# Goal Motives, Well-Being, and Physical Health: An Integrative Model

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The present paper proposes an integrative model on the motivational determinants and health consequences of two forms of well-being (i.e., happiness and self-realization). This model posits that pursuing autonomous goals enhances both happiness and self-realization, whereas pursuing controlled goals thwarts these two same forms of well-being. The model further posits that self-realization, but not happiness, promotes physical health via the practise of more vigilant and less avoidant coping strategies, that lead to reduced stress. Empirical support for the model is reviewed and the model is discussed in terms of its theoretical and research implications.

Keywords: goal motives, happiness, self-realization, stress, physical symptoms

In recent years, an increasing amount of attention has been devoted to understanding the role of psychological factors in physical health. For instance, a notable amount of research has examined how optimal psychological functioning and experience (or well-being; Ryan & Deci, 2001) can contribute to physical health (e.g., Dua, 1994; Lindfors & Lundberg, 2002; Pettit, Kline, Gencoz, Gencoz, & Joiner, 2001; Roysamb, Tambs, Reichborn-Kjennerud, Neale, & Harris, 2003). Building on this prior work, the present paper deals with a recently raised issue as to how two different forms of well-being, namely happiness and selfrealization, relate to physical health (Ryff, Singer, & Love, 2004). However, unlike much previous work that has examined the link between negative aspects of psychological functioning and physical illness, it emphasises the beneficial effects of a particular positive mental health state (i.e., well-being) on physical health. Accordingly, it subscribes to the positive psychology approach (Seligman & Csikszentmihalyi, 2000), which encompasses an approach to psychology from the perspective of healthy life functioning.

With regards to a concept that is central to positive psychology and that has been extensively researched (i.e., self-determined motivation; Deci & Ryan, 1985, 2000), this paper presents a brief review of past research leading to an integrative model on the motivational determinants of happiness and self-realization, as well as on their consequences with respect to physical health. Specifically, we summarise the concepts of happiness and self-realization and then briefly review research on: (a) the influence of one's motivation for pursuing personal goals on these two forms of well-being, (b) the influence of happiness and self-realization on

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physical health outcomes, and (c) the role of specific psychological processes, namely stress and coping, as mediators in the relationship between well-being (i.e., self-realization and happiness) and physical health. Finally, we present empirical evidence to support the proposed integrative model and conclude with observations about the general pattern of findings and the future research needed to advance the understanding of the processes whereby well-being may promote good physical health.

# Toward an Integrative Model of Goal Motives, Well-Being, and Physical Health

In Figure 1, we propose an integrative model that ties the two types of well-being (i.e., happiness and self-realization) to specific motivational determinants, mediating psychological processes, and health outcomes. In a nutshell, this model proposes that: (a) pursuing goals for autonomous motives facilitates both happiness and self-realization, whereas pursuing goals for controlled motives thwarts these two same forms of well-being, (b) self-realization promotes vigilant coping and decreases avoidant coping strategies whilst happiness does not influence these two forms of coping, (c) vigilant and avoidant coping strategies respectively decrease and increase stress, and (d) stress undermines physical health. The following sections present empirical support for this model.

#### Happiness and Self-Realization

The present paper distinguishes between the hedonic and eudaimonic approaches to well-being, with the former focusing on the outcome of happiness and the latter focusing not so much on outcomes as on the process of self-realization itself (i.e., the

<sup>&</sup>lt;sup>1</sup> Throughout this paper, research that has examined the relationship between various variables and physical health will be presented with disregard to physical health's type of indicators (self-report or objective measures) because the findings involving these variables and physical health are similar whether one measures subjective or objective health outcomes. The term "physical health" will thus be used to refer to both objective and self-reported physical health indicators.

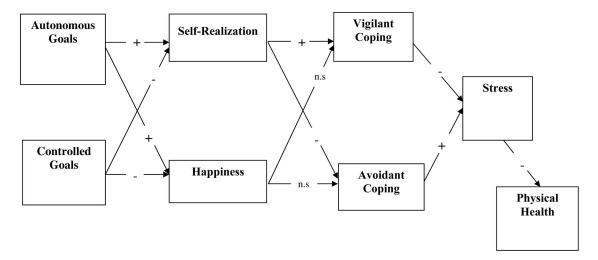


Figure 1. An integrative model of the relationship between autonomous and controlled goals, happiness, self-realization, vigilant and avoidant coping, stress, and physical health. The expression "n.s." is used to specify a non-significant relationship between two variables.

realization of valued human potentials) (Ryan, Huta, & Deci, 2006).

The hedonic approach defines well-being as the seeking of happiness or pleasure (Ryan & Deci, 2001). Positive affect (PA) is considered as a central component of happiness (Kahneman, Diener, & Schwarz, 1999). It reflects pleasurable engagement with the environment and includes the degree to which one feels enthusiastic, alert, and active (Watson, Clark, & Carey, 1988). In the past, several researchers have used PA to operationalize happiness (e.g., Nix, Ryan, Manly, & Deci, 1999; Ryff et al., 2004; Steptoe, Wardle, & Marmot, 2005).

The eudaimonic approach defines well-being as living a complete human life through seeking the realization of valued human potentials (Ryan & Deci, 2001). Thus, eudaimonic conceptions focus on the content of one's life and the processes involved in living well. To date, assessments of self-realization have been multiple but several researchers have used Ryff's Psychological Well-Being framework (PWB; Ryff, 1989; Ryff & Keyes, 1995) to operationalize it (e.g., Keyes, Shmotkin, & Ryff, 2002; Lindfors & Lundberg, 2002). In her PWB scale, Ryff identifies six psychological dimensions of self-realization. Each dimension articulates different challenges individuals encounter as they strive to function positively. These are: self-acceptance (seeing and accepting one's strengths and weaknesses); purpose in life (having objectives that give life meaning and direction); personal growth (feeling that personal talents and potential are being realised); positive relations with others (having close, valued connexions with significant others); environmental mastery (managing the demands of everyday life); and autonomy (following personal convictions, even if they go against conventional wisdom).

#### Goal Motives and Well-Being

As will be demonstrated in the later sections in this paper, happiness and self-realization have been found to be differently associated with physical health. Thus, it appears important to look at the determinants of these two forms of well-being so as to find

out which factor can trigger the well-being-physical health sequence. With respect to this issue and based on the theory of the basic psychological needs (i.e., autonomy, competence, and relatedness) that are the foundations of well-being (Deci & Ryan, 2000), self-determination theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2000) posits that both the content of a goal one pursues and the reasons why it is pursued can influence his or her wellbeing. Although numerous studies have demonstrated the existence of systematic relations between intrinsic and extrinsic goal contents and well-being outcomes (e.g., Kasser & Ryan, 1993, 1996), the present paper specifically focuses on the reasons or motives associated with the goals one pursues and their links with happiness and self-realization. Regarding these reasons or motives, SDT posits that goals can either be pursued out of autonomous (i.e., strong interest or self-identified personal convictions) or controlled (i.e., internal or external pressures, such as guilt or rewards, respectively) motives. According to SDT, the pursuit of autonomous goals will enhance well-being as these goals are aligned with one's true self, interests, and values, and therefore satisfy the basic psychological needs. Conversely, the pursuit of controlled goals will thwart well-being because these goals do not accurately reflect the interests and values of one's deeper self, and are thus unlikely to satisfy the basic psychological needs.

Numerous researchers have conducted studies examining the motives associated with the goals one pursues and their relation with either happiness (e.g., Sheldon & Elliot, 1999; Koestner, Lekes, Powers, & Chicoine, 2002; Sheldon & Kasser, 1998) or self-realization (e.g., Sheldon, Kasser, Smith, & Share, 2002). Because all of these studies have assessed goal motives with a relative autonomy score (i.e., subtracting the sum of intrinsic and identified reasons-defined as strong interest and personal convictions, respectively-for pursuing goals from the sum of the introjected and external reasons—defined as internal and external pressures, respectively-for pursuing these goals), they do not directly provide empirical evidence on the distinctive relationship between pursuing goals for autonomous and controlled motives

and happiness or self-realization. However, Sheldon, Ryan, Deci, and Kasser (2004) have recently demonstrated in three studies that pursuing goals for autonomous motives was consistently positively associated with happiness (measured by PA and life satisfaction) whereas pursuing goals for controlled motives was negatively, albeit not always significantly, associated with happiness (i.e., controlled goals were unrelated to happiness in Study 1 whereas they were negatively related to PA in Studies 2 and 3). Likewise, Carver and Baird (1998) have demonstrated that pursuing goals for autonomous motives was positively related to self-realization (measured by self-actualization), whereas pursuing goals for controlled motives was negatively related to this same outcome.

In summary, prior SDT research work on goal pursuit demonstrates that pursuing goals for autonomous motives facilitates happiness and self-realization, whereas pursuing goals for controlled motives tends to undermine these same forms of well-being.

### Well-Being and Physical Health

Prior research reveals that happiness (measured by PA) is positively related to physical health, whereas it is negatively associated with illness or physical symptoms (e.g., Dua, 1994; Pettit et al., 2001; Roysamb et al., 2003). Similarly, some researchers have demonstrated that self-realization (measured by the PWB scale) was positively linked with physical health and negatively associated with a variety of physical symptoms (e.g., Lindfors & Lundberg, 2002). Past research thus shows that both happiness and self-realization are positively associated with good physical health, but negatively associated with poor physical health. However, such work has not examined the relative impact of happiness and self-realization on physical health. In line with Ryff and her colleagues (2004), it is proposed that self-realization should lead to greater health benefits than happiness because it calls upon a more active and striving organism in the face of existential life challenges. As such, self-realization may prompt greater biological activation of the organism than states of happiness or contentment. This later assumption is actually supported by the results of an investigation undertaken by Ryff et al. (2004). When examining the relationships between both types of well-being (i.e., happiness and self-realization) and physical health, these authors found numerous significant positive associations between self-realization (measured by the PWB scale) and various physical health outcomes (as measured by diverse biomarkers). However, they found that happiness (measured by PA) was only positively related to one of these health outcomes. Thus, possessing high levels of selfrealization would appear to be more conducive to physical health than high levels of happiness.

# Intervening Psychological Processes Between Well-Being and Physical Health

In our view, looking at the potential psychological processes involved in the relationship between well-being and physical health could provide a better understanding of why happiness and self-realization differently influence physical health. With respect to these psychological processes, Ryff et al. (2004) have proposed that it would be important to look at whether possessing a high level of self-realization in front of adversity or under stressful

conditions is consequential for health. Building on this concern, we propose that the differential impact of happiness and self-realization on physical health could stem from their respective influence on the inner psychological resources or strengths involved when one is facing challenges or stressful situations. We suggest that self-realization is more likely to protect physical health because it entails an active and striving organism in the face of challenge and as such, it also enables individuals to react more adaptively under stress. Conversely, we propose that happiness is less likely to protect physical health because it does not foster action and striving under challenge at the outset and therefore, it is less prone to reduce stress. The next few paragraphs briefly attempt to support these assumptions.

Well-being, stress, and physical health. Prior research (e.g., Lindfors & Lundberg, 2002; Smyth et al., 1998; Taylor, Lerner, Sherman, Sage, & McDowell, 2003) has demonstrated that both happiness and self-realization were negatively associated with stress. However, as far as we know, only one research has looked at the comparative impact of happiness and self-realization on stress. Indeed, Ryff et al. (2004) have also demonstrated that self-realization was associated with lower levels of daily stress (measured by various stress hormones, including salivary cortisol), whereas happiness was unrelated to it. These last results suggest that having a sense of self-realization constitutes a greater inner psychological strength for guarding against stressful events than merely being happy. Finally, much research supports the existence of a link between stress and physical symptoms or health problems. For instance, researchers (e.g., Cohen et al., 1998; DeLongis, Folkman, & Lazarus, 1988; Stone et al., 1992) have found a positive relationship between stress and the occurrence of subsequent physical symptoms such as flu, sore throat, headaches, and backaches.

Well-being, coping, stress, and physical health. According to us, the differential impact of happiness and self-realization on stress could be explained by their respective influence on the coping strategies (i.e., the efforts that people employ to master, tolerate, reduce, or minimise stressful events; Taylor, 1998) used to deal with stressful events. More specifically, we suppose that self-realization, which entails an active and striving organism in the face of challenge, reduces stress because it sets in motion a more adaptive coping pattern under stressful conditions. Alternatively, we suppose that happiness does not supply individuals with such an adaptive coping pattern as it entails a more passive approach under stress.

To date, empirical evidence supports the link between both forms of well-being (i.e., happiness and self-realization) and adaptive or maladaptive coping strategies. For instance, prior research (e.g., Kling, Seltzer, & Ryff, 1997; Park & Adler, 2003) has demonstrated that both happiness and self-realization were positively associated with vigilant coping (a more proactive and adaptive way to deal with stressful events) whereas they were negatively associated with avoidant coping (a less adaptive way to deal with stressful events). However, no research has yet looked at the relative impact of happiness and self-realization on coping strategies and therefore, whether happiness and self-realization will have the same impact on vigilant and avoidant coping when their influence is simultaneously compared is still not known. Nevertheless, some researchers have found that vigilant coping strategies were positively associated with less stress (e.g., shorter duration and a better resolution of the stressors) whereas avoidant coping strategies led to the opposite consequences (e.g., Brissette, Scheier, & Carver, 2002; Harnish, Aseltine, & Gore, 2000).

### Empirical Support for the Model

Miquelon and Vallerand (2006) have conducted three studies aimed at supporting the integrative model presented in Figure 1. The purpose in Study 1 was to first examine if happiness and self-realization have a distinctive relationship with physical health and whether they are differently predicted by autonomous and controlled goal motives as proposed by the model. Then, Studies 2 and 3 sought to replicate the findings of Study 1 and improve upon them by using a prospective design and examining if coping strategies and stress serve as a mediators between well-being (i.e., happiness and self-realization) and physical symptoms during a challenging or stressful time for students (i.e., the end of the semester). These studies are presented below.

#### On Goals, Well-Being, and Health Outcomes: Study 1

Study 1 hypothesised that pursuing goals for autonomous motives would be positively associated with both happiness and self-realization (whereas the opposite relationships would take place between pursuing goals for controlled motives and both types of well-being). It also hypothesised that when happiness and self-realization were compared simultaneously within the same model (controlling for their common variance), the existing relationship between well-being and physical health would essentially take place through self-realization.

A large number of undergraduate students (N=308) completed a questionnaire in which they were first asked to list three personal goals (Little, 1993) they would be pursuing during their semester. This questionnaire also measured goal motives (e.g., Sheldon & Elliot, 1999), happiness (PANAS; Watson, Clark, & Tellegen, 1988), self-realization<sup>2</sup> (PWB scale; Ryff, 1989; Ryff & Keyes, 1995), and physical symptoms (Knäuper, Rabiau, Cohen, & Patriciu, 2004). For each participant, an *autonomous goals* variable was computed by adding the intrinsic and identified items for pursuing the three goals. Likewise, a *controlled goals* variable was computed by adding the external and introjected reasons for pursuing the three goals.<sup>3</sup> As shown in Figure 2, with the exception of the estimated negative relationship between controlled goals and happiness, results of a path analysis supported the hypotheses.

# On the Mediating Role of Stress Between Well-Being and Health Outcomes: Study 2

Study 2 focused on five important issues that were not addressed in Study 1. The first issue was to better understand why self-realization (but not happiness) was found to be negatively linked with physical symptoms. This was done by examining if stress served as a mediator between well-being (i.e., happiness and self-realization) and physical symptoms. A second objective was to use a two-wave prospective design in which the influence of physical symptoms at Time 1 (T1) would be controlled for so as to examine if well-being predicts *changes* in physical symptoms that take place over time. A third objective was to standardize goal content by means of assessing goal motives with respect to only

academic goals (consequently, the stress measure was also adapted to the academic context). A fourth objective was to improve the measurement of physical health by adding a self-rated health measure (e.g., Krause & Jay, 1994), in addition to a physical symptoms index. Finally, a last objective was to examine the role of neuroticism as a potential confounding variable in the present model.

In line with the results of Study 1 and of prior research on happiness and self-realization and stress (Ryff et al., 2004) as well as on stress and physical symptoms (e.g., Cohen et al., 1998; Stone et al., 1992), Study 2 hypothesised that: (a) pursuing autonomous academic goals would be positively associated with both happiness and self-realization, whereas pursuing controlled academic goals would be negatively related to self-realization (but unrelated to happiness); (b) self-realization, but not happiness, would be negatively associated with academic stress, which, in turn; (c) would be positively associated to Time 2 (T2) physical symptoms; and (d) negatively related to T2 self-rated health. Happiness was expected to be unrelated to academic stress.

A total of 158 undergraduate students completed the same scales that were used in Study 1. Autonomous and controlled academic goals, happiness, self-realization, and neuroticism (Gosling, Rentfrow, & Swann, 2003) were measured at T1. Physical symptoms and self-rated health (sole item; Krause & Jay, 1994) were assessed at T1 and T2. Finally, academic stress (adapted version of the Perceived Stress Scale; Cohen, Kamarck, & Mermelstein, 1983) was solely assessed at T2 (3 months after T1, toward the end of the semester- a stressful period for students). Results of a path analysis replicated and expanded those of Study 1. Of importance is that self-realization negatively predicted academic stress, which, in turn, positively predicted physical symptoms and negatively predicted self-rated health, even after controlling for neuroticism, T1 self-reported physical symptoms, and T1 self-rated health. In contrast, happiness was not related to academic stress. These results suggested that the negative relationship earlier found between self-realization and physical symptoms could be partly explained via reduced academic stress.

## On the Protective Role of Coping in the Well-Being, Stress, and Health Outcomes Sequence: Study 3

The purpose of Study 3 was to further understand why selfrealization and happiness were found to be differentially related to

<sup>&</sup>lt;sup>2</sup> In the three studies undertaken by Miquelon and Vallerand (2006), only the short version of the self-acceptance, purpose in life, and personal growth subscales of the PWB were used. This is because other PWB dimensions (i.e., autonomy, mastery, and relatedness) are closely related to the three basic psychological needs fostering self-determined motivation (i.e., autonomy, competence, and relatedness; Ryan & Deci, 2000). As such, Miquelon and Vallerand (2006) felt it was important not to confound them with the basic psychological needs. Moreover, Keyes et al. (2002) have demonstrated that it was the existential aspects of the PWB scale (i.e., purpose in life and personal growth) that most cleanly separated self-realization from the affective assessments of happiness.

<sup>&</sup>lt;sup>3</sup> This procedure had been used in prior work on goal motives (e.g., Sheldon et al., 2004) and provided the advantage of assessing the independent role of pursuing goals for autonomous and controlled motives in well-being.

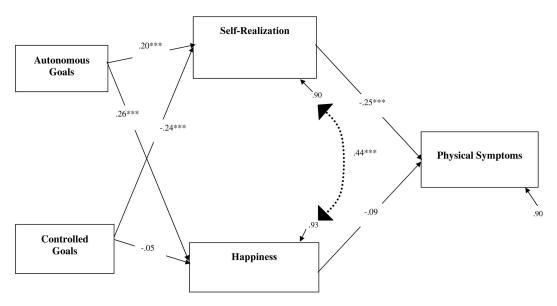


Figure 2. Miquelon and Vallerand's results from a cross-sectional path analysis: Study 1. \*p < .05. \*\*\* p < .01. \*\*\* p < .001. Reprinted with permission from "Goal motives, well-being, and physical health: Happiness and self-realization as psychological resources under challenge, by P. Miquelon and R. J. Vallerand, 2006, Motivation and Emotion, 30, 259–272. Copyright 2006 by Springer Netherlands.

stress. This was done by examining if coping could mediate the relationship between well-being (i.e., happiness and selfrealization) and academic stress found in Study 2. To be consistent with the academic contextual measures of goal pursuit and stress used in Study 2, coping strategies were also assessed with respect to the academic context. In line with the results found in Studies 1 and 2 and with the assumptions proposed earlier above within this paper, Study 3 hypothesised that: (a) pursuing autonomous academic goals would be positively associated with both happiness and self-realization, whereas pursuing controlled academic goals would be negatively related to self-realization (but unrelated to happiness); (b) self-realization would be respectively positively and negatively associated with vigilant and avoidant academic coping, whereas happiness would not be associated with these two forms of academic coping; (c) vigilant and avoidant academic coping would be negatively and positively related to academic stress, respectively; (d) academic stress would be positively associated with T2 physical symptoms, but negatively related to T2 self-rated health. As in Study 2, these hypotheses were tested whilst controlling for T1 physical health indicators (i.e., physical symptoms and self-rated health) and neuroticism.

There were 240 undergraduate students who completed the same scales that were used in Studies 1 and 2 in addition to an academic coping scale (adapted from the situational version of the COPE scale; Carver, Scheier, & Weintraub, 1989). Autonomous and controlled academic goals, happiness, self-realization, and neuroticism were measured at T1. Physical symptoms and self-rated health were assessed at T1 and 2. Finally, academic coping (vigilant and avoidant) and academic stress were only assessed at T2 (again, 3 months after T1, toward the end of the semester). Results of a path analysis replicated and expanded those of Studies 1 and 2 (see Figure 3).

Once again, of importance is that self-realization, but not happiness, was positively associated with vigilant academic coping, whereas it was negatively associated with avoidant academic coping. Both forms of coping were in turn negatively and positively associated with academic stress, respectively. Thus, as expected, results demonstrated that self-realization was a stronger predictor of both vigilant and avoidant coping than happiness.

Although Miquelon and Vallerand's findings<sup>4</sup> have some limitations (e.g., correlational design, self-report measures, undergraduate student sample), they provided strong support for the integrative model proposed within this paper.

### Theoretical Implications and Future Research Directions

The integrative model proposed within the present paper has theoretical implications for various areas of research. These are considered below.

<sup>&</sup>lt;sup>4</sup> In the three studies undertaken by Miquelon and Vallerand (2006), goal motives were examined as predictors of both happiness and self-realization. However, because happiness and self-realization are broader personality-level variables than goals, a plausible hypothesis could have been that happiness and self-realization predict goal motives. This hypothesis was tested by Miquelon and Vallerand with alternative path analysis models for each study. Within each of these models, they used self-realization and happiness as predictors of autonomous and controlled goals. The results revealed that these alternative models were not as adequate as the initial ones, which entails that goal pursuit better predicts well-being than well-being predicts goal pursuit. These analyses are available from the first author.

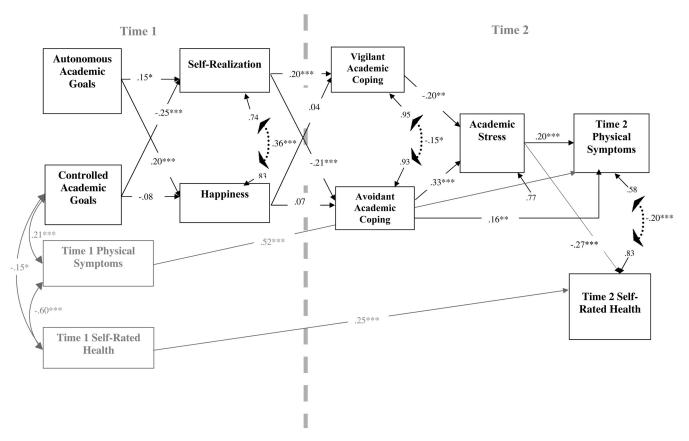


Figure 3. Miquelon and Vallerand's results from a longitudinal path analysis: Study 3. Grey lines are used to highlight variables and paths that are controlled for. p < .05. p < .05. p < .01. The property of this variable. Reprinted with permission from "Goal motives, well-being, and physical health: Happiness and self-realization as psychological resources under challenge," by P. Miquelon and R. J. Vallerand, 2006, Motivation and Emotion, 30, 259–272. Copyright 2006 by Springer Netherlands.

#### Happiness and Self-Realization

The proposed integrative model established a conceptual and empirical distinction between happiness and self-realization, with the latter focusing not so much on well-being's affective outcomes as on the process of self-realization itself. Nevertheless, Miguelon and Vallerand (2006) found the existence of an important overlap between happiness and self-realization (see Figures 2 and 3). Future research should thus investigate the nature of the relationship between these two forms of wellbeing. For instance, a number of researchers have proposed that self-realization is a sufficient (albeit not necessary because antecedents of pleasure can also include goals opposing to eudaimonic conceptions, such as living a life of superficial values) pathways to happiness (e.g., Baumeister, 1991; Wong & Fry, 1998). Stated differently, personal happiness is often contingent on committing oneself to a meaningful life (e.g., Ryff & Singer, 1998; Waterman, 1993). Alternatively, feeling good (happiness) might also help someone to engage in demanding growth-related activities and thus, to experience selfrealization, as suggested by some researchers (e.g., Keyes et al., 2002). Hence, research on the interplay between happiness and self-realization would appear in order.

#### Goal Motives and Well-Being

The integrative model proposed within this paper provides support for SDT's views to the effect that only the pursuit of autonomous goals will enhance well-being. The pursuit of controlled goals, however, will not enhance (and may even thwart) wellbeing because these goals do not accurately reflect the interest and values of one's deeper self (Deci & Ryan, 2000; Ryan & Deci, 2000). Of particular interest is that Miquelon and Vallerand (2006) found that pursuing goals out of controlled motives negatively predicted self-realization but was unrelated to happiness. Although the nonsignificant relationship found between controlled goals and happiness by these authors is in fact consistent with findings from certain studies (see Sheldon et al., 2004; Study 1), it is not what was initially proposed by the herein integrative model. In our view, this result might originate from the fact that pursuing goals that do not represent people's interests and central values might elicit a mix of positive and negative emotions (e.g., Larsen, McGraw, Mellers, & Cacioppo, 2004), which would explain the null relationship. For instance, one may feel happy whilst engaging in nonself-actualizing activities (e.g., watching TV) but might come to feel disappointed for not having engaged in growth-related

activities (e.g., studying or reading). Future research should investigate this possibility.

The integrative model proposed within this paper also establishes a direct relationship between goal motives and well-being. However, previous researchers (e.g., Koestner et al., 2002; Sheldon & Elliot, 1999; Sheldon & Kasser, 1998) have shown that goal progress plays an important role in the relation between goals pursuit and well-being (i.e., progress toward autonomous goals leads to greater well-being). Therefore, future research should examine the extent to which goal progress is involved in the association between goal motives and both happiness and selfrealization. Furthermore, with respect to the relationship between goal motives and well-being, another potential line of research would pertain to the distinctive impact of intrinsic and identified regulation on happiness and self-realization. Indeed, intrinsic regulation has been found to promote a focus on the goal itself and yields energizing emotions such as interest and excitement whereas identified regulation keeps one oriented toward the significance of goal pursuits (see Koestner & Losier, 2002) and may sustain energy or efforts in goal pursuit when one is faced with challenges and stressors. Therefore, intrinsic regulation, which reflects the positive experience that individuals have regarding an activity (e.g., feelings of enjoyment and interest), should be more strongly associated with happiness. Alternatively, identified selfregulation, which is characterised by internalizing a goal into the self so it becomes personally and genuinely meaningful (which sustains commitment to, and persistence at working toward the goal even in the face of adversity) should correlate more importantly with self-realization.

# Well-Being and Physical Health

The findings reviewed within this paper support the existence of a relationship between well-being (i.e., happiness and selfrealization) and physical health. However, in line with the results obtained by Ryff and al. (2004), the current integrative model suggests that this relationship mainly depends on one specific type of well-being, namely self-realization. This assumption is in fact supported by Miquelon and Vallerand (2006), who demonstrated that when the influence of happiness and self-realization on physical health is simultaneously compared, the existing relationship between well-being and physical health essentially takes place through self-realization. In other words, when controlling for the affect-based aspect of well-being (i.e., happiness), self-realization was found to make an independent contribution to physical health. By contrast, when controlling for self-realization, the affect-based aspect of well-being was not found to make a similar independent contribution to physical health. It would thus appear that the key ingredient within well-being that promotes health is selfrealization.

The present integrative model also highlights how two particular psychological processes, namely coping and stress, can clarify why the two forms of well-being (i.e., happiness and self-realization) have a differentiated impact on physical health. It demonstrated that self-realization constitutes a more important inner psychological strength or resource for guarding against stressful events or for coping under challenge than merely being happy (happiness) because it promotes adaptive forms of coping and hinders maladaptive forms of coping under

stress or challenge. Nevertheless, future research needs to examine if there are other intervening mechanisms in the relationship between well-being (i.e., happiness and self-realization) and physical health.

#### Conclusion

In summary, the present paper adds to current knowledge on the role of different forms of well-being in one's physical health. It offers a first glance at this issue in showing that having a higher sense of self-realization (in contrast to the sole presence of happiness) under challenge is consequential for health because it enables individuals to be protected against stressful events as it provides them with sufficient psychological resources stemming from more adaptive forms of coping. Furthermore, in line with a concept that is central to positive psychology, namely self-determined motivation, it also highlights an important determinant (i.e., autonomous vs. controlled goal motives) of the well-being—physical health sequence. Future research is needed, however, to better understand the intricacies of the link between self-realization and physical health.

#### Résumé

Le présent article offre un modèle d'intégration sur les facteurs déterminants de la motivation et les conséquences sur la santé de deux formes de bien-être (le bonheur et l'épanouissement personnel). Le modèle suggère que la poursuite d'objectifs pour des motifs autodéterminés favorise à la fois le bonheur et l'épanouissement personnel, alors qu'atteindre des objectifs non autodéterminés nuit aux deux formes de bien-être en question. Le modèle propose aussi que la réalisation de soi, et non le bonheur, favorise la santé physique par l'adoption de stratégies de vigilance plutôt que l'évitement, ce qui réduit le facteur stress. Les éléments empiriques sous-jacents au modèle sont présentés, et les incidences de celui-ci en matière de théorie et de recherche sont ensuite commentées.

*Mots-clés*: motivation associée aux objectifs, bonheur, réalisation de soi, stress, symptômes physiques

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