Conscious and Nonconscious Processes: Implications for Self-Determination Theory

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According to Bargh's Auto-Motive model (Bargh, 1990, 1997a, 1997b; Bargh & Chartrand, 1999), automatic motivational processes are those that are consistently and frequently engaged when environmental cues and contexts similar to that of the past arise. For example, achievement and affiliation have been primed and have been shown to affect behaviour and perceptions in ways similar to conscious activation (e.g., Lakin & Chartrand, 2003). Emerging evidence now suggest that motivational processes related to self-determination theory (Deci & Ryan, 2000), such as intrinsic and extrinsic motivation can be nonconsciously primed and then influence perceptions and behaviours (e.g., Burton, Lydon, D'Alessandro, & Koestner, 2006; Levesque & Pelletier, 2003; Ratelle, Baldwin, & Vallerand, 2005). These nonconscious effects are shown to parallel the conscious effects of motivational processes. These findings challenge researchers interested in SDT and other humanistic theories to think about whether all behaviours and forms of regulation can be nonconsciously determined. In the present paper, the authors argue that automatic nonconscious processes are not always maladaptive and that autonomous (self-determined) as well as controlled forms of motivation can be automatically and nonconsciously activated. However, the authors also argue that conscious processes are essential to our daily experiences and necessary to modulate the manifestation and expression of nonconscious processes that are negative or detrimental to growth or well-being.

Keywords: self-determination theory, conscious and nonconscious processes, human motivation

The dual-process approach is currently ubiquitous in psychology. A recent literature search for articles on this approach returned over 2,400 hits. A central tenet of this model is that behaviour is determined by a mix of controlled (conscious) and automatic (nonconscious) processes (Bargh, 1989, 1990; Barrett, Tugade, & Engle, 2004; Gollwitzer & Moskowitz, 1996; Higgins, 1989, 1996; Higgins & Bargh, 1987).

Much has been written on the conceptual distinction between the various features of conscious and nonconscious processes. Very broadly defined, conscious processes are the ones of which individuals can be aware, that they intentionally initiate and guide, and that they control. These processes usually require more energy and cognitive resources to carry out compared to nonconscious processes (Bargh, 1994). Conscious processes are usually associated with goal-oriented processes, and considered "desirable." Alternatively, nonconscious processes are the ones of which individuals are usually unaware, that are unintentionally initiated, and which individuals do not control (Bargh, 1994). Nonconscious processes are usually associated with automatic processes, and considered "undesirable." The dual-process model suggests that, following a triggering stimulus, initial responses are generally automatic (nonconscious or implicit), especially for emotional

responses and stereotype activation. Following this initial automatic response, conscious or controlled processes can then modulate how the automatic reaction is expressed in thoughts, feelings, and behaviours (Devine, 1989; Macrae, Milne, & Bodenhausen, 1994). This concept has led to the common perception that conscious processes that are controlled and intentional are mostly good, and nonsconscious processes that lack deliberation are mostly bad—a notion that is not always correct or even useful. We will use the terms nonconscious, automatic, or implicit processes interchangeably.

According to Bargh's Auto-Motive model (Bargh, 1990; Bargh & Chartrand, 1999), automatic motivational processes are those that are consistently and frequently engaged when environmental cues and contexts similar to that of the past arise. After repeated associations with an external event or situation, goals, and motivations, which are represented in memory in much the same way as attitudes, would become automatically linked with the representation of those situations (see Bargh, 1997a, for a review). That is, higher order processes such as goals and motivation can be nonconscious or automatically activated. This notion was originally controversial since such higher order processes were traditionally considered to be consciously initiated and regulated (Carver & Scheier, 1998). However, the early research on the automaticity of goals and motivations demonstrated that they can be activated or triggered without an individual's conscious intention, intervention, or will. For example, several studies have assessed stereotypes about the elderly including concepts such as being slow, conservative, retired, vacationing in Florida, and having poor memory. Bargh, Chen, and Burrows (1996) showed that activating stereotypes of elders by priming individuals with words

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associated with retirement (e.g., bingo, Florida) triggered behaviours that were consistent with this stereotype. People primed with thoughts of the elderly walked more slowly following the experimental induction than those primed with neutral words. Similar research automatically activated the elderly concept by asking people questions such as "How often do you meet elderly people?" and "Do you think elderly people are conservative?" Those primed with the elderly stereotype recalled fewer items that had been placed in front of them at the beginning of the experimental session than those who were not primed (Dijksterhuis, Bargh, & Miedema, 2000). In yet another study, activation of the elderly stereotype increased the expression of conservative views. After being primed with the elderly stereotype, people were more likely to be concerned with the amount of sex on TV, and the decreasing number of people going to church on Sunday than those who were not primed (Kawakami, Dovidio, & Dijksterhuis, 2003)

Automaticity of Higher Order Processes Including Social Behaviours: Positive Aspects of Automaticity in Higher Order Processes

Nonconscious or automatic processes can be useful, and they can contribute to successful self-regulation and adaptation (Bargh & Williams, 2006). Indeed, habits formed through repetitions have many automaticity features and are in many instances adaptive. For example, the goal to exercise can become habitually and automatically linked to the ways or means by which it is achieved on a daily basis. This habitual goal-mean link has been empirically tested in recent studies. For example, Aarts and Dijksterhuis (2000) showed that for habitual bicycle users (e.g., people who use their bicycle to go to school or work), "bicycle" was selected more quickly as a means of travel after being primed with the goal to "travel to the University" in a reaction time task.

The above result illustrates that goal-priming and automatic goal activation will affect goal-relevant behaviour in a way that is guided by the dominant response for the situation currently experienced. Therefore, if the situation calls for a positive or adaptive behaviour, this is the response that will be manifested (Bargh & Ferguson, 2000; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). For example, using words such as win and succeed to prime positive achievement goals or goals to perform well, led participants to perform significantly better on a word-search puzzle task than participants who were primed with neutral words such as ranch and carpet. Very importantly, this effect occurred without conscious guidance since participants were not able to report any connexion between the priming task and the subsequent performance task. In another experiment, Bargh and collaborators (2001) primed the goal to cooperate and were able to produce more cooperative behaviour in participants during a resource dilemma task (e.g., participants returned more fish to the pond). In addition, they were able to show that the nonconsciously activated goal to perform well resulted in a greater tendency to persist in pursuing the goal even after an accidental interruption of the goal pursuit (Bargh et al., 2001). Persistence on the task and resuming goal pursuit after an interruption are classic measure of adaptive goal pursuit. With this series of studies, Bargh and collaborators showed that goals, whether they are consciously or nonconsciously triggered, share many of the same properties.

Pursuing a certain goal and being actively engaged in that pursuit will lead to automatic activations of positive attitudes toward that goal or its relevant behavioural and emotional aspects (Ferguson & Bargh, 2004). For example, participants who were actively engaged in the pursuit of an achievement goal automatically judged words like "win" and other elements relevant to the task to be performed more positively than people in the control condition who were not pursuing an achievement goal. Similarly, other recent research (Lakin & Chartrand, 2003) demonstrated that mimicking someone's behaviour during an interaction is a natural response when people have a desire or a goal to affiliate. When individuals are consciously given the goal to affiliate with a partner during an experiment by being told that it is important to cooperate with the person and get along well, they are more likely to mimic the behaviours of their partner. However, the same effects can be reproduced by activating the goal to affiliate nonconsciously through priming words such as affiliate, friend, and together during an apparently unrelated task (Lakin & Chartrand, 2003). In addition, participants primed with the affiliation goal and who used more mimicry as a result also felt better about that partner interaction and reported that it went more smoothly than participants who were not primed.

Up to this point in the history of the study of nonconscious or automatic motivational processes, the kinds of motivation and goals that were studied most were related to goals such as achievement or affiliation. Levesque and Pelletier (2003) examined nonconscious motivational processes that were more general, abstract, and complex in representations. The kinds of motivation they examined were derived from self-determination theory (Deci & Ryan, 1985, 2000) and were associated with intrinsic and extrinsic motivations.

Self-Determination Theory

Self-determination theory (Deci & Ryan, 1985, 2002) examines motivation from a humanistic organismic perspective. According to SDT, there exist various forms of motivation that can be aligned on a continuum of self-determination, or greater choice and self-endorsement of the behaviour. Amotivation represents the absence of self-determination. When amotivated, individuals disengage from the activity and eventually stop doing it. Next on the continuum is extrinsic motivation. This form of motivation is regulated by external pressures and incentives. When extrinsically motivated, individuals perform a behaviour to obtain a reward or avoid a negative outcome. Extrinsic motivation is a means to an end. When the external pressures regulating the behaviour become internalised into the self, then we say that the behaviour is regulated through introjections, or regulated through guilt and ego-evolvement. Identification is the first form of self-determined motivation. When the behaviour is identified, it is performed because it is valuable and important to the individual. Integration is another form of self-determined motivation that emerges when the behaviour performed is integrated with other aspects of the self. Finally, the prototype of self-determination and the highest in self-determination is intrinsic motivation. When intrinsically motivated, individuals engage in the activity performed just for the pleasure and satisfaction derived while performing the activity.

Over 35 years of research based on self-determination theory has demonstrated that the different forms of motivation are differ-

ently related to performance, creativity, well-being, and behavioural, physical and psychological outcomes including mental health (Deci & Ryan, 2000; Ratelle, Vallerand, Chantal, & Provencher, 2004; Ryan & Deci, 2000) and that autonomy has a central place in human behaviour (Ryan & Deci, 2006). Self-determined forms of motivation (intrinsic motivation, integration, and identification) have been positively associated with long-term maintenance of weight loss (Williams, Grow, Freedman, Ryan, & Deci, 1996), prolonged abstinence from smoking behaviours (Williams et al., 2006), higher quality learning (Grolnick & Ryan, 1987), and generally higher levels of well-being (Ryan & Deci, 2000, 2001). In contrast, non self-determined forms of motivation (amotivation, external regulation, and introjection) have been positively associated with increased anxiety in schoolchildren (Ryan & Connell, 1989) and negative health and well-being outcomes (Deci & Ryan, 2000).

Motivation and Nonconscious Processes: Self-Determination Theory

In the motivation literature, the distinction between intrinsic and extrinsic motivation (external regulation) is extensively studied and well understood. Intrinsic and extrinsic motivations are believed to be conscious self-regulatory processes. Even though self-determination theory applies a finer distinction between the different types of motivation, the implicit assumption in all the writings discussing the theory and the different forms of motivation is that motivation is consciously self-regulated (Deci & Ryan, 2000). Levesque and Pelletier (2003) began to examine the existence of nonconscious processes underlying intrinsic and extrinsic motivations. At first, this examination may seem puzzling to self-determination theory researchers because self-determination is associated with freedom and will, concepts that seemed opposed to nonconscious activation. Based on prior research on the automaticity of social behaviours, we argued that intrinsic motivation could be automatically triggered like other goals or motivation had been shown to be. We hypothesised that as individuals are repeatedly exposed to situations where they feel autonomous and self-determined, they come to automatically associate various situations with feelings of autonomy. Over time, various situations would automatically trigger the activation of an intrinsic or extrinsic motivation depending on the type of motivation that would have been developed over time in various situations.

To explore the automaticity of these forms of motivation, Levesque and Pelletier (2003) primed individuals with intrinsic or extrinsic motivation using the Scramble Sentence Test (Srull & Wyer, 1979). The intrinsic motivation priming words included choice, autonomy, interest, and freedom. The words used to prime extrinsic motivation included pressure, obligated, constrained, and forced. In a second, ostensibly unrelated task, individuals were asked to solve puzzles. After being primed with the extrinsic motivation words, individuals found the puzzle task less interesting and spent less time working on the task during a free-choice period compared to individuals who had been primed with the intrinsic motivation words. Furthermore, these effects occurred without any awareness or knowledge of the connexion between the priming task and the puzzle task or that motivation had been primed. The motivation was activated outside of peoples' consciousness, and the behavioural effects were obtained without

individuals' conscious control or regulation of the motivation being activated.

Using a similar priming procedure, Hodgins, Yacko, and Gottlieb (2006) showed that participants primed with autonomy demonstrated less desire to escape the assigned task (Study 1) and less self-serving bias (Study 2) than control and impersonally primed participants. Similar findings were reported by Burton et al. (2006) who were able to prime intrinsic self-regulation that then led to greater psychological well-being 10 days later.

It is important to understand that consciousness is still important in the development of intrinsic and extrinsic motivational orientations although priming of these motivations was achieved automatically without individuals' intention or conscious control. For the priming to work, individuals already had to possess mental representations of motivational states relevant to intrinsic and extrinsic motivations. From there, the motivations were able to be automatically activated by relevant environmental stimuli.

Ratelle et al. (2005) went a step further than the Levesque and Pelletier (2003) study and demonstrated that cued activation of controlled feelings led to a decrease in levels of intrinsic motivation for a subsequent task. In this series of studies, an originally neutral tone was repeatedly paired with controlling feedback. When the conditioned tone was then presented while participants worked on a subsequent task, it led participants to feel less intrinsically motivated toward the subsequent task compared to a control group not exposed to the conditioned tone. These findings are important as they suggest that the motivational processes can be nonconsciouly activated and operate outside of consciousness to affect perceptions and behaviours in a manner consistent with previous self-determination theory research. A cue linked to an experimental task that was manipulated to be controlling acquired controlling properties. In turn when this newly conditioned cue was presented with a new task, it significantly affected perceptions of and behaviours toward that task. These results are provocative and lead us to wonder whether other processes related to Self Determination Theory, such as introjection, ego-involvement, and conditional regard could also be nonconsciously activated and guided.

As Ryan and Deci (2006) pointed out, and as we reviewed above, there is growing evidence that behaviours and perceptions can be caused by unconscious triggers. Such evidence challenges one to think about whether all behaviours and forms of regulation can be nonconsciously determined. We would argue that autonomous and controlled forms of motivation can both be activated nonconsciously because individuals possess mental representations of motivational states relevant to intrinsic and extrinsic motivations. It is important, however, to not equate autonomous regulation to implicit motivation or controlled regulation to explicit motivation. Although semantically related, the terms are not synonymous as they come from two different traditions: motivational versus cognitive. Self-determined types of motivation can be primed and be nonconsciously activated. As an illustration of how this might work, let's consider habits. Habits, such as exercising, formed through repetitions have many automatic features and are in many instances adaptive. At first, the behaviour is effortful, requiring conscious control and cognitive capacity. However, through repetition, the behaviour becomes second nature or habitual and the initiation of the first few steps of the behavioural sequence is enough to automatically allow the entire behaviour to

run to completion. When exercising is automatic, people are likely to say that for them exercising is part of their life, that it is integrated with their life. Although automatized, this behaviour is positive and can be experienced as self-determined by the individual. That is, if the individual were to reflect on the act of exercising, he or she would genuinely endorse that action and experience it as self-determined. So this automatized behaviour can be self-determined because self-determined does not mean controlled by the person, it means endorsed by the self.

A humanistic theory of motivation such as self-determination theory can integrate evidence of automatic processes related to motivation. It could actually prove useful in explaining how controlling and autonomy supportive contexts can have such a powerful influence on individuals' level of motivation, a robust finding that has been substantiated by years of previous research related to self-determination theory. Individuals don't necessarily need to understand why or how controlling environments affect their level of self-determination for the effects to nonetheless occur, they simply need to have been exposed to them in the past and felt their effects. The same could be said regarding the effects of autonomy supportive environments. The findings on the existence of nonconscious motivational processes (e.g., Levesque & Pelletier, 2003; Ratelle et al., 2005) only show that these effects can occur even when people are not aware.

Although we argue that most people are susceptible to priming and nonconscious activation of motivation, as we will see in the following section, some factors under certain circumstances moderate the impact of nonconscious processes. Emerging evidence suggest that more mindful or aware individuals are less susceptible to nonconscious processes.

The Role of Mindfulness

Although research has shown that a variety of goals and motivations can be activated nonconsciously, there is still a very important role for consciousness in motivation. That is, the demonstration that goals and motivation can be regulated nonconsciously does not negate the importance of conscious processes in the development of motivational orientations or in the modulation of motivational processes. Conscious processes are essential to modulate the expression of a nonconscious or automatic process. Importantly, this function is highly desirable especially when the nonconscious process is negative or detrimental to growth or well-being. One attribute of consciousness that is often discussed in relation to well-being is mindfulness. Mindfulness is usually defined as attentiveness to and awareness of what is presently taking place. It is the open and receptive attention to and awareness of ongoing events and experiences (Brown & Ryan, 2003). Mindfulness is understood and measured as an increase in the frequency of occurrences of mindful states over time. Mindfulness shares many similarities with constructs such as attention, awareness, consciousness, self-awareness, openness to experience, and even emotional intelligence (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). As such, mindfulness could be very important in helping people disengage from unhealthy habits and thought patterns and could thus play a role in self-determined behavioural regulation that has been associated with well-being (Ryan & Deci, 2000). Other forms of consciousness have also been shown to override

unwanted responses that then led to higher levels of well-being (Baumeister, Heatherton, & Tice, 1994).

Levesque and Brown (2007) conducted a series of studies that demonstrated that mindfulness moderates the effect of implicit motivation on day-to-day motivation. In these studies, implicit motivation was measured using the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998), and the association between self and motivational states was also assessed. The IAT task was constructed using words similar to those that primed intrinsic and extrinsic motivation in Levesque and Pelletier (2003). Individuals categorized words related to intrinsic/extrinsic motivation and words related to self/other. The main dependent variable was self-reported level of daily motivation experienced by participants and measured with an experience-sampling technique. Implicit motivation predicted daily level of motivation only when mindfulness was low. When mindfulness was high, implicit level of motivation did not affect daily levels of motivation. For people high in dispositional mindfulness, conscious processes tended to guide their daily motivational experience. The adaptive value of mindfulness in this case is more readily noticeable when the implicit motivation is extrinsic. Individuals with a nonconsciously activated (implicit) extrinsic motivational orientation but with a high level of dispositional mindfulness would be able to counteract the effect of the nonconscious motivation on their daily life. These individuals could still feel self-determined on a day-to-day basis by applying conscious regulatory energy to their daily activities. This would however be an effortful process to maintain and would require a lot of conscious energy and resources. Individuals with a nonconsciously activated extrinsic motivation but without the advantage of high levels of dispositional mindfulness would not be able to modulate the effect of the nonconscious motivation on their daily life and would feel non-self-determined on a day-to-day basis. Over time, this would lead to increased levels of depression and anxiety. However, even in the absence of a high level of dispositional mindfulness, individuals could still feel self-determined on a day-to-day basis if they benefited from a nonconsciously activated (implicit) intrinsic motivational orientation. They might not be conscious of why they are feeling self-determined but they would enjoy the positive outcomes nonetheless. The expression of an implicit intrinsic motivational orientation in daily life would require less effort than the conscious expression of the same level of motivation, thus saving energy and resources to engage in new behaviours.

In addition to the modulating role of consciousness, consciousness appears essential in the development of a new behavioural tendency or a new motivational orientation. When faced with a new situation, all of its elements need to be taken into consideration and analysed. Take the example of a child's first day of school as a prime time for developing academic motivation. Does the situation feel autonomy-supportive or controlling? Is the teacher warm and caring or harsh and cold? Are choices and rationale provided in the situation or are all the decisions already made for the student? The nature of this early educational experience will determine how the student reacts to it, how the student perceives him or herself in this situation, and the kind of motivational orientation toward school that will develop. This early experience will be analysed and consciously processed by the child. Over time, if the same situation is encountered repeatedly at school, the student will not need to consciously process the situ-

ation. The student will automatically associate school with a kind of environment: either autonomy supportive or controlling. This will then become the student's automatic nonconscious way to approach new "school" experiences, effortlessly, without the intervention of conscious choice or guidance. The student's conscious and nonconscious processes would then be aligned with each other.

This assumption was empirically tested for affective responses. Individuals with higher levels of dispositional mindfulness showed more concordance between explicit and implicit affect than individuals with lower levels of mindfulness. That is, the relationship between explicit and implicit emotional states was stronger for individuals who were more frequently exercising mindfulness, suggesting that high levels of mindfulness are associated with less discrepancy between implicit and explicit processes (Brown & Ryan, 2003).

Future Research on Conscious and Nonconscious Motivational Processes

It is clear that recent research has provided empirical evidence for the automaticity of higher order processes such as goals and motivations. Our own work in this area as it relates to self-determination theory and the work of others with similar interests has strengthened our belief that the motivational processes proposed by SDT, such as intrinsic and extrinsic motivation and the power of a controlling context on perceptions and behaviours, can be automatically activated and guided. However, we also strongly feel that conscious processes are essential to our daily experiences. Motivational processes and other higher order processes are certainly not always automatic or nonconscious. On the other hand, automatic processes are not always maladaptive; they are often adaptive. Therefore, although conscious control of automatic processes is often desirable or psychologically appealing, it is not always necessary when the automatic process is adaptive. In these cases, we might be motivated to leave well enough alone. However, when automatic processes are maladaptive, or learning a new behaviour is required, then exercise of conscious control would seem necessary. However, conscious control of automatic processes, although possible, is not always easy to achieve. Conscious control is intentional and self-regulated thus requiring a large amount of cognitive resources. Our conscious cognitive abilities are limited resources thus making it difficult to control and regulate automatic processes especially in the face of competing demands on cognitive resources. Future research addressing the role and the importance of nonconscious processes will also have to address the questions of the role and importance of consciousness. In the present paper, we have attempted to highlight research on the importance of both conscious and nonconscious processes and to show that this research is applicable to the principles, processes, and motivational regulations proposed by self-determination theory, a humanistic theory.

Applied research on the utility of automatic processes in relation to self-determination theory is needed. Instead of asking whether motivations can be automatically activated, future research needs to explore in greater depth the kinds of motivational processes that would function nonconsciously, which ones could be automatically activated and in which circumstances, as well as the usefulness of nonconscious motivations in daily life once automatically activated. As we argued earlier, we believe that autonomous and controlled forms of regulation can be automatically activated. For example, we could examine the effect of motivational priming in schools, organisations, and health settings. Would exposing elementary schoolchildren to intrinsic motivation words activate the goals to persevere, perform well, and be more creative in schools? Would similar primes in the workplace automatically activate a sense of value for the organisation, greater loyalty, and higher levels of performance? What about the effects of extrinsic motivation or controlling primes in the same or diverse environments? Based on the empirical evidences reviewed in the present paper, this seems to be a straightforward hypothesis. As discussed previously, it is important to understand that the primes would not be manipulating a motivational process that did not exist to begin with. Autonomous and controlled primes in school settings would activate the goals to do well and perform creatively as long as the cognitive structures associated with intrinsic motivation and self-determination would be present in children's mental representations. As the findings of Levesque and Pelletier (2003), Hodgins et al. (2006), and Burton et al. (2006) suggest, autonomous and controlled forms of regulation can be automatically activated and affect subsequent perceptions and behaviours. It would be important to examine whether the other forms of motivational regulation proposed by self-determination theory can also be automatically activated. We suspect that they could. In addition, Ratelle et al., (2005) demonstrated that the process by which controlling environments can affect subsequent perceptions, motivation, and behaviour can also be primed. What other motivational processes proposed by self-determination theory can be primed and automatically activated? What does it mean for self-determination theory and other humanistic theories?

Considering the uniqueness of the exploration of automatic motivational processes related to self-determination theory, it is hard to imagine exactly where the field will go. What is certain is that more research is needed to uncover the nature of these automatic motivational processes, their ontogenesis, and their applications. Importantly, keeping an open-mind toward the integration of self-determination theory concepts with the automaticity literature would be essential.

Résumé

Selon le modèle de Bargh (Bargh, 1990, 1997a, 1997b; Bargh et Chartrand, 1999), les processus de motivation automatiques entrent fréquemment en jeu lorsque font surface des indices et des contextes environnementaux qui sont semblables à ceux du passé. Par exemple, il a été mis en relief que les sentiments d'accomplissement et d'appartenance sont au premier rang et affectent le comportement et les perceptions de façon comparable à l'activation consciente (p. ex., Lakin et Chartrand, 2003). De nouvelles données suggèrent que les processus motivationnels liés à la théorie de l'autodétermination (Deci et Ryan, 2000), comme la motivation intrinsèque et extrinsèque, peuvent être suscités de façon non consciente, et ainsi influencer les perceptions et les comportements (p. ex., Burton, Lydon, D'Alessandro et Koestner, 2006; Lévesque et Pelletier, 2003; Ratelle, Baldwin, et Vallerand, 2005). Ces incidences non conscientes correspondent à celles qui sont conscientes dans les processus motivationnels. De telles constatations peuvent inciter les chercheurs qui se penchent sur la

théorie de l'autodétermination et sur d'autres théories humanistes à établir si tous le scomportements et types de régulation peuvent être déterminés de façon non consciente. Dans le présent article, nous indiquons que les processus non conscients automatiques ne sont pas toujours attribuables à une mauvaise adaptation, et que les expressions de motivation autonome (autodéterminées) et contrôlées peuventêtre activées de façon automatique et non consciente. Toutefois, nous affirmons aussi que les processus conscients sont essentiels aux expériences quotidiennes et s'avèrent nécessaires pour moduler la manifestation et l'expression des processus non conscients qui sont négatifs ou nuisibles à la croissance ou au bien-être.

Mots-clés : théorie de l'autodétermination, processus conscients et inconscients, motivation humaine

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