Motivation Science

A Look at the Self-Growth Process: The Role of Passion and Mastery Goals in Contextual and Global Self-Growth

Robert J. Vallerand, Virginie Paquette, Nabil Bouizegarène, and Iliane Houle

Online First Publication, January 8, 2026. https://dx.doi.org/10.1037/mot0000419

Motivation Science

ISSN: 2333-8113
https://doi.org/10.1037/mot0000419

A Look at the Self-Growth Process: The Role of Passion and Mastery Goals in Contextual and Global Self-Growth

Robert J. Vallerand[1], Virginie Paquette[2], Nabil Bouizegarène[1], and Iliane Houle[1]
[1] Laboratoire de recherche sur le comportement social, Department of Psychology, Université du Québec à Montréal
[2] Human Resources Management Departement, Université du Québec à Trois-Rivières

The purpose of this research was to examine the role of passion and mastery goals in the self-growth process. Study 1 (Sample 1A: $N = 633$; Sample 1B: $N = 247$) validated a new measure of self-growth as a subjective assessment of continuous self-growth both within a specific activity (Contextual Self-Growth) and at the person level (Global Self-Growth) through exploratory and confirmatory factor analyses. Study 1 also showed that harmonious passion (HP) was positively associated with contextual self-growth, while obsessive passion was weakly associated with it. In turn, contextual self-growth was positively related to global self-growth. Studies 2 ($N = 817$) and 3 (longitudinal design, $N = 434$) investigated the mediating role of achievement goals, particularly mastery goals, in the relationships between passion and self-growth. The results of Study 2 showed that HP promoted mastery goals that led to contextual self-growth. In turn, contextual self-growth predicted global self-growth. These results were fully replicated using a 9-month longitudinal study (Study 3). In addition, HP protected against the negative effects of performance-avoidance goals on self-growth (Study 2 only). In contrast, obsessive passion led to self-growth via performance-approach goals, and hindered self-growth via performance-avoidance goals (Study 2 only). In sum, these findings highlight the importance of differentiating between contextual and global self-growth as an outcome, as well as the more adaptive role of HP and mastery goals in fostering both contextual and global self-growth.

Keywords: passion, mastery goals, self-growth

> The hallmark of human nature is each person's great capacity to adapt, to change, and to grow. (Dweck, 2012, p. 614)

As is evidenced in the above quote, self-growth represents a key concept of human nature. Although numerous authors have theorized on self-growth, much less has been written on how self-growth is achieved. Consider the following. Two young workers start a new job that they love. Being passionate for their work, they devote a significant amount of time toward mastering their craft, thereby experiencing self-growth at work. However, they go about it differently. For instance, Mary's goals are to fully master the different elements of her work and improve. She focuses on learning as much as possible about the various subelements, how to deal psychologically with various situations (e.g., coping with stress at work), and consequently, she feels like she is growing and developing each day as a worker and as a person as well. Our second worker, Marc, does it differently. Although he also seeks to learn new tasks at work, he mostly compares himself to other coworkers, ensuring that he's doing better, or at least not worse, than they do. By focusing on comparing himself to others and not necessarily on improving the different facets of his work, this performance-oriented approach is not as conducive to self-growth at work and may impede his self-growth as a person as well. Overall, one can see that Mary's approach to her new job is more conducive to self-growth both at work and at the person level, compared to Marc's.

The above example underscores two major questions. First, how should we consider self-growth? Should we look at people's self-growth globally, as a person, or should we also look at some circumscribed areas, such as work, where some contextual self-growth takes place? We suggest that both are important. A second question asks what is the process through which self-growth is achieved? Vallerand (2015) posits that passion is a key driver of self-growth because people are so enamored with the given activity that they enthusiastically spend countless hours on it while pursuing mastery goals. In the process, because the activity that people are passionate about becomes part of their identity (Vallerand et al., 2003), self-growth within the activity sphere leads to self-growth as a person. Of importance, however, not everybody displays the same passion and pursues the same goals for an activity one is passionate about (Vallerand, 2015). Thus, as seen in the above example, people

Marylène Gagné served as action editor.
Robert J. Vallerand https://orcid.org/0000-0002-5301-2799
Robert J. Vallerand has received research grants from the Social Sciences and Humanities Research Council (435-2015-1237), the Fonds de Recherche du Québéc—Société et Culture (2021-SE3-283171), and the Canada Research Chairs program (950-230793). Virginie Paquette was supported by a grant from the Fonds de Recherche du Québec—Société et Culture in the preparation of this paper (353062). All authors declare that they have no conflicts of interest. Furthermore, the present research has received the ethic approval from the Comité institutionnel d'éthique de la recherche avec des êtres humains of the Université du Québec à Montréal (2023-5625). Although the studies were not preregistered, all materials, data, code, and results of this research are available from the corresponding author upon request.

Correspondence concerning this article should be addressed to Robert J. Vallerand, Laboratoire de recherche sur le comportement social, Department of Psychology, Université du Québec à Montréal, C.P. 8888 Succursale Centre-Ville, Montréal, Québec H3C 3P8, Canada. Email: vallerand.bob@gmail.com

may end up adopting different goals at work that differentially affect their self-growth both at work and as a person. These are some of the issues that we address in the present research.

On Self-Growth

Self-growth has generally been seen in psychology as a tendency toward self-development that all humans naturally seek to achieve. Maslow (1971), for instance, posited that people seek to become a better version of themselves through planned actions. Thus, one choicefully seeks to expand one's sense of identity and self. Similarly, Rogers (1962) proposed that one is oriented toward "becoming" a person. Thus, there is this continuous movement toward an organismic valuing process or developing in line with one's better nature. Several other theorists have pursued along those lines (see Jain et al., 2015, 2020; Maurer et al., 2023). Much research and theorizing have looked at growth mindsets. Dweck (2006), for instance, has proposed that people hold mindsets that can either be growth-oriented or fixed. Those individuals with a growth mindset believe that their abilities and self develop over time, whereas those with a fixed mindset hold the belief that the self and abilities are relatively static. Much research reveals that those who hold growth mindsets reap more benefits than those with fixed mindsets (Dweck, 2012).

Other authors have focused on growth motivation and goals and how they orient people toward improving. Bauer et al. (2015) have developed the Growth Motivation Index to assess the degree to which people put effort into growth and self-improvement in everyday life. Similarly, Gordon and Luo (2011) have developed the Personal Expansion questionnaire to measure people's interest in trying new things and deepening their knowledge of familiar ones. In addition, Kasser and Ryan (1996; see also Hope et al., 2014) have shown that intrinsic values are more positively oriented toward growth than extrinsic values. One such intrinsic value is self-acceptance, which is defined as an orientation toward psychological growth, autonomy, and self-regard. In contrast, extrinsic values, such as financial success (being wealthy and financially successful), are much less associated with self-growth than intrinsic values. Other authors, such as Elliot and Church (1997), have shown that while some people focus on mastery goals oriented toward learning and improving at a given activity, others tend to focus on outperforming others (performance-approach goals) or avoiding underperforming relative to others (performance-avoidance goals). Because one can be better than others without improving on the task at hand, one can see that not all achievement goals should lead to self-growth. Finally, the work of Martin and colleagues (e.g., Bostwick et al., 2025) has empirically shown that self-growth constructs, such as growth orientations, goals, and mindsets, show both global properties at the person level and contextual specificity within a given activity or life domain (e.g., education). Similarly, supporting this view, other authors (e.g., Kleine et al., 2019) have looked at thriving at work, defined as functioning at one's fullest potential, as a means of acquiring abilities and fostering self-development in the work domain (Kleine et al., 2019). However, this analysis was not explored at the global level.

Whereas much attention has focused on self-growth motivation, goals, values, and mindsets, much less attention has been given to self-growth as an outcome, or the perceptions that one's self is growing and expanding. One exception is the work of Ryff and Keyes (1995). Ryff and Keyes assess personal growth, defined as continued development, with items such as "I have the sense that I have developed a lot as a person over time." They thus assess self-growth globally. Ryff and Keyes see self-growth (or personal growth) as one of the six components of psychological well-being (Ryff & Keyes, 1995), along mastery, autonomy, positive relations, purpose in life, and self-acceptance. Other authors, such as Anderson et al. (2020), conceive of personal growth as the resultant of the other five above dimensions of well-being and, as such, do not assess self-growth independently.

Overall, the above discussion leads to at least five conclusions. First, although a number of different self-growth constructs have been proposed, very few of these constructs actually focus on self-growth as an outcome. Most authors focus on self-growth as a type of mindset, beliefs, motivation, goals, and values. Second, even fewer authors assess self-growth as an outcome that is ongoing where, in line with Rogers (1963), people feel that they are still growing and expanding. Third, some authors (e.g., Anderson et al., 2020; Ryff & Keyes, 1995) define self-growth (personal growth in their case) as part of well-being. However, it would appear important to define and assess self-growth and well-being independently. With orthogonal assessments of each construct, future research is then in a better position to determine whether self-growth is part of well-being or one of its determinants. Fourth, whereas goals and motivation have been assessed at the activity or contextual level such as education (e.g., Martin et al., 2022), self-growth at this level as an outcome has not. We believe that it is important to do so. For instance, Maslow (1943, p. 382) underscored the role of the self at the activity level: "A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualization." As the quote from Maslow suggests, assessing self-growth at the contextual level seems important. The lack of research on self-growth as an outcome in specific life contexts and activities is surprising as it is in line with the research and writings of key authors on the self, such as James (1890) and Hazel Markus (Markus & Nurius, 1986; Markus & Wurf, 1987). James, for instance, saw the self as multifaceted and as involving at least the spiritual (including activities that one enjoys), social, and material dimensions. Markus agrees with such a contextualized perspective on the self. She empirically showed that people saw themselves as such (e.g., as a student, an athlete, a friend) and that these various self-conceptions played a key role as leading the self toward action and change (possible selves). In line with the above, we suggest that contextual self-growth deserves empirical attention. Finally, fifth, very little research has focused on how self-growth is achieved. However, developmental and motivational research reveals that self-growth takes place first in specific situations and contexts (e.g., education) before being generalized at the global level (e.g., Harter, 2008). Indeed, research reveals that self-growth needs to be anchored in concrete behavior and experiences in order to be internalized. This takes place first in specific activities and contexts before it can be internalized later on at the more global level (e.g., Blanchard et al., 2007; Guay et al., 2003; Vallerand, 2015). Thus, contextual self-growth should lead to global self-growth.

In line with the above, from a definitional standpoint, our position is that self-growth can be seen as an outcome where people see themselves as currently growing, expanding, and ongoing (Rogers, 1963). Indeed, assessing past self-growth does not ensure that it is currently taking place or that it will continue to take place. In addition, we believe that self-growth should be defined and measured independently from well-being, as it might lead to well-being. That is, a

completely different assumption than making the case that self-growth is a dimension of well-being. With orthogonal assessments of each construct, future research is then in a better position to determine whether self-growth is part of well-being or one of its determinants. Furthermore, self-growth is best seen as being both at the contextual and global levels. Finally, contextual self-growth should foster global level. This last issue is addressed in the next section.

The Dualistic Model of Passion (DMP) and Self-Growth

The DMP

The DMP (Vallerand, 2010, 2015; Vallerand & Houlfort, 2019; Vallerand et al., 2003) defines passion as a strong inclination toward an activity (or an object, an ideology, a person) that people love, value, and hold personal significance that comes to define the person. Indeed, people invest a lot of time and energy in this activity, and it becomes a part of their identity. As the activity is internalized in the self and identity expands, this passion for the activity can propel self-growth both within the activity one is passionate about and at the person level in general (Vallerand, 2013, 2015, 2024).

An important contribution of the DMP is that it posits that there are two types of passion, harmonious and obsessive. The two types of passion depend on the quality of the internalization in self and identity. Harmonious passion (HP) comes from an autonomous internalization (Ryan & Deci, 2017; Vallerand, 1997) of the activity in self and identity. This means that people then freely engage in the beloved activity with a sense of personal endorsement that entails an open, nondefensive, and mindful engagement in the activity (St-Louis et al., 2018; Vallerand et al., 2003). Engaging in an activity with an HP should therefore allow people to fully focus on the task at hand and to experience positive outcomes both during task engagement (e.g., positive affect, concentration, and flow; Carpentier et al., 2012; Vallerand et al., 2003) as well as afterward (e.g., general positive affect and life satisfaction; Mageau & Vallerand, 2007), thereby contributing to life outcomes, self-growth, and optimal functioning. Furthermore, with HP, persistence in the activity is flexible (Chichekian & Vallerand, 2022; Vallerand et al., 2023) such that people can retain a sense of control over their passionate engagement and can momentarily disengage from it if necessary. Thus, the passionate activity is in equilibrium with other realms of people's lives and other identity elements that should lead to adaptive outcomes such as self-growth both during and after activity engagement.

Conversely, obsessive passion (OP) results from a controlled internalization of the activity that one loves in self and identity. This means that both internal pressure (e.g., an uncontrollable urge and impulsivity to engage in the activity; Orosz et al., 2016, 2018) as well as external pressure (e.g., self-esteem contingencies associated with the activity; Mageau et al., 2009; compensating for what's missing in one's life, Lalande et al., 2017) compel people to get involved in the activity that they love. They will then engage in the activity they are passionate about with rigid persistence (Chichekian & Vallerand, 2022; Vallerand et al., 2023) and ego-involvement that fosters conflict between the activity and other realms of life (Lopes & Vallerand, 2020, Study 2; Vallerand et al., 2003), as well as ruminations when doing something else (Carpentier et al., 2012). Such a less-than-optimal engagement in the activity should be associated with lower levels of self-growth and, in turn, lower levels of optimal functioning. OP may then lead to less adaptive and even maladaptive outcomes both during and after activity engagement, as well as when prevented from engaging in the activity (see Vallerand, 2015; Vallerand et al., 2003).

Several hundreds of studies have now been conducted on the DMP and have yielded overwhelming empirical support on at least three counts (for reviews, see Curran et al., 2015; Vallerand, 2010, 2015, 2024). First, well over 20 studies have provided support for the Passion Scale and its two subscales on HP and OP, using confirmatory factor analyses in dozens of countries, including China, Russia, Japan, Australia, most European and several African countries, the Middle East, and North America. Furthermore, there is invariance as pertains to gender, age, types of activities, and languages (Marsh et al., 2013; Vallerand & Rahimi, 2022). Second, HP and OP both reflect the concept of "passion." Indeed, in several studies with thousands of participants, both subscales have been found to positively relate to all five definitional criteria of passion: an activity that one loves, finds important, that one sees "as being a passion," in which one invests time and energy, and that is part of one's identity (see Vallerand & Rahimi, 2022 for a review). Finally, the third empirical support comes from the differential outcomes engendered by HP and OP. A complete review is beyond the scope of this article. However, let us briefly note that while both HP and OP reflect the construct of passion, HP clearly leads to more adaptive outcomes than OP as pertains to a variety of outcomes, such as psychological well-being, physical health, satisfaction in personal and romantic relationships, and contributing to one's community and society at large (see Chénard-Poirier et al., 2023; Curran et al., 2015; Vallerand, 2013; Vallerand & Rahimi, 2022). On the other hand, although OP has been found to be generally conducive to performance (like HP), unlike HP, it has also been found to lead to some maladaptive outcomes such as burnout, chronic injuries in dancers and runners, addiction, stalking, and terrorism and violence, to name a few (for reviews, see Kruglanski et al., 2021; Vallerand & Paquette, 2021).

On Passion and Self-Growth

The DMP (Vallerand, 2015, 2024) posits that people have a natural tendency toward self-growth. That is, we seek to master both our outside and inside worlds (e.g., Maslow, 1943, 1954; Rogers, 1962, 1963; Ryan & Deci, 2017). In line with Deci (1975), the DMP postulates that people seek challenges, attempt to overcome them, and in doing so, grow in self-complexity both within the activity sphere and globally as a person. Activities people are passionate about provide great opportunities for people's self to expand and develop. There are at least three reasons why this is so (see Vallerand, 2015, chapter 3, for a more detailed discussion). A first reason is that passion is a very powerful motivational force that is conducive to engaging in the activity with high levels of energy and sustained enthusiasm. This is true for both HP and OP. Thus, people engage in their beloved activity with full energy, leading them to persist for countless hours and sometimes years, allowing them to overcome obstacles and to reach goals (Vallerand et al., 2023). Furthermore, because they care deeply about the activity, people do not merely log hours; they do so with high-quality engagement that should be conducive to improving and developing self-growth within the purview of the activity they are passionate about. Indeed, passionate people become experts at this activity, not only about what there is to know about the activity itself, but also about how they can best engage

in it from their personal standpoint. In so doing, they learn quite a bit about themselves, develop new psychological skills, and experience self-growth (Bonneville-Roussy & Vallerand, 2018).

A second reason why passion fosters self-growth is that passion (both HP and OP, but HP more so) promotes the use of mastery goals (see Bonneville-Roussy et al., 2011; Vallerand et al., 2007, 2008). Mastery goals (Elliot & Church, 1997) involve focusing on improving and mastering various elements of the activity itself, thereby promoting self-growth in the activity one is passionate about. Studies have shown that HP is strongly and positively associated with mastery goals, whereas this link is weaker but generally significant for OP. However, OP is associated with other goals, such as performance-approach goals (striving to outperform others) and performance-avoidance goals (avoiding being worse than others; Elliot & Church, 1997), which have been respectively associated with limited adaptive and maladaptive effects (e.g., Guo et al., 2023; Vallerand et al., 2007, 2008). In contrast, HP tends to be weakly positively associated with performance-approach goals and negatively, or not at all, related to performance-avoidance goals (e.g., Bonneville-Roussy et al., 2011; St-Cyr et al., 2021; Vallerand et al., 2007, 2008). Therefore, within the activity people are passionate about, HP, more so than OP, should facilitate attempts to master challenges and, in doing so, foster higher levels of self-growth. This specific pathway to self-growth will be explored in the present research.

Finally, a third reason why passion should foster self-growth is that the passionate activity is part of identity (Bouizegarene et al., 2018; Marsh et al., 2013; Vallerand et al., 2003, Study 1). When passionate, one does not merely teach or do research, for instance; one is a teacher or is a scientist. Because the activity one is passionate about is part of one's identity, self-growth within the activity is internalized in both identity and self, thereby fostering self-growth within the realm of the beloved activity. However, as was seen above, there is a significant difference in the quality of processes and outcomes experienced as a function of HP and OP. Thus, what is experienced and internalized as a function of HP is much more positive than with OP, leading to possibly greater contextual self-growth for HP than OP.

Another important issue deals with the fact that contextual self-growth is expected to foster global self-growth. This is in line with developmental (see Harter, 2008) and motivational research (Vallerand, 1997; Vallerand & Ratelle, 2002). For instance, in some of our past work on the hierarchical model of intrinsic and extrinsic motivation, we have shown that a bottom-up effect takes place such that motivational processes are internalized from the more situational and contextual levels to the more global levels. For instance, in a longitudinal study that took place across a whole basketball season, we found that the more the players' motivation toward basketball in each specific game was self-determined (intrinsic and identified regulation), the more their contextual (and general) motivation toward basketball became progressively more self-determined across the season (Blanchard et al., 2007). These findings have been replicated in physical activity and educational contexts (Lavigne & Vallerand, 2010; Lavigne et al., 2012). Similarly, and more germane to the present research, in a 5-year longitudinal study, Guay et al. (2003) showed that contextual motivation in education at Time 1 (T1) predicted changes in global motivation that took place at Time 2 (T2), 5 years later. It is hypothesized that such a bottom-up effect also takes place for self-growth. The more one experiences self-growth in a given context that one is passionate about (especially HP), the more there will be self-growth at the global level.

Only three studies so far have directly looked at the role of passion in self-growth as an outcome (Carbonneau et al., 2016, Studies 1, 2, and 3). These studies focused on romantic passion and used both cross-sectional and prospective designs. Self-growth was assessed with a stem "Being in a relationship with my partner has …" that was followed by five items, such as "… made me a better person" and "… helped me develop qualities that were hidden in me." Thus, as can be seen, this scale assesses the self-growth scale as an outcome at the "global" level, focusing on the person as a whole. In addition, Carbonneau et al. assessed if the person disengaged from other life activities to pursue the romantic relationship. Such activity disengagement should be conducive to a loss of global self-growth. Findings of all three studies revealed that HP fostered global self-growth much more than OP. Specifically, while both HP and OP for romantic passion were positively associated with global self-growth (HP more so than OP) in Study 1, only HP predicted increases in self-growth in Study 2 (6 months later) as well as in Study 3, where global self-growth was assessed with an informant (best friend). Finally, in all three studies, OP predicted disengaging from other life activities, whereas HP predicted increasing engagement in such life activities. Overall, the results of the three studies suggest that engaging in a romantic relationship out of HP leads one to experience global self-growth as a person and much more so than OP. However, the Carbonneau et al. studies did not assess self-growth at the contextual level, within the romantic relationship, nor did they provide an explanation of the processes responsible for the changes in self-growth that took place.

The Present Research

The overall purpose of the present research was to test our theoretical perspective on the role of passion and mastery goals in the process of self-growth. There were four specific goals to this research that were tested in three studies. The first goal was to validate a scale that measures self-growth as defined previously. Thus, our approach was to measure self-growth as the perceptions that one is still growing and expanding both within the activity one is passionate about (contextual self-growth) and as a person as a whole (global self-growth). Furthermore, the item content did not include any mention of well-being. Accordingly, we hypothesized that exploratory and confirmatory factor analyses would support the existence of two distinct factors: (a) self-growth within the activity people are passionate about (contextual self-growth), and (b) self-growth in general (global self-growth; Hypothesis 1 [H1]). Furthermore, we expected that examining the relationships between the two self-growth subscales and a range of related (e.g., growth motivation, personal expansion, thriving, curiosity, personal growth, self-acceptance, satisfaction of the need for autonomy at both contextual and global levels, and performance at the contextual level) and dissimilar (e.g., financial success, depression and anxiety) constructs would provide evidence of convergent and divergent validity. Specifically, constructs assessing elements related to self-growth at the global level (growth motivation, personal expansion, thriving, curiosity, personal growth, need for autonomy in life, and self-acceptance), were expected to be positively related to both types of self-growth, but more strongly related with global self-growth as they are assessed at the same level of generality, namely the global level (Hypothesis 2a [H2a]). The constructs related to self-growth but assessed at the contextual level (need for autonomy and performance at the contextual level in education) were expected to be

positively related to both types of self-growth, but more strongly related to contextual self-growth (Hypothesis 2b [H2b]). At last, dissimilar constructs were expected to be weakly positively related to both types of self-growth (for the financial success value) or negatively related to them (for indices of maladjustment such as symptoms of depression and anxiety; Hypothesis 2c [H2c]). Regarding the scale reliability, it was expected that both subscales would present adequate reliability (Hypothesis 3 [H3]). These hypotheses were tested in Study 1. Research in developmental and motivational psychology (e.g., Harter, 2008; Vallerand, 1997) shows that self-growth takes place from the specific to the general. Thus, a second ¨goal was to test the hypothesis that contextual self-growth would positively predict global self-growth (Hypothesis 4 [H4]). This hypothesis was tested in all three studies. A third goal of this study was to ascertain the role of HP and OP as predictors of self-growth. In line with prior research (Vallerand, 2015, 2024), it was expected that HP, more so than OP, would foster self-growth within the passionate activity (contextual self-growth), and ultimately contribute to global self-growth via contextual self-growth (Hypothesis 5 [H5]). This hypothesis was also tested in all three studies.

Finally, a fourth and final goal was to test whether mastery goals (Elliot & Church, 1997) mediated the relationships between the two types of passion and self-growth. Consistent with past research (e.g., Bonneville-Roussy et al., 2011; Vallerand et al., 2007, 2008), it was hypothesized that HP would positively and strongly predict mastery goals, whereas the link with OP and mastery goals would be weaker (Hypothesis 6a [H6a]). In addition, OP was expected to positively predict the less adaptive achievement goals of performance-approach and performance-avoidance, whereas HP was expected to show weak positive relationships with performance-approach goals but negative, or no associations, with performance-avoidance goals (Hypothesis 6b [H6b]). Furthermore, mastery goals were expected to positively and strongly predict contextual self-growth (Hypothesis 7a [H7a]). In contrast, performance-approach goals were expected to weakly positively predict contextual self-growth, whereas performance-avoidance goals were hypothesized to negatively predict this variable (Hypothesis 7b [H7b]). These hypotheses were all tested in Studies 2 and 3. Specifically, these two studies tested a model in which achievement goals (mastery, performance-approach, and performance-avoidance goals) mediate the relationship between passion and self-growth. While Study 2 used a cross-sectional design, Study 3 used a prospective design to aim at replicating the mediation model from Study 2 in order to predict changes in both types of self-growth over a 9-month period.

Study 1

The aim of Study 1 was twofold. First, we wanted to develop a scale to assess self-growth both at the contextual and global levels. Second, we sought to assess the role of passion in self-growth. To examine the structural validity of the Self-Growth Scale, an exploratory factor analysis (EFA) was conducted on half of Sample 1A (see below) selected at random, while a confirmatory factor analysis (CFA) was performed on the second half of the sample. In addition, for the purpose of testing the convergent and divergent validity of the scale, correlations were examined between the two self-growth subscales and the various variables mentioned in the previous section. This was done with a second Sample (1B). Then, to accomplish the second aim of this study, we conducted structural equation modeling analyses on the complete Sample 1A to examine the role of passion as a predictor of contextual self-growth, and the latter, as a predictor of global self-growth.

Method

Participants and Procedure

Study 1 included two samples. A total of 880 participants were recruited via online platforms. Sample 1A consisted of 633 individuals (65.56% women, $M_{age} = 37.94$ years, $SD = 13.25$) who were asked to select their favorite activity and to complete the Passion Scale and the Self-Growth-Contextual subscale regarding this specific activity. They were recruited via Amazon MTurk. Among this sample, 26.70% selected an activity dealing with sport (e.g., basketball, watching football), 16.75% about arts and crafts (e.g., painting and weaving), 14.22% about listening to and playing music (e.g., playing an instrument and listening to music), 16.90% about reading, writing, learning, and teaching (e.g., creative writing and learning a language), 6.32% about spending time with loved ones and pets (e.g., hanging out with family and playing with pets), 6.32% about board games, video games, and technology (e.g., online gaming and coding), and 12.32% about other activities (e.g., cooking and gardening). On average, participants engaged in their favorite activity for 11.35 hr per week ($SD = 11.21$). Sample 1B consisted of 247 students (46.34% women, $M_{age} = 29.59$ years, $SD = 9.35$), who were recruited via Prolific. They were asked to complete the Passion Scale and the Self-Growth-Contextual subscale regarding their studies. On average, participants had been in their program for 2.61 years ($SD = 1.09$) and spent an average of 25.26 hr per week on their studies ($SD = 10.17$). Participants from both samples provided informed consent and completed a 15-min survey in exchange for monetary compensation (US$1.50 or its equivalent in pounds). This compensation followed Chandler and Shapiro's (2016) recommendations of US$0.10 per estimated minute. Participants in Studies 2 and 3 received the same compensation, as the estimated completion time for both surveys was 15 min. To ensure data quality across all studies, we used attention check questions (e.g., "For this item, please select *very slightly agree* (2)"). For Studies 1 (Sample 1A) and 2, we used approved MTurk participants, as previous research has shown that results obtained with these participants are consistent with those from classic studies (Hauser et al., 2023). For Studies 1 (Sample 1B) and 3, we used the Prolific's options to choose participants who reflected the highest quality of participants who also corresponded to our needs, that is, individuals who had already indicated to be students (Study 1, Sample 1B) or workers (Study 3) on their Prolific account. For Studies 1 (Sample 1A) and 2, all participants answered the attention check questions correctly and were therefore included in the analyses. For Studies 1 (Sample 1B) and 3, two and three participants, respectively, were not included in the final sample due to failing the attention check questions. Participants from Sample 1A completed demographic questions, questions about their passionate activity, and scales assessing passion and self-growth, while participants from Sample 1B completed demographic question, the Self-Growth Scale, and scales to assess convergent and divergent validity.

Measures

Sample 1A

Self-Growth. The Self-Growth Scale was developed specifically for the present research. The authors developed a number of items

reflecting a subjective assessment of continuous self-growth both within a specific activity (contextual self-growth) and at the person level (global self-growth). Following committee work, only items reflecting the fact that one is still progressing and without any reference to well-being were retained. A total of 12 items, six for each subscale, were retained for further analyses. A sample item for self-growth within a given activity for which people are passionate (Self-Growth-Contextual) is "In general, I keep on progressing in my favorite activity". The term "my favorite activity" was used with Sample 1A, as participants were asked about their favorite activity. However, with Sample 1B, "my favorite activity" was replaced by "in my studies," as participants were asked about their studies, and by "in my work" in Studies 2 and 3, as participants were asked about their work. A sample item from the Self-Growth-Global subscale is "In general, in my life I keep on developing as a person". Participants were given the following instruction for the Self-Growth-Contextual subscale (Sample 1A): "The following items pertain only to your favorite activity that you previously identified. Rate your degree of agreement with each of the following items in relation to this activity." The following instruction was provided for the Self-Growth-Global subscale: "The following items pertain to you in general as a person. Rate your degree of agreement with each of the following items." Participants indicated their level of agreement using a 7-point scale (1 = *do not agree at all* to 7 = *very strongly agree*). It should be noted that the Self-Growth-Contextual subscale was presented alongside the scales assessing the activity-related variables, whereas the Self-Growth-Global subscale was presented alongside the scales measuring global variables.

Passion. Participants in Sample 1A were first asked to indicate their favorite activity and then to complete the Passion Scale (Marsh et al., 2013; Vallerand et al., 2003) while thinking about this activity. This scale includes two subscales assessing HP (six items, e.g., "This activity is in harmony with the other activities in my life"; $\alpha = .84$) and OP (six items, e.g., "I have almost an obsessive feeling for this activity"; $\alpha = .85$). Items are rated on a 7-point scale (1 = *do not agree at all* to 7 = *very strongly agree*). The Passion Scale has demonstrated high validity and reliability (Cronbach's αs of .75 and above; Vallerand, 2015) and is invariant across gender, language, and type of activities (Marsh et al., 2013; Vallerand & Rahimi, 2022; Vallerand et al., 2003).

Sample 1B

The same Self-Growth Scale used with Sample 1A was used with Sample 1B. Because participants were students, the Self-Growth-Contextual subscale used "in your studies" instead of "in your activity" (see below for the Cronbach's αs). Furthermore, the following scales were included to examine the convergent and divergent validity of the Self-Growth Scale.

Growth Motivation. This construct was assessed using the Growth Motivation Index (Bauer et al., 2015). Due to the questionnaire length, eight items from this scale were used (e.g., "I actively seek new conceptual or philosophical perspectives from which to think about life, even if they mean I've been wrong all along," $\alpha = .88$). Participants rated each item on a 7-point scale indicating how often they engage in each of the described behavior (1 = *never*, 4 = *periodically*, 7 = *always*).

Personal Expansion. The Personal Expansion Questionnaire (Gordon & Luo, 2011) was used to assess the novelty dimension (i.e., a willingness to experience new things). It consists of five items. A sample item is "I am always interested in finding new things to try" ($\alpha = .75$). Items are rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Thriving. Thriving was measured using the Brief Inventory of Thriving (Su et al., 2014). This 10-item scale assesses different aspects of thriving such as feelings of accomplishment, self-efficacy, and well-being. A sample item is "I am achieving most of my goals" ($\alpha = .92$). Items were rated on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*).

Curiosity. Participants completed the Joyous Exploration subscale of the Five-Dimensional Curiosity Scale Revised (Kashdan et al., 2020). This four-item subscale measures individuals' love of learning and sense of fascination about new things. A sample item is "I find it fascinating to learn new information" ($\alpha = .82$). Items were rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Personal Growth. Personal growth was assessed using 14 items from the Personal Growth subscale of the Psychological Well-Being scale (Ryff, 1989). A sample item is "With time, I have gained a lot of insight about life that has made me a stronger, more capable person" ($\alpha = .90$). Items are rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Self-Acceptance Aspiration. This construct was measured using the Self-Acceptance subscale of the Aspiration Index (Kasser & Ryan, 1993). The index asks participants to rate aspiration items in terms of their personal importance and the likelihood of attaining them in the future. The Self-Acceptance subscale includes four items, such as "You will be the one in charge of your life" ($\alpha = .76$). In the present study, participants were asked to rate only the importance of each item for their future, using a 5-point scale (1 = *not at all important* to 5 = *very important*).

Financial Success Aspiration. This construct was assessed using the Financial Success subscale of the Aspiration Index (Kasser & Ryan, 1993). Four items from this subscale were used, such as "You will have a job with high social status" ($\alpha = .82$). Once again, participants rated the importance of each item for their future on a 5-point scale (1 = *not at all important* to 5 = *very important*).

Need for Autonomy in Education and in Life. The satisfaction of the need for autonomy at the contextual level (i.e., in one's studies as participants from Sample 1B were students) was assessed using three items from Vallerand et al. (1997). A sample item is "I feel a sense of choice and freedom in the things I undertake in my studies" ($\alpha = .79$). The satisfaction of the need for autonomy at the global level ("I feel a sense of choice and freedom in the things I undertake in my life in general"; $\alpha = .81$) was also adapted from the Vallerand et al. (1997) scale. Items are rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Performance in Education. Performance at the contextual level (i.e., one's studies) was assessed using the Performance subscale from the Optimal Functioning in Society Scale (Chénard-Poirier et al., 2023). This four-item subscale was adapted for one's studies (e.g., "In my studies, I generally go beyond the call of duty to reach a very high level of performance," $\alpha = .91$). Participants indicated their level of agreement with each item using a 7-point scale (1 = *not agree at all* to 7 = *very strongly agree*).

Symptoms of Depression. Depressive symptoms were measured using three items from Mansbach et al. (2015). A sample item is "I think of myself as a worthless person" ($\alpha = .96$). Items

are rated on a 7-point scale (1 = *do not agree at all* to 7 = *very strongly agree*).

Symptoms of Anxiety. Symptoms of anxiety were assessed using three items also from Mansbach et al. (2015). A sample item is "I feel nervous and strung-out all the time" ($\alpha = .93$). Items are rated on a 7-point scale (1 = *do not agree at all* to 7 = *very strongly agree*).

Results and Discussion

Factor Analyses

All analyses in this research were conducted with Mplus 8.6 (Muthén & Muthén, 1998–2017) with robust maximum likelihood estimation (MLR). Missing data were handled using full information maximum likelihood, which assumes that data are missing at random. This method allows missingness to be conditioned on all variables included in the same model, making it one of the most effective approaches for handling missing data (Enders, 2022). The structural validity of the self-growth scale was tested using EFA and CFA. An EFA, relying on an oblique rotation (geomin with an epsilon value of .5), was performed on half of Sample 1A ($N = 317$) selected at random. Models with one and two factors were tested. A parallel analysis, the scree plot, and a high Kaiser–Meyer–Olkin measure of sampling adequacy (0.929) all indicated that a two-factor solution was the best fit for the data. Additionally, the two-factor solution showed lower values on the Akaike information criterion, Bayesian information criterion (BIC), and sample-size-adjusted BIC, further confirming it as the best fitting model. The fit indices of the two models tested are presented in Table 1, and the factor loadings of the EFA appear in Table 2.

The two-factor model was replicated using a CFA with MLR conducted on the other half of Sample 1A ($N = 316$). The results indicated an adequate fit to the data, $\chi^2(53) = 124.75$, $p < .001$, root-mean-square error of approximation (RMSEA) = .07 [.05, .08], comparative fit index (CFI) = .97, Tucker–Lewis index (TLI) = .96, standardized root-mean-square residual (SRMR) = .03. The standardized results are presented in Figure 1. A one-factor CFA was also conducted and revealed inadequate fit indices, $\chi^2(54) = 1{,}002.05$, $p < .001$, RMSEA = .24 [.22, .25], CFI = .57, TLI = .47, SRMR = .25, thereby indicating that the two-factor solution provided a better fit. These fit indices are also presented in Table 1. Moreover, we also performed a CFA on the Self-Growth Scale with Sample 1B to further confirm its structural validity. Once more, the results supported the two-factor solution of the scale: $\chi^2(53) = 103.21$, $p < .001$, RMSEA = .06 [.04; .08], CFI = .96, TLI = .95, SRMR = .04.

Reliability

Reliability analyses were conducted with both samples. These analyses revealed that both subscales were reliable (Self-Growth-Contextual, $\alpha_{S1A} = .97$, $\alpha_{S1B} = .93$; Self-Growth-Global, $\alpha_{S1A} = .96$, $\alpha_{S1B} = .94$).

Correlations—Convergent and Divergent Validity

Table 3 presents the descriptive statistics and correlations between the two self-growth subscales and all variables of Sample 1B to test the convergent and divergent validity of the Self-Growth Scale. First, all constructs related to self-growth at the global level (growth motivation, personal expansion, thriving, curiosity, personal growth, self-acceptance, and need for autonomy in life) were moderately to strongly related to both types of self-growth, but more strongly to global self-growth with correlations varying between .48 and .67 ($p < .001$) for global self-growth, and .30 and .60 ($p < .001$) for contextual self-growth. Second, as expected, the two scales assessing constructs related to the context of education (need for autonomy and performance in education) were related to global self-growth (.51 for both) but slightly more strongly to contextual self-growth (.57 and .58, respectively). Finally, as expected, correlations were much lower for the value of financial success (rs = .15 and .32, $p < .05$) and negative with symptoms of depression and anxiety (rs varied from −.28 to −.46, $p < .001$). These findings provide support for the convergent and divergent validity of the scale.

Structural Equation Modeling Analyses

Table 4 reports the descriptive statistics and correlations among all variables of Sample 1A. A structural equation model (SEM) was conducted on the whole Sample 1A to examine the following model: the two types of passion (HP and OP) predict Self-Growth-Contextual, which in turn predicts Self-Growth-Global. Covariances among the exogenous variables (HP and OP) were estimated. Correlations appear in Table 4. Results of the SEM revealed that the hypothesized model had an excellent fit to the data, $\chi^2(248) = 697.26$, $p < .001$, RMSEA = .05 [.05, .06], CFI = .95, TLI = .94, SRMR = .09. HP was positively related to Self-Growth-Contextual ($\beta = .55$, $p < .001$), while this relationship was weaker, but still positive, with OP ($\beta = .17$,

Table 1
Model Fit Indices of the Two Models Tested Via the EFA and CFA (Study 1)

Model	χ^2	*df*	RMSEA	CFI	TLI	SRMR	AIC	BIC	ABIC
EFA									
One factor	931.53***	54	.23	.58	.48	.24	10,809.41	10,944.73	10,830.55
Two factors	79.61***	43	.05	.98	.97	.01	8,837.51	9,014.17	8,865.10
CFA									
One factor	1,002.05***	54	.24	.57	.47	.25	11,254.76	11,389.97	11,275.78
Two factors	124.75***	53	.07	.97	.96	.03	9,450.10	9,589.06	9,471.70

Note. EFA = exploratory factor analysis; CFA = confirmatory factor analysis; χ^2 = chi square goodness of fit statistic; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root-mean-square residual; AIC = Akaike information criterion; BIC = Bayesian information criterion; ABIC = sample-size-adjusted BIC. For the EFA, $N = 317$. For the CFA, $N = 316$.
*** $p < .001$.

Table 2
Descriptive Statistics and Factor Loadings From the Exploratory Factor Analysis of the Self-Growth Scale (Study 1—Sample 1A)

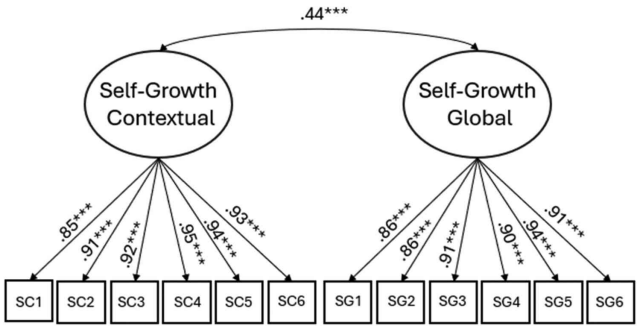
Item	*M* (*SD*)	Factors	
		SG-C	SG-G
1. I keep on progressing in my favorite activity[a].	5.47 (1.46)	**.78**	.14
2. I am continuously developing my skills in my favorite activity.	5.35 (1.58)	**.90**	.09
3. I am developing more completely in my favorite activity.	5.26 (1.56)	**.89**	.13
4. I am improving in my favorite activity.	5.36 (1.59)	**.92**	.06
5. I am expanding my skills and abilities in my favorite activity.	5.37 (1.60)	**.92**	.07
6. I am getting progressively better in my favorite activity.	5.36 (1.62)	**.94**	.05
1. I keep on developing as a person.	5.36 (1.42)	.07	**.85**
2. I am becoming a better person.	5.34 (1.44)	.11	**.87**
3. I progress in various areas of my life.	5.24 (1.50)	.05	**.89**
4. I develop myself a little bit more every day.	5.16 (1.55)	.10	**.90**
5. I progressively become a more complete person.	5.15 (1.55)	.11	**.87**
6. I am constantly improving as a person.	5.32 (1.47)	.08	**.91**

Note. For descriptive statistics, $N = 633$ (whole Sample 1A); for factor loadings, $N = 317$ (first half of Sample 1A). Estimator: MLR. Rotation method: Geomin with an epsilon value of .5. Loadings larger or equal to .40 are in bold. SG-C = Self-Growth-Contextual; SG-G = Self-Growth-Global; MLR = maximum likelihood estimation with robust standard errors.
[a] The words "in my activity" were used for the SG-C in Study 1—Sample 1A as this sample was asked to focus on their favorite activity. However, these words were replaced by "in your studies" in Study 1—Sample 1B and by "in your work," in Studies 2 and 3.

$p < .001$). In turn, Self-Growth-Contextual was positively related to Self-Growth-Global ($\beta = .47$, $p < .001$). The standardized solutions are presented in Figure 2. Indirect effects were examined using bootstrapping (5,000 samples, with 95% bias-corrected confidence intervals [CIs]), along with the maximum likelihood estimator (since bootstrapping is not feasible with MLR). Unstandardized results indicated that Self-Growth-Contextual mediated the relationships between HP and Self-Growth-Global ($b = 0.38$, 95% CI [0.28, 0.49], $p < .001$) and between OP and Self-Growth-Global ($b = 0.09$, 95% CI [0.05, 0.13], $p < .001$).

In sum, the present findings supported all hypotheses. First, the Self-Growth Scale with a two-factor solution was the most adequate model, supporting H1. In addition, the correlations provided evidence of convergent and divergent validity, supporting H2, and Cronbach's αs indicated adequate reliability, supporting H3. Second, in line with the DMP (Vallerand, 2024), the results revealed the distinct roles of HP and OP in contextual self-growth. Specifically, HP was more strongly and positively associated with Self-Growth-Contextual than OP, supporting H5. Finally, Self-Growth-Contextual positively predicted Self-Growth-Global, supporting H4.

Figure 1
Results of the CFA for the Self-Growth Scale (Study 1—Second Half of Sample 1A)



Note. $N = 316$. Standardized path coefficients are presented. CFA = confirmatory factor analysis; SC = Self-Growth-Contextual; SG = Self-Growth-Global.
*** $p < .001$.

Study 2

There were two major purposes of Study 2. A first goal was to test a process model in which passion, achievement goals, and self-growth form an integrated sequence. In this model, the two types of passion predict the three achievement goals that predict contextual self-growth. In turn, contextual self-growth predicts global self-growth.

Table 3
Descriptive Statistics and Correlations Between the Two Self-Growth Subscales and Convergent/Divergent Validity Variables (Study 1—Sample 1B)

Variable	*M*	*SD*	Correlations	
			SG-G	SG-C
Growth motivation	5.24	1.06	.60	.43
Personal expansion—Novelty	5.04	0.85	.48	.30
Thriving	4.05	0.72	.66	.44
Curiosity–Joyous exploration	5.88	0.93	.64	.52
Personal growth	5.68	0.93	.67	.60
Self-acceptance	4.43	0.56	.65	.52
Need for autonomy in life	5.84	0.88	.61	.51
Need for autonomy in education	5.48	1.05	.51	.57
Performance in education	5.28	1.18	.51	.58
Financial success	3.64	0.96	.32	.15
Depression	1.82	1.46	−.46	−.35
Anxiety	2.31	1.57	−.44	−.28

Note. $N = 247$. SG-G = Self-Growth-Global; SG-C = Self-Growth-Contextual. All correlations are significant, $p < .05$.

Table 4
Descriptive Statistics and Correlations for Study Variables (Study 1—Sample 1A)

Variable	*M* (*SD*)	1	2	3
1. Harmonious passion	5.43 (1.02)	—		
2. Obsessive passion	3.39 (1.46)	.23***	—	
3. Self-Growth-Contextual	5.36 (1.47)	.54***	.28***	—
4. Self-Growth-Global	5.26 (1.37)	.55***	.14***	.46***

Note. $N = 633$.
*** $p < .001$.

The same hypotheses formulated in The Present Research section were tested. The second goal of this study was to test the proposed mediation model while focusing on the work domain. Whereas Study 1 included a number of activities that people were passionate about, Study 2 focused on work as it is a central dimension of identity in workers. Thus, contextual self-growth at work should play an important role in predicting self-growth at the global level.

Method

Participants and Procedure

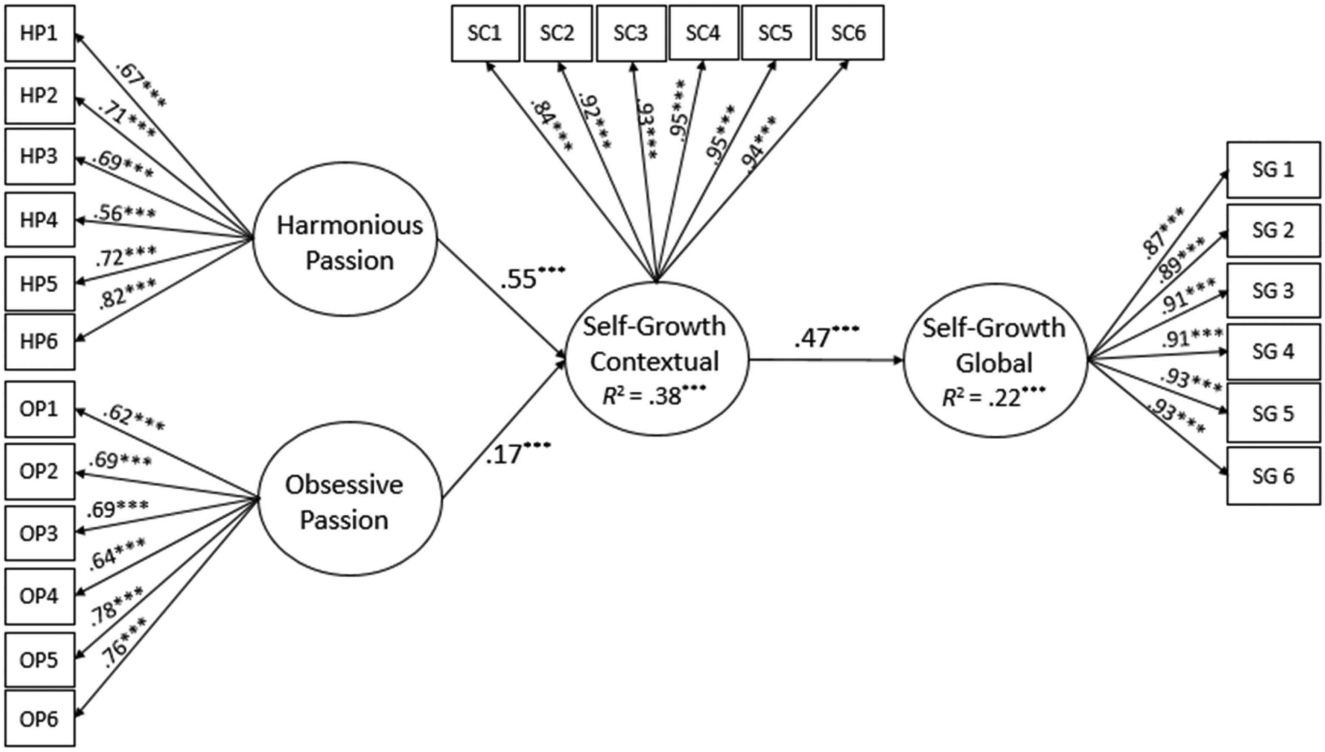
Participants were 817 American workers (48.64% women, $M_{age} = 40.06$ years, $SD = 11.93$), recruited via Amazon MTurk. On average, they worked 38.63 hr per week ($SD = 8.69$) and had been in their current job for an average of 6.65 years ($SD = 6.33$). They were employed in various fields (e.g., health care, retail, and manufacturing). The procedures were similar to those of Study 1, with the addition of participants completing a scale assessing their achievement goals at work.

Measures

The questionnaire included the Passion Scale adapted to measure one's passion for work (HP subscale $\alpha = .91$ and OP subscale $\alpha = .88$; Marsh et al., 2013). It also included the self-growth scale used in Study 1, which assessed Self-Growth-Contextual at work ($\alpha = .98$) and Self-Growth-Global ($\alpha = .97$). As previously indicated, for the Self-Growth-Contextual subscale, we replaced the words "favorite activity" for "in my work." The Self-Growth Scale appears in the Appendix. Finally, the questionnaire also included the Achievement Goals scale.

Achievement Goals. Participants' achievement goals were measured using the 18-item scale from Elliot and Church (1997) adapted to the work domain. The scale comprises three 6-item subscales assessing mastery goals ($\alpha = .89$; e.g., "I hope to improve and broaden my skills at work"), performance-approach goals ($\alpha = .92$; e.g., "It is important for me to do better than others at work"), and performance-avoidance goals ($\alpha = .89$; e.g., "My goal at work is to avoid performing poorly"). Items are rated on a 7-point scale

Figure 2
Results of the Structural Equation Model of Study 1



Note. $N = 633$ (complete Sample 1A). Standardized path coefficients are presented. For clarity concerns, covariances between the error terms are not included in the figure. HP = harmonious passion; OP = obsessive passion; SC = Self-Growth-Contextual; SG = Self-Growth-Global.
*** $p < .001$.

(1 = *do not agree at all* to 7 = *very strongly agree*). This scale has demonstrated high reliability and validity (Elliot & Church, 1997).

Results and Discussion

Descriptive statistics and bivariate correlations for all variables are presented in Table 5. A look at the correlations reveals the same pattern of relationships as in Study 1. HP was strongly correlated with both contextual and global self-growth (rs = .64 and .47, respectively), whereas OP showed much weaker correlations (rs = .22 and .08, respectively), thereby replicating the findings of Study 1. A full SEM with measurement model including achievement goals was conducted with paths specified according to the hypotheses outlined above. Covariances among the exogenous variables (e.g., HP and OP) and among the error terms of the endogenous variables (e.g., achievement goals) were estimated.

The results showed that the model had a good fit to the data, $\chi^2(802) = 2{,}694.95$, $p < .001$, RMSEA = .05 [.05, .06], CFI = .93, TLI = .92, SRMR = .07. The standardized solutions are presented in Figure 3 (only significant paths, $p < .05$, are displayed although they remain in the model). HP for work was positively associated with mastery goals ($\beta = .71$, $p < .001$), performance-approach goals ($\beta = .10$, $p = .042$), and negatively related to performance-avoidance goals ($\beta = -.32$, $p < .001$). Conversely, OP for work was positively associated with both performance-approach ($\beta = .41$, $p < .001$) and performance-avoidance ($\beta = .50$, $p < .001$) goals and was unrelated to mastery goals ($\beta = -.06$, $p = .085$). In turn, mastery goals were positively related to Self-Growth-Contextual at work ($\beta = .79$, $p < .001$), which was positively related to Self-Growth-Global ($\beta = .60$, $p < .001$). In contrast, performance-avoidance goals were negatively associated with Self-Growth-Contextual ($\beta = -.11$, $p < .001$). Finally, performance-approach goals were positively related to Self-Growth-Contextual at work ($\beta = .09$, $p = .017$).

Using bootstrapping (5,000 samples, with 95% bias-corrected CI), along with the maximum likelihood estimator, indirect effects were examined to further test the mediating role of achievement goals in the relationships between passion and self-growth. Unstandardized results indicated that mastery goals mediated the relationships between HP and Self-Growth-Contextual ($b = 0.63$, 95% CI [0.53, 0.75], $p < .001$) and via Self-Growth-Contextual, Self-Growth-Global ($b = 0.36$, 95% CI [0.28, 0.44], $p < .001$). Since OP was unrelated to mastery goals, the latter did not mediate the relationships between OP and Self-Growth-Contextual. Furthermore, performance-approach goals mediated the relationship between OP and Self-Growth-Contextual ($b = 0.05$, 95% CI [0.01, 0.09], $p = .022$) and via Self-Growth-Contextual, Self-Growth-Global ($b = 0.03$, 95% CI [0.00, 0.05], $p = .023$). Performance-approach goals did not significantly mediate the relationships between HP and both types of self-growth ($b = 0.01$, 95% CI [0.00, 0.03], $p = .158$–.163). Finally, performance-avoidance goals mediated the protective effects between HP and Self-Growth-Contextual ($b = 0.04$, 95% CI [0.02, 0.07], $p = .005$) and via Self-Growth-Contextual, Self-Growth-Global ($b = 0.02$, 95% CI [0.01, 0.04], $p = .005$). Conversely, performance-avoidance goals mediated the negative relationships between OP and Self-Growth-Contextual ($b = -0.07$, 95% CI [−0.11, −0.03], $p = .001$) and via Self-Growth-Contextual, Self-Growth-Global ($b = -0.04$, 95% CI [−0.06, −0.02], $p = .001$).

In sum, the results of Study 2 not only replicated the SEM findings of Study 1 but also extended the model by identifying the nature of the psychological processes—specifically, achievement goals—that mediated the relationship between passion and self-growth. These results generally supported H4–H7. As expected, HP facilitated contextual and, ultimately, global self-growth (H5) through the adoption of mastery goals (H6a and H7a). Furthermore, HP also mitigated the negative effects of performance-avoidance goals on self-growth (H6b). OP was also positively associated with contextual self-growth at work (H5), and global self-growth in general, through performance-approach goals (H6b). However, OP also impeded both types of self-growth through the mediating effect of performance-avoidance goals (H6b and H7b). Additionally, OP was not related to mastery goals as expected (no support for H5a). Thus, the overall relationship between OP and self-growth was much less positive than that involving HP, which was fully positive. Finally, the direct path from contextual self-growth to global self-growth supported H4, confirming that self-growth takes place from the specific to the general.

Study 3

Study 3 aimed to replicate the model of Study 2 while using a prospective design to assess changes in self-growth over a 9-month period, once more in the work domain. Passion, self-growth, and achievement goals were assessed at T1, while self-growth was assessed again at T2. The same model proposed in Study 2 was formulated in Study 3, except that we controlled for both types of self-growth at T1. Thus, the two types of passion predict the three achievement goals that predict contextual self-growth. In turn, contextual self-growth predicts global self-growth. Measuring both types of self-growth at T1 and T2 allowed us to examine the role

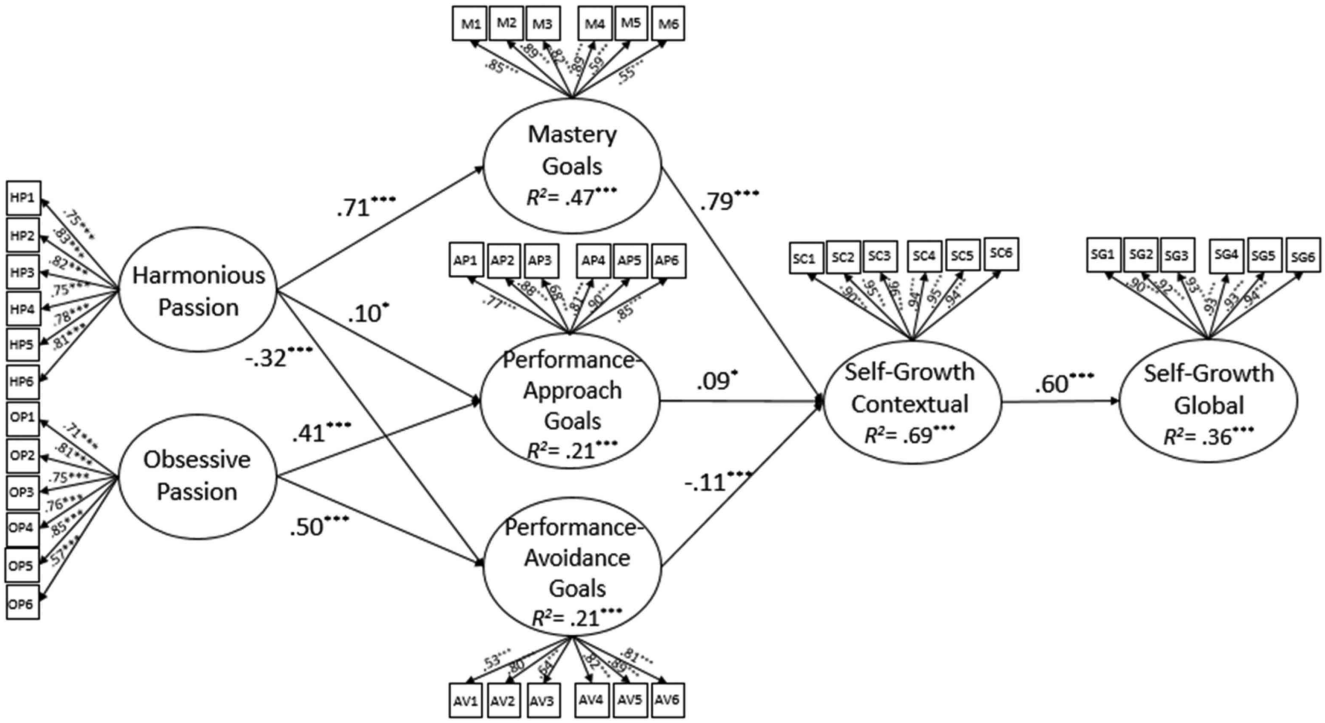
Table 5
Descriptive Statistics and Correlations for Study Variables (Study 2)

Variable	*M* (*SD*)	1	2	3	4	5	6
1. Harmonious passion	4.34 (1.43)	—					
2. Obsessive passion	2.10 (1.24)	.34***	—				
3. Mastery goals	4.91 (1.26)	.59***	.27***	—			
4. Performance-approach goals	3.95 (1.59)	.28***	.42***	.58***	—		
5. Performance-avoidance goals	3.76 (1.54)	−.07*	.34***	.17***	.46***	—	
6. Self-Growth-Contextual	5.09 (1.44)	.64***	.22***	.76***	.45***	.05	—
7. Self-Growth-Global	5.24 (1.36)	.47***	.08*	.50***	.27***	−.02	.58***

Note. $N = 817$.
* $p < .05$. *** $p < .001$.

Figure 3

Results of the Structural Equation Model of Study 2



Note. $N = 817$. Standardized path coefficients are presented. For clarity concerns, covariances between the error terms are not included in the figure. HP = harmonious passion; OP = obsessive passion; M = mastery goals; AP = performance-approach goals; AV = performance-avoidance goals; SC = Self-Growth-Contextual; SG = Self-Growth-Global.
* $p < .05$. *** $p < .001$.

of passion and the mediating role of achievement goals in changes in self-growth over time. The same hypotheses formulated in The Present Research section were tested for Study 3.

Method

Participants and Procedure

Workers were invited to complete a baseline questionnaire and a follow-up questionnaire over a 9-month interval via the Prolific platform. Of the 654 workers who participated at T1, 434 completed the follow-up questionnaire at T2 (66.36% response rate). The final sample included only the participants who completed both T1 and T2 questionnaires. These workers (40.89% women, $M_{age} = 39.82$ years, $SD = 10.43$) were predominantly from the United Kingdom and Canada. They worked on average 38.36 hr per week ($SD = 2.41$) and had been in their current job for an average of 7.26 years ($SD = 7.36$). They were employed across a wide range of industries (e.g., health care, sales, construction, and technology).

Measures

The questionnaire included the same scales as in Study 2. At T1, participants completed the Passion Scale for work (HP subscale $\alpha = .89$ and OP subscale $\alpha = .81$; Vallerand et al., 2003) and a 12-item version of the Achievement Goals Scale (mastery goals subscale $\alpha = .86$; performance-approach goals subscale $\alpha = .84$; and performance-avoidance subscale $\alpha = .87$; Elliot & Church, 1997) adapted to the work domain. They also completed the Self-Growth Scale at T1 (for both subscales $\alpha = .97$) and T2 (once more $\alpha = .97$ for both subscales), with the Self-Growth-Contextual subscale adapted for work as in Study 2.

Results and Discussion

Preliminary Analyses

Descriptive statistics and correlations among all variables are presented in Table 6. Multivariate analysis of variance conducted prior to the main analysis showed no significant differences between participants who only completed the baseline questionnaire and those who took part in both phases of the study, $F(7, 644) = 1.235$, $p = .281$, Wilks' $\Lambda = .99$; $\eta_p^2 = .01$. As mentioned above, only those who completed the questionnaire at both time points were included in the final sample. In addition, a look at Table 6 reveals that the Pearson correlations between HP and OP on the one hand, and the two types of self-growth, on the other, replicated the relationships obtained in Studies 1 and 2.

Main Analyses

A SEM was performed with paths drawn according to the hypothesized model. That is, the two types of passion predict the three achievement goals that predict contextual self-growth. In turn,

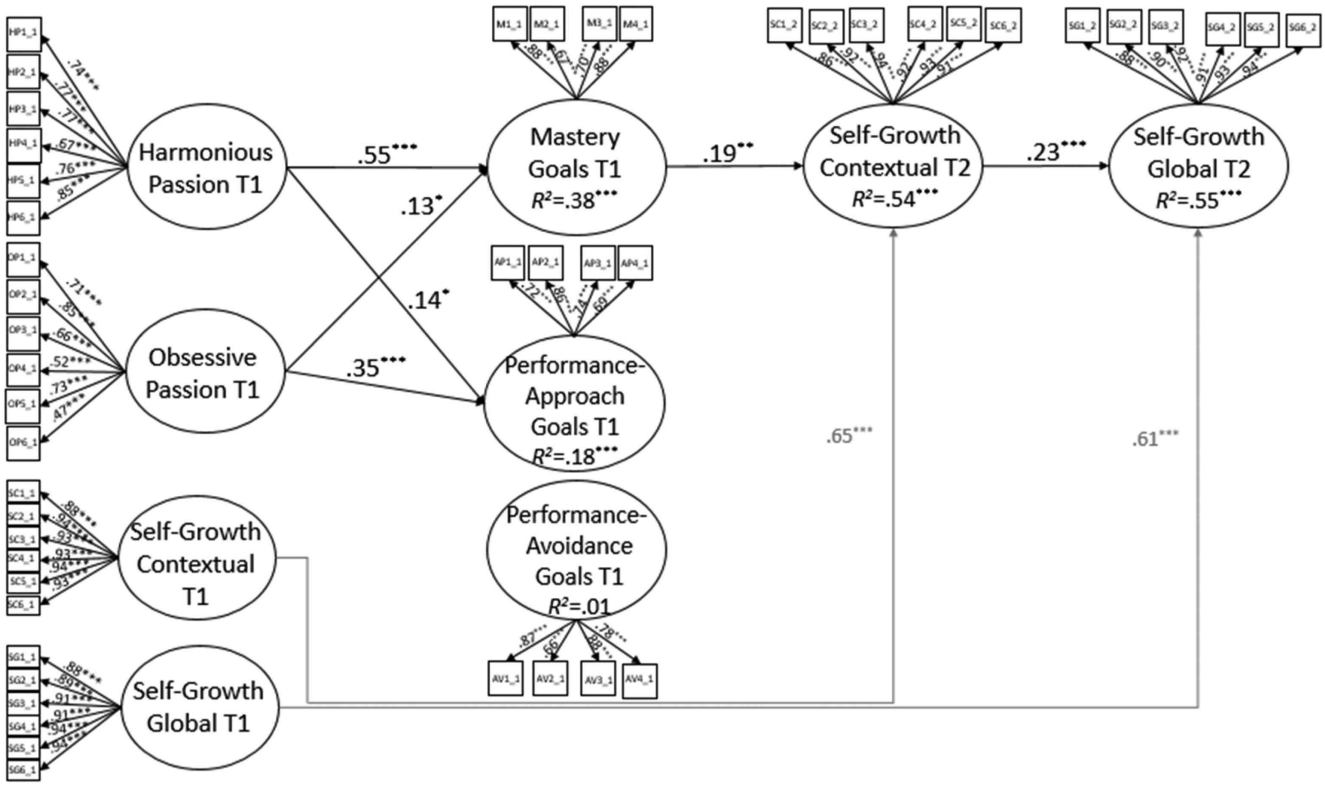
Table 6
Descriptive Statistics and Correlations for Study Variables (Study 3)

Variable	*M* (*SD*)	1	2	3	4	5	6	7	8
1. Harmonious passion T1	3.80 (1.32)	—							
2. Obsessive passion T1	1.93 (0.96)	.30***	—						
3. Mastery goals T1	4.41 (1.33)	.51***	.30***	—					
4. Performance-app goals T1	3.75 (1.45)	.21***	.33***	.50***	—				
5. Performance-av goals T1	3.20 (1.54)	−.02	.15**	−.12*	.31***	—			
6. Self-Growth-Contextual T1	4.72 (1.49)	.52***	.20***	.64***	.35***	−.06	—		
7. Self-Growth-Global T1	4.44 (1.48)	.44***	.02	.43***	.22***	−.06	.55***	—	
8. Self-Growth-Contextual T2	4.63 (1.45)	.46***	.20***	.57***	.31***	−.03	.72***	.49***	—
9. Self-Growth-Global T2	4.49 (1.50)	.43***	.05	.41***	.19***	−.03	.50***	.71***	.53***

Note. $N = 434$. App = approach; av = avoidance; T1 = Time 1; T2 = Time 2.
* $p < .05$. ** $p < .01$. *** $p < .001$.

contextual self-growth predicts global self-growth, controlling for self-growth at T1. Covariances among the exogenous variables (e.g., HP, OP, and self-growth at T1) and among the error terms of the endogenous variables (achievement goals) were estimated. The results showed that the model had a good fit to the data, $\chi^2(1066) = 2{,}318.34$, $p < .001$, RMSEA = .05 [.05, .06], CFI = .93, TLI = .92, SRMR = .09. The standardized solutions are presented in Figure 4 (only significant paths are displayed). HP for work was positively associated with mastery goals ($\beta = .55$, $p < .001$) and performance-approach goals ($\beta = .14$, $p = .030$), and was unrelated to performance-avoidance goals ($\beta = -.08$, $p = .184$), all at T1. Conversely, OP for work at T1 was positively associated with mastery goals ($\beta = .13$, $p = .015$), performance-approach goals ($\beta = .35$, $p < .001$), and unrelated to performance-avoidance goals ($\beta = .12$, $p = .082$), all at T1. In turn, mastery goals at T1 were positively related to Self-Growth-Contextual ($\beta = .19$,

Figure 4
Results of the Structural Equation Model of Study 3



Note. $N = 434$. Standardized path coefficients are presented. For clarity concerns, covariances between the error terms and correlations between T1 and T2 self-growth items are not included in the figure. HP = harmonious passion; OP = obsessive passion; M = mastery goals; AP = performance-approach goals; AV = performance-avoidance goals; SC = Self-Growth-Contextual; SG = Self-Growth-Global; T1 = Time 1; T2 = Time 2.
* $p < .05$. ** $p < .01$. *** $p < .001$.

$p = .006$), which was positively related to Self-Growth-Global ($\beta = .23$, $p = .001$) at T2, 9 months later. In contrast, performance-approach and performance-avoidance goals at T1 were unrelated to Self-Growth-Contextual at T2 (performance-approach $\beta = -.02$, $p = .755$; performance-avoidance $\beta = .05$, $p = .302$). These findings were obtained while controlling for the relationships between self-growth at T1 and T2 (Self-Growth-Contextual T1 on T2 $\beta = .65$, $p < .001$; Self-Growth-Global T1 on T2 $\beta = .61$, $p < .001$).

Using bootstrapping (5,000 samples, with 95% bias-corrected CI) and the maximum likelihood estimator, the examination of unstandardized indirect effects revealed that mastery goals mediated the relationships between HP and Self-Growth-Contextual ($b = 0.12$, 95% CI [0.04, 0.23], $p = .008$) and Self-Growth-Global ($b = 0.03$, 95% CI [0.01, 0.06], $p = .024$) via Self-Growth-Contextual. In contrast, mastery goals did not mediate the relationships between OP and Self-Growth-Contextual ($b = 0.03$, 95% CI [0.01, 0.08], $p = .079$) and the relationship between OP and Self-Growth-Global via Self-Growth-Contextual ($b = 0.01$, 95% CI [0.00, 0.02], $p = .098$).

Overall, the results of Study 3 provided support for H4 to H7 (with the exception of H6b and H7b, which were partially supported). Specifically, HP predicted mastery goals (H6a) that, in turn, were positively associated with increases in contextual self-growth from T1 to T2 (H7a). As expected, OP was positively associated with mastery goals (although less so than HP; H6a) and with performance-approach goals (H6b). Contrary to hypotheses, OP was not significantly related to performance-avoidance goals. Only mastery goals predicted increases in contextual self-growth (H7a), while performance-approach and performance-avoidance goals did not predict changes in this variable (no support for H7b). Finally, as in Studies 1 and 2, in Study 3, contextual self-growth positively predicted increases in global self-growth over the 9-month period, supporting H4. It is important to note that, over time, HP indirectly led to increases in global self-growth through mastery goals and contextual self-growth, as the indirect effects were significant. OP did not indirectly predict increases in either type of self-growth. Therefore, overall H5 was supported. These results suggest that HP, more so than OP, contributes to increases in both contextual and global self-growth over time through the adoption of mastery goals.

General Discussion

The overall purpose of the present research was to test our perspective on how self-growth takes place. There were four specific goals to this research. First, we sought to validate a measure of self-growth as the perception that one's self is still growing and expanding, both within the activity one is passionate about (contextual self-growth) and as a person as a whole (global self-growth). Second, we also aimed to examine the relationship between these two types of self-growth, in which contextual self-growth predicts global self-growth. Third, we wanted to investigate the role of passion as a determinant of contextual self-growth and, ultimately, of global self-growth. Finally, fourth, we wished to investigate whether achievement goals, particularly mastery goals, mediate the relationships between passion and self-growth. It was hypothesized that the structural and convergent/divergent validity, as well as the reliability of the Self-Growth Scale, would be empirically supported (H1, H2, and H3). Furthermore, contextual self-growth was expected to positively predict global self-growth (H4). In addition, it was hypothesized that HP, more strongly than OP, would lead to contextual self-growth (H5), and that this relationship would be mediated by mastery goals (H6a and H7a). Furthermore, OP was also expected to positively predict performance-approach and performance-avoidance goals, while HP was expected to be positively related to performance-approach goals, but to be negatively or unrelated to performance-avoidance goals (H6b). Performance-approach goals were expected to be weakly and positively related to contextual growth, while performance-avoidance goals were expected to be negatively related to it (H7b).

Overall, the results of the three studies provided strong support for almost all of our hypotheses. First, there was strong empirical support for the Self-Growth Scale that assesses contextual and global self-growth. The results of the factor analyses (EFA and CFA) and the convergent/divergent correlations of Study 1, the measurement models of the SEM and the reliability analyses of all three studies clearly supported the validity and reliability of the Self-Growth Scale and, of course, its bifactorial nature. Second, as expected, the Pearson correlations in all three studies (and the SEM results in Study 1) showed that HP was more strongly related to both types of self-growth than OP. Third, as hypothesized, mastery goals mediated the relationships between HP and contextual self-growth, and ultimately with global self-growth, in Studies 2 and 3. However, mediation did not take place for OP with mastery goals in both Studies 2 and 3. Of interest, a positive mediation took place between OP and contextual self-growth through performance-approach goals in Study 2, but not in Study 3. Finally, a negative mediation effect between OP and self-growth through performance-avoidance goals was expected and observed in Study 2, but not in Study 3. Conversely, a protective mediation took place between HP and contextual self-growth through performance-avoidance goals in Study 2, but not in Study 3. Finally, a substantial portion of variance (R^2) was explained in mediators and outcomes in all studies, suggesting the significance of the model. These overall findings lead to a number of conclusions.

On the Nature of Self-Growth

Self-growth is a very popular concept in psychology. It has been used in a variety of ways, ranging from needs (Maslow, 1943) to mindsets (Dweck, 2012), values (Kasser & Ryan, 1996), and goals (e.g., Elliot, 1997; Martin, 2006). However, much less has been written about self-growth as an outcome, where individuals feel they are continuously growing both within a given activity that one is passionate about and globally as a person. A first conclusion from the present research is that there is support for such a dual perspective on self-growth. Results of the EFA and CFA of Study 1 and the measurement models of the SEM of Studies 2 and 3 clearly showed that self-growth can indeed be conceptualized in this fashion. Such a conceptualization of the two types of self-growth is thus important and aligns with the views of some of the giants in the field (e.g., James, 1890; Markus & Nurius, 1986; Maslow, 1943) who believed that self-growth takes place in specific activities that people really love, care about, and that are related to their identity—in our views, that people are passionate about because these represent important dimensions of self and identity (Vallerand, 2015). Empirical support for the existence of these two dimensions of contextual and global self-growth refines our understanding of self-growth. Such a perspective of self-growth is consistent with other models of the self (e.g., Marsh, 1990) and motivation (e.g., Elliot & Church, 1997; Vallerand, 1997) that favor a

multidimensional/hierarchical approach. The present research focused mostly on self-growth in the contexts of work (Studies 2 and 3) and in education (Study 1, Sample 1B). Clearly, self-growth should matter for other types of activities and contexts such as relationships and leisure. Future research on the relative role of contextual self-growth in these life spheres in the development of global self-worth would appear important.

The present findings showed that contextual self-growth at work positively predicted global self-growth in Studies 2 and 3 (including increases over a 9-month period in Study 3). In addition, contextual self-growth in a variety of activities also positively predicted global self-growth in Study 1 (Sample 1A). These results are in line with past research revealing that self-development takes place from the specific to the general (Harter, 2008). These findings on the positive relationship between the two types of self-growth point to some interesting future research directions. Thus, should one expect the positive relationship between the two types of self-growth to always take place? For example, what happens when one comes to develop some negative self-attributes in a given context such as becoming increasingly immoral at work? For instance, Markus and Nurius (1986) showed that "feared selves" can have a negative impact on psychological functioning. Can such newly developed negative contextual self-attributes have a negative impact on global self-growth and stall or even reverse self-growth? Future research is necessary to address this issue.

A second conclusion from the present findings is that there is support for our perspective that to fully conceptualize self-growth, we should consider the fact that one is still growing, that one keeps on progressing. For instance, having achieved self-growth in the past does not ensure that self-growth will be forthcoming, and to continue to thrive, the self must keep on growing. Thus, a scale assessing perceptions of self-growth as an outcome should then measure people's perceptions that the self is currently growing. This is what the Self-Growth Scale does. The fact that the three studies of this research showed that such an assessment was found to be reliable and validly associated with HP and OP and mastery goals, as expected, provides support for such a perspective on self-growth. In addition, by assessing the fact that self-growth is continuing, we ensure that some level of self-growth has been achieved at least in the near past, that one is progressing in the present, and further, that self-growth should keep on taking place at least in the near future. Thus, the process of self-growth is consistent across all temporal processes of the past, present, and future. We feel that such a process is in line with the organismic approach that conceives of self-growth as a powerful force that is ongoing (Maslow, 1943; Rogers, 1962, 1963; Ryan & Deci, 2017).

The above perspective on the continuity of self-growth (feeling that the self is still progressing) leads to some interesting directions for future research as pertains to the role of temporal processes in self-continuity (Sedikides et al., 2023). In line with the above, experiencing ongoing self-growth should foster expectations of optimism for future self-growth and high levels of well-being. This does not necessarily mean that past self-growth is unimportant. Rather, past self-growth represents a solid base that should propel the individual to seek new challenges in a given context, both in the immediate present and the future, thereby ensuring that self-growth does not stagnate. Future research on the role of self-growth, both at the contextual and global level, and temporal processes in self-continuity would appear important.

Passion and Mastery Goals as Determinants of Self-Growth

One of the goals of this research was to test an important premise of the DMP (Vallerand, 2015), namely that passion is a major driver of self-growth. The DMP posits that people seek challenges, attempt to overcome them, and in doing so, grow in self-complexity, both within activities that we are passionate about and, in turn, globally. This is because passion, among other things, energizes people to enthusiastically engage in the activity they are passionate about and, in the process, learn not only about the activity but also about themselves within this activity, thereby fostering self-growth both at the contextual and global levels. However, not all passions are equal. Thus, HP is hypothesized to foster contextual self-growth, and in turn, global self-growth, much more so than OP because it gives access to more adaptive processes, such as mastery goals, that promote self-growth. In addition, HP may even protect one against the adoption of less adaptive goals such as performance-avoidance goals, and the losses in self-growth that result from such goals.

The results of the Pearson correlations in all three studies and those of the SEM analyses in all three studies provided strong support for this analysis. The Pearson correlations between HP and contextual self-growth across the three studies varied from .46 to .64, whereas those with OP varied from .20 to .28. The difference between the correlations of the two types of passion and global self-growth was even more important, ranging from .43 to .55 for HP, and from .05 ($p >$ .05) to .14 for OP. These correlational results were replicated in the SEM analysis involving passion and self-growth in Study 1. However, of major importance were the findings of Studies 2 and 3 that largely supported the proposed mediational analysis, showing that the relationship between HP and contextual self-growth, and ultimately global self-growth, was mediated by mastery goals (Elliot, 1997). One is reminded that the full mediation from HP to global self-growth was significant in the 9-month prospective study (Study 3). Such was not the case with respect to OP, as it did not lead to self-growth via mastery goals. Hence, as hypothesized, HP plays a key role in fostering changes in self-growth at the personal level, through its relationship with mastery goals and self-growth at the contextual level (i.e., at work). Thus, how one engages in a key activity, such as work, out of HP and with adaptive mastery goals goes a long way in determining how one develops both as a worker and an individual. In addition, these findings are in line with past research on Elliot's (1997) perspective on the role of mastery goals in adaptive outcomes (e.g., Guo et al., 2023).

Of interest is the fact that some limited self-growth did take place through the adoption of performance-approach goals. However, such a mediation only took place for OP (and not HP) and only in Study 2, but not in the prospective Study 3. Future research is necessary to further probe how adopting such competitive goals (performing better than others) in a key area of one's life such as work may foster self-growth. It is possible that by trying to outperform others, people learn some psychological skills, allowing them to experience some self-growth. As expected, performance-avoidance goals were negatively related to contextual self-growth in Study 2. There was full mediation from OP to contextual and global self-growth in Study 2. However, such a mediation was not obtained in Study 3, where decreases in self-growth over time were not significant. Although the maladaptive effects of performance-avoidance on a variety of outcomes are well established (e.g., Guo et al., 2023), such a negative role still has to be firmly established with respect to drops

in self-growth over time. Finally, a word is in order regarding the protective function that HP served in Study 2 with both types of self-growth through its negative relationship with performance-avoidance goals. Such protection may come in handy, especially in highly competitive contexts such as high-level work, music, and sports environments. However, the findings of Study 2 on this protective effect were not replicated in the longitudinal Study 3. Future research should further test the robustness of this interesting protective effect.

Limitations

The present research shows some limitations. First, this research relied mostly on self-report data. Thus, future research using other types of measures such as objective measures (e.g., Vallerand et al., 2023) and informant reports (e.g., Carbonneau et al., 2016) is encouraged. Second, whereas Study 3 used a prospective design looking at changes in self-growth over a 9-month period, an experimental design involving passion and self-growth was not used. Thus, in line with past studies on the induction of passion (e.g., Bélanger et al., 2013; Lafrenière et al., 2013), future research should use experimental designs to test the causal effects of passion on the two types of self-growth. Third, all participants were recruited via online platforms. Although we used approved MTurk participants, their equivalents on the Prolific platform, and attention check questions, future research should replicate the present findings with more traditional participants. Finally, the participants in our research were all from Western countries. Although past research on passion has shown the validity of the DMP in a variety of cultures and countries such as China, Russia, Japan, and others (see Vallerand & Rahimi, 2022), such research did not deal with self-growth. Future research should do so.

In sum, the present research is the first to document the existence of two types of self-growth, contextual and global, defined as an outcome. Furthermore, a major finding of this research is that one sure way to experience self-growth at the personal level is to have a HP for a meaningful activity, such as work, because it fosters mastery goals that, in turn, lead to changes at the contextual (or work) level, and ultimately, at the global level. Future research on this self-growth process is encouraged as it could lead to important inroads in our understanding of how the self evolves and contributes to optimal functioning.

References

Anderson, B. K., Meyer, J. P., Vaters, C., & Espinoza, J. A. (2020). Measuring personal growth and development in context: Evidence of validity in educational and work settings. *Journal of Happiness Studies*, *21*(6), 2141–2167. https://doi.org/10.1007/s10902-019-00176-w

Bauer, J. J., Park, S. W., Montoya, R. M., & Wayment, H. A. (2015). Growth motivation toward two paths of eudaimonic self-development. *Journal of Happiness Studies*, *16*(1), 185–210. https://doi.org/10.1007/s10902-014-9504-9

Bélanger, J., Lafrenière, M.-A., Vallerand, R. J., & Kruglanski, A. W. (2013). When passion makes the heart grow colder: The role of passion in alternative goal suppression. *Journal of Personality and Social Psychology*, *104*(1), 126–147. https://doi.org/10.1037/a0029679

Blanchard, C. M., Mask, L., Vallerand, R. J., de la Sablonnière, R., & Provencher, P. (2007). Reciprocal relationships between contextual and situational motivation in a sport setting. *Psychology of Sport and Exercise*, *8*(5), 854–873. https://doi.org/10.1016/j.psychsport.2007.03.004

Bonneville-Roussy, A., Lavigne, G. L., & Vallerand, R. J. (2011). When passion leads to excellence: The case of musicians. *Psychology of Music*, *39*(1), 123–138. https://doi.org/10.1177/0305735609352441

Bonneville-Roussy, A., & Vallerand, R. J. (2018). The role of passion in the development of expertise: A conceptual model. In D. Z. Hambrick, G. Campitelli, & B. N. Macnamara (Eds.), *The science of expertise: Behavioral, neural, and genetic approaches to complex skill* (pp. 376–397). Routledge.

Bostwick, K. C., Burns, E. C., Martin, A. J., Collie, R. J., & Durksen, T. L. (2025). A bifactor exploratory structural equation model of students' growth-focused motivation. *The Journal of Experimental Education*, *93*(2), 340–362. https://doi.org/10.1080/00220973.2024.2329105

Bouizegarene, N., Bourdeau, S., Leduc, C., Gousse-Lessard, A.-S., Houlfort, N., & Vallerand, R. J. (2018). We are our passions: The role of identity processes in harmonious and obsessive passion and links to optimal functioning in society. *Self and Identity*, *17*(1), 56–74. https://doi.org/10.1080/15298868.2017.1321038

Carbonneau, N., Vallerand, R. J., Lavigne, G. L., & Paquet, Y. (2016). "I'm not the same person since I met you": The role of romantic passion in how people change when they get involved in a romantic relationship. *Motivation and Emotion*, *40*(1), 101–117. https://doi.org/10.1007/s11031-015-9512-z

Carpentier, J., Mageau, G., & Vallerand, R. J. (2012). Ruminations and flow: Why do people with a more harmonious passion experience higher well-being? *Journal of Happiness Studies*, *13*(3), 501–518. https://doi.org/10.1007/s10902-011-9276-4

Chandler, J., & Shapiro, D. (2016). Conducting clinical research using crowdsourced convenience samples. *Annual Review of Clinical Psychology*, *12*(1), 53–81. https://doi.org/10.1146/annurev-clinpsy-021815-093623

Chénard-Poirier, L. A., Vallerand, R. J., Verner-Filion, J., Houlfort, N., Forest, J., & Rinfret, N. (2023). Optimal functioning in society: A conceptualization, a measure, and a look at determinants. *Journal of Happiness Studies*, *24*(2), 857–892. https://doi.org/10.1007/s10902-023-00617-7

Chichekian, T., & Vallerand, R. J. (2022). Passion for science and the pursuit of scientific studies: The mediating role of rigid and flexible persistence and activity involvement. *Learning and Individual Differences*, *93*, Article 102104. https://doi.org/10.1016/j.lindif.2021.102104

Curran, T., Hill, A. P., Appleton, P. R., Vallerand, R. J., & Standage, M. (2015). The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes. *Motivation and Emotion*, *39*(5), 631–655. https://doi.org/10.1007/s11031-015-9503-0

Deci, E. L. (1975). *Intrinsic motivation*. Plenum Press.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.

Dweck, C. S. (2012). Mindsets and human nature: Promoting change in the Middle East, the schoolyard, the racial divide, and willpower. *American Psychologist*, *67*(8), 614–622. https://doi.org/10.1037/a0029783

Elliot, A. J. (1997). Integrating the "classic" and "contemporary" approaches to achievement motivation: A hierarchical model of approach and avoidance achievement motivation. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 143–179). JAI Press.

Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, *72*(1), 218–232. https://doi.org/10.1037/0022-3514.72.1.218

Enders, C. K. (2022). *Applied missing data analysis* (2nd ed.). Guilford.

Gordon, C. L., & Luo, S. (2011). The Personal Expansion Questionnaire: Measuring one's tendency to expand through novelty and augmentation. *Personality and Individual Differences*, *51*(2), 89–94. https://doi.org/10.1016/j.paid.2011.03.015

Guay, F., Marsh, H. W., & Boivin, M. (2003). Academic self-concept and academic achievement: Developmental perspectives on their causal ordering. *Journal of Educational Psychology*, *95*(1), 124–136. https://doi.org/10.1037/0022-0663.95.1.124

Guo, J., Hu, X., Elliot, A. J., Marsh, H. W., Murayama, K., Basarkod, G., Parker, P. D., & Dicke, T. (2023). Mastery-approach goals: A large-scale cross-cultural analysis of antecedents and consequences. *Journal of Personality and Social Psychology*, *125*(2), 397–420. https://doi.org/10.1037/pspp0000436

Harter, S. (2008). The developing self. In W. Damon & R. M. Lerner (Eds.), *Child and adolescent development: An advanced course* (pp. 216–262). John Wiley & Sons.

Hauser, D. J., Moss, A. J., Rosenzweig, C., Jaffe, S. N., Robinson, J., & Litman, L. (2023). Evaluating CloudResearch's Approved Group as a solution for problematic data quality on MTurk. *Behavior Research Methods*, *55*(8), 3953–3964. https://doi.org/10.3758/s13428-022-01999-x

Hope, N. H., Milyavskaya, M., Holding, A. C., & Koestner, R. (2014). Self-growth in the college years: Increased importance of intrinsic values predicts resolution of identity and intimacy stages. *Social Psychological and Personality Science*, *5*(6), 705–712. https://doi.org/10.1177/1948550613516875

Jain, C., Apple, D. K., & Ellis, W. (2015). What is self-growth. *International Journal of Process Education*, *7*(1), 41–52.

Jain, C., Apple, D. K., Ellis, W., Leise, C., & Leasure, D. (2020). Bringing self-growth theory to practice using the self-growth methodology. *International Journal of Process Education*, *11*(1), 73–100.

James, W. (1890). *The principles of psychology, Vol I.* Henry Holt and Co. https://doi.org/10.1037/10538-000

Kashdan, T. B., Disabato, D. J., Goodman, F. R., & McKnight, P. E. (2020). The Five-Dimensional Curiosity Scale Revised (5DCR): Briefer subscales while separating overt and covert social curiosity. *Personality and Individual Differences*, *157*, Article 109836. https://doi.org/10.1016/j.paid.2020.109836

Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, *65*(2), 410–422. https://doi.org/10.1037/0022-3514.65.2.410

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, *22*(3), 280–287. https://doi.org/10.1177/0146167296223006

Kleine, A. K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta-analysis. *Journal of Organizational Behavior*, *40*(9-10), 973–999. https://doi.org/10.1002/job.2375

Kruglanski, A. W., Szumowska, E., Kopetz, C. H., Vallerand, R. J., & Pierro, A. (2021). On the psychology of extremism: How imbalance breeds intemperance. *Psychological Review*, *128*(2), 264–289. https://doi.org/10.1037/rev0000260

Lafrenière, M.-A. K., Vallerand, R. J., & Sedikides, C. (2013). On the relation between self-enhancement and life satisfaction: The moderating role of passion. *Self and Identity*, *12*(6), 597–609. https://doi.org/10.1080/15298868.2012.713558

Lalande, D., Vallerand, R. J., Lafrenière, M. A. K., Verner-Filion, J., Laurent, F. A., Forest, J., & Paquet, Y. (2017). Obsessive passion: A compensatory response to unsatisfied needs. *Journal of Personality*, *85*(2), 163–178. https://doi.org/10.1111/jopy.12229

Lavigne, G. L., Forest, J., & Crevier-Braud, L. (2012). Passion at work and burnout: A two-study test of the mediating role of flow experiences. *European Journal of Work and Organizational Psychology*, *21*(4), 518–546. https://doi.org/10.1080/1359432X.2011.578390

Lavigne, G. L., & Vallerand, R. J. (2010). The dynamic processes of influence between contextual and situational motivation: A test of the hierarchical model in a science education setting. *Journal of Applied Social Psychology*, *40*(9), 2343–2359. https://doi.org/10.1111/j.1559-1816.2010.00661.x

Lopes, M., & Vallerand, R. J. (2020). The role of passion, need satisfaction, and conflict in athletes' perceptions of burnout. *Psychology of Sport and Exercise*, *48*, Article 101674. https://doi.org/10.1016/j.psychsport.2020.101674

Mageau, G. A., & Vallerand, R. J. (2007). The moderating effect of passion on the relation between activity engagement and positive affect. *Motivation and Emotion*, *31*(4), 312–321. https://doi.org/10.1007/s11031-007-9071-z

Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S.-J., Lacaille, N., Bouffard, T., & Koestner, R. (2009). On the development of harmonious and obsessive passion: The role of autonomy support, activity specialization, and identification with the activity. *Journal of Personality*, *77*(3), 601–646. https://doi.org/10.1111/j.1467-6494.2009.00559.x

Mansbach, W. E., Mace, R. A., & Clark, K. M. (2015). The Brief Anxiety and Depression Scale (BADS): A new instrument for detecting anxiety and depression in long-term care residents. *International Psychogeriatrics*, *27*(4), 673–681. https://doi.org/10.1017/S1041610214002397

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*(9), 954–969. https://doi.org/10.1037/0003-066X.41.9.954

Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, *38*(1), 299–337. https://doi.org/10.1146/annurev.ps.38.020187.001503

Marsh, H. W. (1990). The structure of academic self-concept: The Marsh/Shavelson model. *Journal of Educational Psychology*, *82*(4), 623–636. https://doi.org/10.1037/0022-0663.82.4.623

Marsh, H. W., Vallerand, R. J., Lafrenière, M. A. K., Parker, P., Morin, A. J. S., Carbonneau, N., Jowett, S., Bureau, J. S., Fernet, C., Guay, F., Abduljabbar, A. S., & Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and languages. *Psychological Assessment*, *25*(3), 796–809. https://doi.org/10.1037/a0032573

Martin, A. J. (2006). Personal bests (PBs): A proposed multidimensional model and empirical analysis. *British Journal of Educational Psychology*, *76*(4), 803–825. https://doi.org/10.1348/000709905X55389

Martin, A. J., Burns, E. C., Collie, R. J., Bostwick, K. C., Flesken, A., & McCarthy, I. (2022). Growth goal setting in high school: A large-scale study of perceived instructional support, personal background attributes, and engagement outcomes. *Journal of Educational Psychology*, *114*(4), 752–771. https://doi.org/10.1037/edu0000682

Maslow, A. H. (1943). Dynamics of personality organization. I. *Psychological Review*, *50*(5), 514–539. https://doi.org/10.1037/h0062222

Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of Personality*, *22*(3), 326–347. https://doi.org/10.1111/j.1467-6494.1954.tb01136.x

Maslow, A. H. (1971). *Self-actualization*. Big Sur Recordings.

Maurer, M. M., Maurer, J., Hoff, E., & Daukantaitė, D. (2023). What is the process of personal growth? Introducing the Personal Growth Process Model. *New Ideas in Psychology*, *70*, Article 101024. https://doi.org/10.1016/j.newideapsych.2023.101024

Muthén, L. K., & Muthén, B. O. (1998–2017). *Mplus user's guide. Eighth Edition*.

Orosz, G., Vallerand, R. J., Bőthe, B., Tóth-Király, I., & Paskuj, B. (2016). On the correlates of passion for screen-based behaviors: The case of impulsivity and the problematic and non-problematic Facebook use and TV series watching. *Personality and Individual Differences*, *101*, 167–176. https://doi.org/10.1016/j.paid.2016.05.368

Orosz, G., Zsila, A., Vallerand, R. J., & Böthe, B. (2018). On the determinants and consequences of passion for playing Pokemon Go. *Frontiers in Psychology*, *9*, Article 316. https://doi.org/10.3389/fpsyg.2018.00316

Rogers, C. R. (1962). Toward becoming a fully functioning person. In A. W. Combs (Ed.), *Perceiving, behaving, becoming: A new focus for education* (pp. 21–33). National Education Association. https://doi.org/10.1037/14325-003

Rogers, C. R. (1963). Toward a science of the person. *Journal of Humanistic Psychology*, *3*(2), 72–92. https://doi.org/10.1177/002216786300300208

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.1521/978.14625/28806

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*(4), 719–727. https://doi.org/10.1037/0022-3514.69.4.719

Sedikides, C., Hong, E. K., & Wildschut, T. (2023). Self-continuity. *Annual Review of Psychology*, *74*(1), 333–361. https://doi.org/10.1146/annurev-psych-032420-032236

St-Cyr, J., Vallerand, R. J., & Chénard-Poirier, L. A. (2021). The role of passion and achievement goals in optimal functioning in sports. *International Journal of Environmental Research and Public Health*, *18*(17), Article 9023. https://doi.org/10.3390/ijerph18179023

St-Louis, A., Verner-Filion, J., Bergeron, C., & Vallerand, R. J. (2018). Passion and mindfulness: Accessing adaptive self-processes. *The Journal of Positive Psychology*, *13*(2), 155–164. https://doi.org/10.1080/17439760.2016.1245771

Su, R., Tay, L., & Diener, E. (2014). The development and validation of the Comprehensive Inventory of Thriving (CIT) and the Brief Inventory of Thriving (BIT). *Applied Psychology: Health and Well-Being*, *6*(3), 251–279. https://doi.org/10.1111/aphw.12027

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 271–360). Academic Press. https://doi.org/10.1016/s0065-2601(08)60019-2

Vallerand, R. J. (2010). On passion for life activities: The dualistic model of passion. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 42, pp. 97–193). Academic Press. https://doi.org/10.1016/s0065-2601(10)42003-1

Vallerand, R. J. (2013). Passion and optimal functioning in society: A eudaimonic perspective. In A. S. Waterman (Ed.), *The best within us: Positive psychology perspectives on eudaimonic functioning* (pp.183–206). APA Books. https://doi.org/10.1037/14092-010

Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199777600.001.0001

Vallerand, R. J. (2024). The power and perils of passion in the quest for self-growth and optimal functioning. *Canadian Psychology/Psychologie Canadienne*, *65*(2), 132–147. https://doi.org/10.1037/cap0000386

Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, *85*(4), 756–767. https://doi.org/10.1037/0022-3514.85.4.756

Vallerand, R. J., Chichekian, T., Verner-Filion, J., & Bélanger, J. J. (2023). The two faces of persistence: How harmonious and obsessive passion shape goal pursuit. *Motivation Science*, *9*(3), 175–192. https://doi.org/10.1037/mot0000303

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, *72*(5), 1161–1176. https://doi.org/10.1037/0022-3514.72.5.1161

Vallerand, R. J., & Houlfort, N. (Eds.) (2019). *Passion for work: Theory, research, and applications*. Oxford University Press. https://doi.org/10.1093/oso/9780190648626.001.0001

Vallerand, R. J., Mageau, G. A., Elliot, A., Dumais, A., Demers, M.-A., & Rousseau, F. L. (2008). Passion and performance attainment in sport. *Psychology of Sport and Exercise*, *9*(3), 373–392. https://doi.org/10.1016/j.psychsport.2007.05.003

Vallerand, R. J. & Paquette, V. (2021). On extreme behavior and outcomes: The Role of Harmonious and obsessive passion. In A. Kruglanski, C. Kopetz, & E. Szumowska (Eds.), *Handbook of the psychology of extremism* (pp. 66–95). Guilford.

Vallerand, R. J., & Rahimi, S. (2022). On the Passion Scale. In W. Ruch, A. B. Bakker, L. Tay, & F. Gander (Eds.), *Handbook of positive psychology assessment* (pp. 248–272). Hogrefe Publishing.

Vallerand, R. J., & Ratelle, C. F. (2002). Intrinsic and extrinsic motivation: A hierarchical model. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 37–63). University of Rochester Press.

Vallerand, R. J., Salvy, S. J., Mageau, G. A., Elliot, A. J., Denis, P., Grouzet, F. M. E., & Blanchard, C. B. (2007). On the role of passion in performance. *Journal of Personality*, *75*(3), 505–534. https://doi.org/10.1111/j.1467-6494.2007.00447.x

(*Appendix follows*)

Appendix

The Self-Growth Scale

Self-Growth-Contextual

The following items pertain to your work. Rate your degree of agreement with each of the following items, in relation to your work.

In general, in my work[a]…

1. I keep on progressing in my work.
2. I am continuously developing my skills in my work.
3. I am developing more completely in my work.
4. I am improving in my work.
5. I am expanding my skills and abilities in my work.
6. I am getting progressively better in my work.

Self-Growth-Global

The following items pertain to you as a person. Rate your degree of agreement with each of the following items.

1. I keep on developing as a person.
2. I am becoming a better person.
3. I progress in various areas of my life.
4. I develop myself a little bit more every day.
5. I progressively become a more complete person.
6. I am constantly improving as a person.

Note 1: The two subscales can be used alone or together in a questionnaire. When used in the same questionnaire, we recommend using the Self-Growth-Contextual subscale with questions dealing with the activity or context, and the Global subscale with the global outcomes. *Note 2*: The items are rated on a 7-point scale (1 = *do not agree at all* to 7 = *very strongly agree*).

[a] This is the Self-Growth Scale as used in Studies 2 and 3. Because these studies focused on the context of work, the items at the contextual level include the word "work." However, this word can be changed to another activity, life domain, or context as was done in Study 1—Sample 1A ("in your favorite activity") and Sample 1B ("in your studies").

Received November 18, 2024
Revision received September 9, 2025
Accepted November 18, 2025 ■