently increases their autonomous regulation (Olafsen, Halvari, Forest, & Deci, 2015). It has also been demonstrated that base pay appears to elicit more autonomous regulation than annual and quarterly pay-for-performance, which tend to elicit more controlled regulation (Kuvaas, Buch, Gagné, Dysvik, & Forest, 2016).

Insights From New Avenues of Research

Materialism and Money Motives

Researchers have recently begun focusing on the impact of employees' psychological relationship with money on work outcomes. Individuals pursue financial success for a variety of reasons and the nature of their motivations is crucial for need satisfaction (Landry et al., 2016). Wanting to make money to participate in leisure activities, achieve freedom to live one's life according to one's values, give to charity, to gain fair compensation for one's work, and to feel proud of oneself lead to higher levels of wellbeing as these pursuits encourage the satisfaction of psychological needs. On the contrary, when individuals make money primarily to compare themselves favorably with others, overcome feelings of self-doubt, boost their self-esteem, as well as to spend impulsively, elevated ill-being is witnessed because these pursuits lead to the frustration of the psychological needs (Landry et al., 2016). Relatedly, materialistic employees, (i.e., those placing a high importance on income and material possessions relative to other life domains) are significantly less likely to satisfy their psychological needs (Dittmar, Bon, Hurst, & Kasser, 2014). These findings are important because research suggests that efforts by an organization to provide opportunities for autonomy may not be embraced by individuals exhibiting a negative relationship with money (Deckop, Jurkiewicz, & Giacalone, 2010). Although future research is needed to find effective strategies to reduce such monetary motivations in the workplace, it is important for managers to be aware that all employees may not react to practices facilitating need satisfaction in the same way.

Psychological Strengths at Work

In recent years, there has also been a growing interest in the use of employees' psychological strengths at work. Psychological strengths are defined as personal characteristics, such as judgment, honesty, and kindness that are energizing for an individual and which lead to maximal effectiveness (Linley, 2008). From an historical perspective, management practices have mainly focused on identifying employees' weaknesses to improve them. However, employees given the opportunity to utilize their psychological strengths at work are more likely to progress in their goals, which in turn facilitates the satisfaction of their basic psychological needs (Linley, Nielsen, Gillett, & Biswas-Diener, 2010). Although future research is needed to explore the direct associations between strengths use, need satisfaction, and autonomous regulation, these findings suggest that organizations should focus on helping employees identify and use their strengths at work. Managers can begin implementing this approach by using the wellvalidated free online questionnaire, Values in Action, which assesses 24 psychological strengths and provides a personalized report ranking the importance of each strength. Other tools that permit the assessment and development of psychological strengths include the Realise2 survey developed by the Center of Applied Positive Psychology and Gallup's Strengthsfinder survey.

Practical Implications

This article suggests three important levers through which organizations can encourage the satisfaction of employees' needs for autonomy, competence, and relatedness. As some models suggest, like the multilevel personality in context model, for example (Sheldon, Cheng, & Hilpert, 2011), actions and interventions can be hierarchically organized. Following this general idea, we have identified three elements, ranging from intraindividual (job characteristics), interpersonal (leadership styles), to organizational (compensation).

First, need satisfaction may depend on the characteristics of employees' job situation. To encourage feelings of competence, it may be fruitful for organizations to allow employees to use and develop a variety of skills in their job (e.g., by expanding their responsibilities and/or providing training opportunities) and provide ownership in the execution of projects/tasks from start to finish. Also, providing employees with greater flexibility in the way their work is scheduled and/or executed may contribute to fulfilling their need for autonomy. Finally, job tasks that have a direct impact on the work of others are likely to encourage relatedness need satisfaction. Also, as mentioned earlier, allowing employees to craft either job and personal resources, for example, or demands (Le Blanc, Demerouti, & Bakker, 2017) can be an opportunity to allow them to satisfy their basic psychological needs.

The research summarized in this article also points to the notion that the quality of the relationship between employees and their superiors (managers and/or leaders) can have an important influence on need satisfaction. Organizational leaders as well as managers are encouraged to adopt behaviors that can directly encourage the satisfaction of their employees' needs. Autonomy can be encouraged by actively providing employees with choice, opportunities to participate in decision making, as well as minimizing surveillance. Competence need satisfaction can be encouraged by providing training, challenging work, performance feedback, and coaching. It is equally important to encourage a sense of relatedness by having regular positive interactions with employees, demonstrating genuine concern for employees' experience as well as encouraging cooperation. As training managers and leaders is feasible and leads to positive results (Hardré & Reeve, 2009), this practice should be encouraged and implemented.

A final way organizations can encourage the satisfaction of employee psychological needs is through compensation practices. Considering the widespread use of performance contingent pay among organizations, there are several ways such systems can be structured to limit their negative effects on need satisfaction (Balkins et al., 2015). First, the allocation of pay can be done on an expost basis (employee is not aware of the amount, form, and timing of pay). This is less likely to undermine the need for autonomy, as employees will be less inclined to focus on pay, and is more likely to inform the individual that effective performance occurred (satisfying the need for competence). Moreover, performance goals can be presented in a more generalized way to allow employees discretion in selecting meaningful performance outcomes and the means to attain them as well as more choice concerning the amount and timing of pay (e.g., allowing employees to choose among different levels of pay at risk). New types of compensation, for example, prosocial bonuses, which inject social elements within money, can unlock positive benefits with the same amount of money spent. For example, three different interventions have shown that US\$10 spent on individual bonus leads to a US\$3 return on investment (thus a net loss), whereas the same US\$10 spent on a prosocial bonus leads to a US\$52 return on investment (Anik, Aknin, Norton, Dunn, & Quoidbach, 2013). Knowing how, when, and with whom money can affect psychological need satisfaction is thus a promising future research avenue (e.g., Thibault Landry et al., 2016).

Other actions that could be taken at the organizational level, either by managers, leaders, or HR department, include career development and developmental appraisal, training, direct employee participation, and mentoring (Marescaux et al., 2012), but we decided to focus our attention on pay as it oftentimes is the most idiosyncratic difference between work and other spheres of life.

Conclusion

Employees can exhibit four different types of motivation with respect to their work. The relative presence of the different types of motivation is important given that, compared with controlled regulation, autonomous regulation leads to a host of positive individual and organizational outcomes. Managers are thus encouraged to promote autonomous regulation first by assessing their employees' current motivation and by structuring three elements of the work environment (job design, interpersonal relation-ships/leadership, and compensation) in such a way as to facilitate psychological need satisfaction.

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Author Biographies

Lara Manganelli is a third-year doctoral student in organizational psychology at *Université du Québec à Montréal* (UQAM). Her current research pertains to the processes by which money leads to well-being and the ways in which individuals can develop a psychologically healthier relationship with money. She also works on projects investigating the effects of human resource management practices on organizational behavior.

Anaïs Thibault-Landry is a fourth-year doctoral student in organizational psychology at UQAM. Her primary research focus is on the effects of compensation practices on motivation, performance, and well-being. She has also worked on projects examining the associations between motivations for making money and psychological well-being.

Jacques Forest is a licensed psychologist and certified human resources professional (CHRP) as well as a professor-researcher at *École des sciences de la gestion* (ESG) UQAM. His primary research interests pertain to the antecedents and consequences of motivation in the workplace using self-determination theory (SDT). He has done research on the impact of compensation strategies, strengths management, job design, and leadership on workplace motivation, all in the aim of knowing how it is possible to simultaneously increase performance and well-being. He has helped develop the Multidimensional Work Motivation Scale, which is now available in 14 different languages with eight additional translations in progress.

Joëlle Carpentier is a researcher in the fields of organizational and sport psychology and a professor at ESG UQAM. Her research mainly focuses on specific behaviors adopted by leaders and peers that facilitate motivation and well-being in domains where high levels of performance are expected. Her primary research focus is on the definition and operationalization of a high-quality feedback by supervisors and colleagues, as well as on its determinants and consequences.