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On the Nature, Predictors, and Outcomes of Longitudinal Work Passion Profiles

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We have no conflicts of interest to disclose. All procedures performed in the current study involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments. Informed consent was obtained from all individual participants involved in the study.
The dataset used in this study can be obtained, upon reasonable request, from the corresponding author.
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Abstract

Based on the dualistic model of passion, this study relies on person-centered analyses to assess how harmonious and obsessive passion for work combine within specific profiles of employees. We also documented the stability of these profiles over time and their associations with theoretically-relevant predictors and outcomes, among a sample of 442 employees who completed a questionnaire twice over a period of three months. Finally, we examined whether these associations differed as a function of working remotely or onsite. Four profiles were identified and found to be highly stable over time: Harmonious Passion Dominant, Obsessive Passion Dominant, Mixed Passion-Average, and Low Passion. Work centrality, family orientation, and supervisor expectations regarding work-related messages were all found to be related to employees' likelihood of membership into the profiles in a way that generally supported our hypotheses. Moreover, and as expected, the Harmonious Passion Dominant profile was associated with the highest levels of work-family enrichment, family-work enrichment, and job and life satisfaction. Lastly, none of these associations differed among employees working onsite or remotely.

Keywords. Work passion; work-family interface; conflict and enrichment; person-centered approach; latent profile analyses; latent transition analyses; satisfaction; off-job time.

The dualistic model of passion (Vallerand, 2015; Vallerand & Houlfort, 2019) differentiates between harmonious (HP; a strong psychological investment in an activity [job] that is freely chosen by the individual) and obsessive passion (OP; strong psychological investment in an activity [job] that originates from internal or external contingencies). Although both types of passion have never been proposed as mutually exclusive (Gillet et al., 2022b), research has thus far primarily adopted a variable-centered approach, focused on the isolated, additive, or interactive associations between both types of passion, predictors, and outcomes assumed to generalize to the whole sample.

Fortunately, a *quadripartite* model (Schellenberg et al., 2019) has been recently proposed to guide investigations of the role played by distinctive combinations of HP and OP. Moreover, emerging person-centered research has started to investigate how HP and OP combine within distinct profiles of employees (Li et al., 2020). This approach should help us to achieve a clearer understanding of optimal work passion profiles for employees and their organizations. For instance, is high OP as problematic when combined with similarly high HP? Likewise, person-centered results are more naturally aligned with our tendency to think in terms of categories of employees (person-centered) rather associations among variables (variable-centered; Morin et al., 2011). Our findings are likely to have important implications for practice (e.g., by identifying actionable levers of intervention).

Unfortunately, investigations of this *quadripartite* model have been limited to non-work domains, with only two studies conducted among French (Gillet et al., 2022b) and Chinese (Li et al., 2020) employees. The longitudinal stability of these profiles also remains to be documented (e.g., Gillet et al., 2022b) and research still has to address whether these profiles have comparable implications for employees working remotely or onsite. In addition, all previous studies seeking to validate this model have relied on a variable-centered approach, with a single exception (Li et al., 2020). Variable-centered approaches assume that all participants come from the same population for which results can be summarized by a set of "average" parameters. In contrast, person-centered analyses seek to identify subpopulations of workers presenting qualitatively distinct configurations of HP and OP, such as those proposed in the *quadripartite* model of passion (Li et al., 2020). Moreover, this approach also makes it possible to determine how many employees are truly characterized by the four theoretical configurations highlighted in the *quadripartite* model, and whether additional profiles may be

identified based on moderate levels of HP and/or OP.

This research contributes to the extant literature in four important ways. First, we rely on a person-centered approach to identify subpopulations of employees characterized by various configurations of HP and OP, thus enabling us to provide some validity evidence for the propositions of the *quadripartite* model of passion (Schellenberg et al., 2019), as well as to consider the possible existence of additional work passion profiles not been highlighted in this model. Second, we also consider the extent to which these profiles (within-sample similarity) and individual profile membership (within-person stability) will remain stable over a three-month period (Sandrin et al., 2020). Third, we replicate and extend Li et al.'s (2020) findings by relying on a Western sample and considering predictors and outcomes not previously examined. Finally, we contribute to research by examining the unique work experiences of remote workers relative to that of onsite workers.

The four research questions guiding this study are: (a) Can distinct work passion profiles be identified, and are these profiles consistent with the predictions of the dualistic (Vallerand, 2015) and *quadripartite* (Schellenberg et al., 2019) models of passion and with previous research findings (Li et al., 2020)? (b) Will similar profiles be identified over time, and will employees retain a similar profile over time? (c) Will the strength and direction of the associations between work passion profiles, predictors, and outcomes align with theoretical expectations? (d) To which extent will the results to the three previous questions generalize to employees working remotely or onsite?

A Person-Centered Perspective on Work Passion

The dualistic model of passion (Vallerand, 2010, 2015) defines passion as a strong inclination toward a specific activity, such as one's work (Vallerand & Houlfort, 2019). Passionate workers invest a lot of time and efforts in their work, love their work, and consider it as central to their identity (Vallerand & Houlfort, 2003). Harmoniously passionate workers willingly engage in their work, whereas obsessively passionate workers feel an internal pressure to engage in the work that they love (Vallerand et al., 2003). For workers with high HP, work thus occupies an important, but not overpowering, place in their life. Their work passion can be in harmony with other facets of their life due in part to their ability to establish adaptive boundaries between work and other important life spheres (Vallerand & Houlfort, 2019). In contrast, workers with high OP experience an uncontrollable urge to work, which they see as both enjoyable and

important (Houlfort et al., 2018). As a result, these workers risk engaging in their work with a rigid persistence, leading them to experience conflicts with other spheres of their life due to their inability to establish proper boundaries between their work and other life domains (Vallerand & Houlfort, 2019).

HP and OP lie on two separate continua, suggesting that some may simultaneously experience high OP and HP, while others may experience only one, or neither, form of passion (Vallerand, 2015). The combined effects of HP and OP have been examined based on the *quadripartite* model of passion (Schellenberg et al., 2019), which differentiates four combinations: Pure OP (low HP; high OP), Pure HP (high HP; low OP), Mixed Passion (high HP; high OP), and Non-Passion (low HP; low OP). This representation highlights the need to move beyond the examination of independent effects to consider their joint role. Thus, is it better to display no passion (i.e., Non-Passion) than high OP (i.e., Pure OP)? Are workers protected against the harm of high OP when displaying high HP (i.e., Mixed Passion vs Pure OP)? Is it always better to display high HP coupled with low OP (i.e., Pure HP), or are there situations in which it is more adaptive to also display high OP (i.e., Mixed Passion)?

Li et al. (2020) identified three profiles among two convenience samples of Chinese employees: (1) Mixed Passion (high HP and OP); (2) HP Dominant (moderate HP and low OP); and (3) OP Dominant (low HP and moderate OP). Our study seeks, in part, to provide a longitudinal extension of Li et al.'s (2020) results among a diversified sample of employees. From the theoretical perspective of the *quadripartite* model, we expect that:

Hypothesis 1. At least four profiles will be identified. Some of these profiles will be characterized by matching (i.e., Low Passion and Mixed Passion) whereas others will be characterized by different (i.e., HP Dominant and OP Dominant) levels of HP and OP.

A Longitudinal Person-Centered Perspective

The present study assesses the extent to which the identified work passion profiles remain stable (or fluctuate) over a three-month period. As others (Birkeland & Nerstad, 2016; Birkeland et al., 2018), we expected this time lag to be suitable because it goes beyond daily fluctuations (Carbonneau & Vallerand, 2013), while being short enough to capture changes that could not be reflected in longer time spans (Fernet et al., 2014). Two distinct forms of longitudinal stability should be considered (Huyghebaert-Zouaghi et al., 2020; Sandrin et al., 2020). Within-sample stability is related to the

nature of the profiles, which could change over time, whereas within-person stability, is related to changes in employees' correspondence to specific profiles over time (Gillet et al., 2019; Morin et al., 2016). These indicators of stability are descriptive, rather than theoretical. Like tests of measurement invariance (Morin et al., 2016), they concern the generalizability of our solution over time as well as the extent to which employees retain the same profile over time.

So far, research on work passion profiles (Li et al., 2020) or relying on the *quadripartite* model (Gillet et al., 2022b; Schellenberg et al., 2021a, 2021b) has been largely cross-sectional, precluding tests of profile stability. Nevertheless, variable-centered studies (Birkeland & Nerstad, 2016; Birkeland et al., 2018) revealed moderately high stability in HP ($r =.70$ to $.71$) and OP ($r = .75$ to $.77$) ratings over three months, consistent with stability and occasional change. Fernet et al. (2014) reported slightly lower estimates of rank-order stability ($r = .66$ for HP and $r = .68$ for OP) over a one-year interval, consistent with the idea that work passion is more stable over a short period of time (Vallerand, 2015). These observations suggest that:

> **Hypothesis 2.** The work passion profiles will display evidence of configural, structural, dispersion, and distribution within-sample similarity.

> **Hypothesis 3.** The work passion profiles will display a moderate ($\geq 50\%$) to high ($\geq 65\%$) level of within-person stability.

Predictors of Profile Membership

We consider the role of work centrality, family orientation, and supervisor expectations regarding work-related messages as predictors of the work passion profiles. These predictors are likely to play a role in driving employees to allocate —willingly or not— more or less of their energy and resources to their work (Hobfoll, 2011), and can be theoretically expected to predict membership into specific work passion profiles (Vallerand & Houlfort, 2019).

Work centrality. Work centrality, defined as employees' beliefs regarding the central importance of work in their own identity (Paullay et al., 1994), has been previously shown to be associated with higher HP and OP (Huyghebaert-Zouaghi et al., 2022). Likewise, positive associations have been found between workaholism (as an extreme form of work centrality) and HP and OP (Birkeland & Buch, 2015; Tóth-Király et al., 2021). However, both associations are stronger for OP than HP. To

understand these associations, we need to consider the duality of work centrality as a set of beliefs that can decrease (due to high work investment) and increase (due to high work satisfaction and commitment) employees' personal resources. On the one hand, employees who see their work as central to their identity devote a lot of time and effort to it. Yet, the resources available to support this intense investment for controlled reasons (Gillet et al., 2017b) are limited over time (Hobfoll, 2011), and eventually become unavailable to support other life domains. Moreover, these employees still feel restless when not at work, and experience difficulties withdrawing from work during off-job time. In failing to stop thinking about work, they often create more work for themselves, which may lead them to experience disappointment and frustration related to their work but also to their life in general (Gillet et al., 2021). In sum, these employees expand substantial time and effort in their work role at the expense of their family life, face difficulties in disengaging from work, experience negative mood states when prevented from working, and remain preoccupied with their work outside of the work context (Gillet et al., 2017b). These consequences of work centrality are defining characteristics of OP (Vallerand, 2015), suggesting that experiencing the former may lead to the latter. On the other hand, Bakker et al. (2019) have positioned work centrality as a core resource (i.e., a resource which facilitates the mobilization of other resources; Thoits, 1994). Working is an important part of life to which people dedicate a lot of time. Work-centered employees may build up, or accumulate, work-related resources as a result of the importance they ascribe to their work (e.g., more positive mood, greater knowledge; Mannheim et al., 1997). As these work-related resources accumulate, they may become available to support them (Hobfoll, 2011). They may thus find fulfillment and enjoyment in their work role, find their work valuable and meaningful, and consider it to be part of their identity, which represents the core of HP (Tóth-Király et al., 2021). We thus propose that:

Hypothesis 4. Work centrality will be positively associated with membership into the Mixed
Passion, HP Dominant, and OP Dominant profiles relative to the Low Passion one.

Family orientation. Individuals striving to achieve a balanced allocation of their resources between their personal/familial and professional lives are considered to have a high family orientation, defined as "the degree to which one attaches importance to family needs relative to one's career role" (Hall et al., 2013, p. 541). These individuals allocate resources to their family while being

engaged in their work, and prioritize the needs of their family when making career decisions (Hall et al., 2013). Family orientation is thus incompatible with OP (Vallerand, 2015). In contrast, HP far more rarely interferes with other life domains (e.g., family), and is more likely to be in harmony with these other domains (Vallerand & Houlfort, 2019). For these reasons, family orientation should be positively associated with HP and negatively associated with OP. Alternatively, employees with a high family orientation invest more of their personal resources in nonwork activities, making them more likely to find themselves in a loss spiral of resource depletion when work is considered (Hobfoll, 2011). This lack of resources to allocate to work is likely to decrease their passion for work, particularly OP which demands more resources (Vallerand, 2015). We thus suggest that:

>*Hypothesis 5.* Family orientation will be associated with membership into the HP Dominant and Low Passion profiles relative to the OP Dominant one.

>*Supervisor expectations regarding work-related messages.* Modern communication technologies make it possible for employees and their supervisor to stay connected to their work at any time and place. As a result, some employees may come to experience a real or perceived pressure from their supervisor to respond to work-related messages during their free time (Day et al., 2012). Research has shown that such expectations interfered with employees' work recovery and psychological well-being (Barber et al., 2019; Derks et al., 2015). Indeed, the health alteration process of the job-demands resources model (Bakker & Demerouti, 2017) suggests that employees exposed to high job demands (e.g., supervisor expectations) need to devote substantial resources to these demands. Yet, these resources are limited (Hobfoll, 2011), thus jeopardizing employees' health and ability to maintain satisfactory investment. In terms of passion, exposure to such expectations is likely to fuel OP, by making it more legitimate for employees to maintain their work connection for longer periods of time (Vallerand & Houlfort, 2019). However, being externally driven, these expectations are likely to be detrimental for HP (Derks et al., 2015; Vallerand, 2010). As a result, we propose that:

>*Hypothesis 6.* Supervisor expectations about work-related messages will be associated with membership into the OP Dominant and Low Passion profiles relative to the HP Dominant one, and into the OP Dominant profile relative to the Low Passion one.

Outcomes of Profile Membership

Passionate workers allocate their personal resources to their work activity in a more (HP) or less (OP) balanced manner, while gaining personal resources from the sense of fulfillment derived from spending time in an activity about which there are passionate (Hobfoll, 2011). Work passion is thus likely to influence how well employees manage their work-family interface, along with their satisfaction with various life domains (Houlfort et al., 2018). In this study, we thus consider work-family conflict (when work interferes with family life), work-family enrichment (when resources gained at work enrich one's family life), family-work conflict (when family life interfere with work), family-work enrichment (when resources gained outside work can enrich one's work life), positive work reflection, and job, life and family satisfaction as outcomes of the work passion profiles.

Research based on the dualistic model of passion has evidenced that HP and OP differentially predict individual outcomes (Pollack et al., 2020). HP is associated with lower rumination, work-family conflict and family-work conflict, and with higher psychological detachment, work-family enrichment and family-work enrichment, and job, life and family satisfaction (Donahue et al., 2012; Houlfort et al., 2018; Huyghebaert-Zouaghi et al., 2022). Moreover, Schellenberg et al. (2019) showed that workers with the highest HP displayed more positive outcomes (e.g., physical health and psychological well-being) than those with low HP. They also found that workers with the highest OP experienced more negative outcomes (e.g., physical symptoms and burnout) than those with low OP (see also Schellenberg et al., 2021b). Similarly, Gillet et al. (2022b) showed that employees with the highest HP displayed lower work-family conflict and counterproductive work behaviors than those with low OP. Employees with the highest OP also displayed higher work-family conflict and lower family life satisfaction than those with low OP.

For workers with a HP Dominant profile, work is able to co-exist in harmony with the other facets of their life, allowing them to establish adaptive boundaries between their work and personal life, thus reducing their risk of experiencing work-family conflict and increasing their satisfaction with their life and family (Vallerand & Houlfort, 2019). Furthermore, HP should lead employees to build up, or accumulate, psychological resources as a result of the enjoyment (i.e., work satisfaction; Vallerand et al., 2003) they derive from working (e.g., positive mood; Hobfoll, 2011). As these resources accumulate, they are likely to become available to support employees in meeting their family

demands (i.e., work-family enrichment; Wayne et al., 2020), thus also increasing their ability to capitalize on resources gained in the family domain to support their work (i.e., family-work enrichment; Vallerand & Houlfort, 2019).

In contrast, workers with an OP Dominant profile engage in their work with a rigid persistence, making it harder to establish boundaries between work and other life domains and increasing the likelihood of that work will interfere with other life areas (i.e., work-family conflict), in turn decreasing life and family satisfaction (Houlfort et al., 2018). These employees are thus also less likely to accumulate resources in their personal life to support work (lower family-work enrichment; Wayne et al., 2020). Because they expand most of their personal resources at work, employees with high OP may adopt defensive strategies to protect themselves from further loss of resources in other life domains (Hobfoll, 2011). As a result, they are more likely to experience family-related demands as a threat to their work functioning (i.e., family-work conflict; Houlfort et al., 2018). By prioritizing their work role obsessively, these employees should become less willing to capitalize on resources gained in the work domain to support their personal life (i.e., lower work-family enrichment; Vallerand et al., 2003). Furthermore, because the motivation of high OP workers tends to be tied to various contingencies, they are unlikely to work for the sole satisfaction that it produces, leading them to experience lower job satisfaction than their HP colleagues. We thus suggest:

Hypothesis 7. The HP Dominant profile will display lower work-family conflict and family-work conflict, higher work-family enrichment and family-work enrichment, and higher job, life, and family satisfaction relative to profiles characterized by lower HP and similarly low OP (Low Passion) and by lower HP and higher OP (OP Dominant).

Hypothesis 8. The OP Dominant profile will display higher work-family conflict and family-work conflict, lower work-family enrichment and family-work enrichment, and lower job, life, and family satisfaction relative to profiles characterized by lower OP and similarly low HP (Low Passion) and by lower OP and higher HP (HP Dominant).

We also expect workers displaying high HP and OP (i.e., Mixed Passion) to experience the benefits of HP without the detrimental outcomes of OP. Indeed, HP is associated with more frequent experiences of positive emotions (Vallerand, 2015; Vallerand & Houlfort, 2019) that help increase

workers' well-being and attenuate the undesirable effects of negative emotions. HP should thus lead to a more adaptive functioning than an OP Dominant profile. Research has also shown that HP can protect individuals against the harms of OP (Gillet et al., 2022b; Schellenberg et al., 2019). In contrast, high HP coupled with low OP (i.e., HP Dominant) should help employees enjoy the benefits of HP without experiencing the costs of OP (Schellenberg et al., 2021b). We thus expect that:

Hypothesis 9. The HP Dominant profile will display lower work-family conflict and family-work conflict, higher work-family enrichment and family-work enrichment, and higher job, life, and family satisfaction relative to the Mixed Passion profile.

Hypothesis 10. The OP Dominant profile will display higher work-family conflict and family-work conflict, lower work-family enrichment and family-work enrichment, and lower job, life, and family satisfaction relative to the Mixed Passion profile.

Schellenberg et al. (2019) showed that non-passionate workers experienced more physical symptoms, lower physical health and psychological well-being, and similar levels of burnout than highly passionate ones. Gillet et al. (2022b) showed that non-passionate and highly passionate individuals had similar levels of counterproductive work behaviors. These results suggest differences between the Mixed and Low Passion profiles. Thus, high HP and OP (i.e., Mixed Passion) may be related to better functioning than low HP coupled with high OP (i.e., OP Dominant) due to the positive role played by HP in the former profile (Vallerand, 2015). Conversely, the detrimental outcomes associated with OP may be more salient for Mixed Passion workers than for their Low Passion colleagues (Schellenberg et al., 2019). Due to these inconsistent expectations (e.g., Schellenberg et al., 2019, 2021b), we leave as an open question whether the Mixed Passion profile will display outcomes differing from the Low Passion profile.

Finally, turning our attention to workers' ability to positively reflect about their work in their personal time, it is important to acknowledge that, because they devote a lot of time and effort to their work, passionate employees (HP and/or OP) often have trouble withdrawing cognitively and emotionally from their work (Braukmann et al., 2018). In failing to completely stop thinking about work, passionate employees (HP and/or OP) often create more work for themselves because they tackle their work with unrestored resources. However, these cognitive intrusions do not need to be

negative. Indeed, some of them may involve efforts to stay connected to their job by thinking about enjoyable and satisfying work events or well-accomplished tasks (i.e., positive work reflection; Sonnentag et al., 2021). When engaging in positive work reflection, passionate employees may experience positive emotions and a variety of associated outcomes (e.g., self-esteem, motivation; Sonnentag et al., 2021). In contrast, Low Passion employees strive to fully detach from their work (Vallerand, 2010). Although we leave as an open research question whether the HP Dominant, OP Dominant, and Mixed Passion profiles will differ in positive work reflection, we propose that:

> **Hypothesis 11.** The Low Passion profile will be associated with lower positive work reflection than the three other profiles.

The Role of Work Type: Remote versus Onsite Work

We finally examine whether the work passion profiles and their associations with predictors and outcomes generalize to employees working remotely or onsite. Remote workers often feel the need to be continuously available, which translates into higher time demands, increased stress, and ongoing difficulties maintaining work-life balance (Huyghebaert-Zouaghi et al., 2022), all of which may increase the likelihood of experiencing high OP and low HP. Conversely, onsite employees working may benefit from normative schedules and resourceful work conditions, making it easier for them to find meaning in their job and experience HP (Charalampous et al., 2019). Indirect evidence thus suggests that profiles with high HP (e.g., HP Dominant) should be less prevalent among remote employees, while profiles with high OP (e.g., OP Dominant) should be more frequent.

In terms of predictors, a remote work setting, by blurring the work-nonwork boundaries, may increase the undesirable impact of work centrality and supervisor expectations regarding work-related messages on HP (Wang et al., 2021) by making easier to devote excessive time and energy to one's work to cope with these demands (Vallerand, 2015). The converse is also possible: The detrimental effects of work centrality and supervisor expectations regarding work-related messages on HP may be reduced when work is accomplished in a setting that makes the work role less salient (Wang et al., 2021). For instance, working remotely provides employees with autonomy and flexibility (Biron & van Veldhoven, 2016), leading to a higher sense of control of how and when to transition between roles (Park et al., 2020) and making it easier to distribute resources across domains (Wan et al., 2019).

For family orientation, Carver and Scheier's (1990) control theory suggests that employees high in family orientation should display lower HP and higher OP when work-nonwork boundaries are blurred (i.e., remote; Wang et al., 2021). These employees may see working remotely as a threat to their ability to manage work-nonwork boundaries and experience a sense of losing control in their prioritization of the resources to allocate across roles (Hall et al., 2013). Alternatively, remote employees high in family orientation should be able to schedule their work in a way that is aligned with their family orientation, allowing them to find a better balance between these roles, and increasing their likelihood of membership into a HP Dominant profile (Vallerand & Houlfort, 2019).

In terms of outcomes, control theory (Carver & Scheier, 1990) also suggests that employees' functioning and work-family balance could be impaired in a setting (i.e., remote) limiting their ability to work efficiently due to the unavailability of a peaceful workspace, insufficient access to the technologies and support required for work, and family interruptions. These interferences may entail work-family conflict and lower work-family enrichment, and lead to other detrimental outcomes (e.g., low job satisfaction; Page et al., 2021). In contrast, the higher person-environment fit experienced by onsite employees should help them maintain clearer work-family boundaries, and therefore, more positive work-family experiences (Wang et al., 2021). These positive experiences could help them build more resources and increase their expectancies of successfully attaining their professional goals, leading them to better outcomes (i.e., life satisfaction; Hobfoll, 2011).

Method

Participants and Procedure

Participants were invited to complete an online questionnaire twice over a period of three months via the Prolific Academic crowdsourcing platform. In the present study, we relied on Prolific to recruit a sample of working adults from the United States and the British Isles, allowing us to collect data using already validated English versions of the instruments, and to maximize the number of remote employees given that both countries were on national lockdown (COVID-19) during data collection. Participants were informed of the objectives of the research, told that participation was voluntary and confidential, and notified that they could freely withdraw from the project at any time. They were also asked to provide a unique identifier to allow the research team to match their

responses over time while maintaining confidentiality. At both time points, participants were compensated £1.75 for completing the questionnaire (15 minutes).

Recruitment was limited to participants: (1) who lived with a spouse or partner; (2) who spoke English as their main language; and (3) who were employed by an organization as their main occupation, rather than self-employed, unemployed, or students. The survey also included two questions assessing participants' attention (e.g., "It is important that you pay attention to our survey, please tick strongly disagree"), and one final question verifying "for scientific reasons", if they really worked in an organization. Only respondents who successfully completed all verifications were included in the study, resulting in a final convenience sample of 442 participants (56.6% identified as female, 42.8% as male, 0.7% did not report their gender, and no-one identified as non-binary) at Time 1, and 356 participants (55.6% identified as female, 43.8% as male, 0.6% did not report their gender, no-one identified as non-binary) at Time 2. Of those, 158 reported working mainly onsite, and 284 reported working mainly remotely. Participants lived and worked in the British Isles (81.0%) or the United States (19.0%), and 94.1% held a bachelor degree. They can be considered highly passionate towards their work if we consider the mean scores on the three passion criteria items (i.e., "I love work"; "Work is important for me"; and "I spend a significant amount of time engaging in various work activities"; 1-Strongly disagree to 7-Strongly agree; $M = 4.68$; $SD = 1.14$; Philippe et al., 2017)[1]. They had a mean age of 39.52 years ($SD = 10.38$) and a mean job tenure of 6.89 years ($SD = 6.03$). A majority held a permanent (92.5%) full-time (89.6%) position. Participants were mainly in non-market services (53.2%), market services (33.0%), industry (8.1%), construction (2.3%), agriculture (0.2%), or other sectors (3.2%). Our sample size of 442 participants is perfectly within the range of participants typically used, and recommended as a minimum, in person-centered studies (e.g., Nylund-Gibson & Choi, 2018; Spurk et al., 2020; Zhou et al., 2018), and consistent with the sample

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[1] Vallerand et al. (2003) considered that an activity (e.g., work) is not a passion for individuals who score lower than 4 on the seven-point scale used to rate the passion criteria. In their first study, 16% of the sample were non-passionate individuals. In the present research, based on these criteria, we had 21% of non-passionate workers. We note that, matching previous results (Marsh et al., 2013; Philippe et al., 2017; Vallerand et al., 2003), we obtained correlations ranging from .469 to .588 between scores on the passion criteria and our measures of HP and OP, which were independent from one another with non-statistically significant correlations close to 0. Moreover, our results were also generally replicated when using only the subset of passionate employees.

size used in recent applications of latent transitions analyses (e.g., n = 491: Sandrin et al., 2020; n = 432: Huyghebaert-Zouaghi et al., 2022). Moreover, our analyses revealed no indications that sample size might have been insufficient (i.e., proper convergence, statistically significant effects, reasonable standard errors; Morin & Litalien, 2019).

Measures

Work passion (profile indicators). We assessed HP (three items; e.g., "Work is in harmony with the other things that are part of me"; α = .89 at both Time 1 and 2) and OP (three items; e.g., "I have almost an obsessive feeling for work"; α = .64 at Time 1 and α = .53 at Time 2[2]) using a scale developed by Philippe et al. (2017). Items were rated on a seven-point scale (Strongly disagree to Strongly agree). We relied on this short version of the longer Passion Scale (Marsh et al., 2013; Vallerand et al., 2003) to ensure that our questionnaire would be as short as possible, to limit the burden placed on participants. This short version has been used in numerous recent studies, and responses obtained on this version have been found to possess very good psychometric properties (e.g., Busby et al., 2020; Gillet et al., 2022b; Lopes & Vallerand, 2020). For instance, Philippe et al. (2017) found evidence of factorial validity for the a priori two-factor structure of responses obtained with this scale, and support for the measurement invariance of this structure across gender and relational status. They also found that HP and OP were both similarly correlated with the passion criteria, confirming that they both capture a type of passion, but weakly correlated with each other and differentially associated with various outcomes, thus supporting their distinctive nature.

Work centrality (predictor). Work centrality was measured using a five-item scale (e.g., "Work should be considered central to life rather than family"; α = .92 at Time 1 and α = .93 at Time 2; Carr et al., 2008). Items were rated on a five-point scale (Strongly disagree to Strongly agree).

Family orientation (predictor). Family orientation was measured using a five-item scale (e.g., "My career decisions are made in terms of how they will affect my family"; α = .95 at both Time 1

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[2] It is important to keep in mind that alpha is artificially impacted (in a positive manner) by the number of items included in a measure (e.g., Streiner, 2003). It is possible to estimate the impact of length via the Spearman-Brown prophecy formula (Nunnally & Bernstein, 1994), which suggests that the reliability of these measures would have been between .69 and .78 for OP and .94 for HP if based on six equivalent items. Yet, this low level of reliability reinforces the importance of relying on an approach providing some control for unreliability in our main analyses (i.e., factor scores).

and 2; Hall et al., 2013). Items were rated on a five-point scale (Strongly disagree to Strongly agree).

Supervisor expectations regarding work-related messages (predictor). Supervisor expectations regarding work-related messages were assessed using a four-item scale (e.g., "My supervisor expects me to respond to work-related messages during my free time after work"; $\alpha = .90$ at Time 1 and $\alpha = .92$ at Time 2; Derks et al., 2015). Items were rated on a five-point scale (Strongly disagree to Strongly agree).

Work-family conflict and family-work conflict (outcomes). A scale developed by Netemeyer et al. (1996) was used to assess work-family conflict (five items; e.g., "The amount of time my job takes up makes it difficult to fulfill family responsibilities"; $\alpha = .96$ at both Time 1 and 2) and family-work conflict (five items; e.g., "I have to put off doing things at work because of demands on my time at home"; $\alpha = .94$ at Time 1 and $\alpha = .96$ at Time 2). Items were rated on a seven-point scale (Strongly disagree to Strongly agree).

Work-family enrichment and family-work enrichment (outcomes). A scale developed by Kacmar et al. (2014) was used to measure work-family enrichment (three items; e.g., "My involvement in my work makes me feel happy and this helps me be a better family member"; $\alpha = .86$ at Time 1 and $\alpha = .90$ at Time 2) and family-work enrichment (three items; e.g., "My involvement in my family helps me acquire skills and this helps me be a better worker"; $\alpha = .81$ at Time 1 and $\alpha = .85$ at Time 2). Items were rated on a five-point scale (Strongly disagree to Strongly agree).

Positive work reflection (outcome). Positive work reflection was assessed with a three-item scale (e.g., "I find solutions to work-related problems in my free time"; $\alpha = .96$ at both Time 1 and 2; Fritz & Sonnentag, 2006). Items were rated on a five-point scale (Not true at all to Totally true).

Job, family, and life satisfaction (outcomes). Job, family, and life satisfaction were each assessed by one item recommended by Fisher et al. (2016; also see Wanous et al., 1997). These items asked participants to report the extent to which they were satisfied with their current job ($r = .74$, p $\leq$ .01 between Time 1 and 2), family life ($r = .71$, p $\leq$ .01 between Time 1 and 2), and life in general ($r = .73$, p $\leq$ .01 between Time 1 and 2) using a four-point scale (Dissatisfied to Satisfied).

Analyses

Preliminary Analyses

The psychometric properties of all multi-item measures were verified as part of preliminary factor analyses. Details on these analyses are reported in the online supplements (Tables S1 to S5). The main analyses relied on factor scores (which include a correction for unreliability; Skrondal & Laake, 2001) from longitudinal models of latent means invariance for all of our multi-item measures. In contrast, we relied on scale scores for the single-item measures of job, family, and life satisfaction. Attrition analyses revealed no differences between participants who completed one versus two time points.

Model Estimation

Models were estimated using the maximum likelihood robust estimator implemented in Mplus 8.7 (Muthén & Muthén, 2021). Missing responses were handled using full information maximum likelihood (Enders, 2010) procedures, allowing us to estimate longitudinal models using all participants who responded to at least one time point ($n = 442$), rather than relying on a suboptimal listwise deletion strategy including only participants ($n = 356$) who completed both measurements points. As latent profile analyses are known to be sensitive to the start values used in the model estimation process (Hipp & Bauer, 2006), all latent profile analyses were estimated using 5000 sets of random start values, 1000 iterations, and 200 final stage optimizations (e.g., Morin & Litalien, 2019). These numbers were increased to 10000, 1000, and 500 for the longitudinal analyses.

Latent Profile Analyses

At each time point, latent profile analyses including one to eight profiles were estimated. The means and variances of the indicators (HP and OP) were freely estimated (Morin & Litalien, 2019).

Model Comparison and Selection

The decision of how many profiles to retain relies on whether the profiles are meaningful, aligned with theory, and statistically adequate (Marsh et al., 2009; Morin, 2016). Statistical indicators (McLachlan & Peel, 2000) can also be consulted (details are provided in the online supplements).

Longitudinal Tests of Profile Similarity

Assuming that the same number of profiles would be extracted at both time points (Morin & Wang, 2016), the two time-specific latent profile analysis solutions will be combined into a single longitudinal latent profile analysis for longitudinal tests of within-sample profile similarity (Morin et al., 2016). Details on this sequential strategy are provided in the online supplements.

Latent Transition Analyses

The most similar longitudinal latent profile solution will then be re-expressed as a latent transition analysis to investigate within-person stability and transitions in profile membership (Collins & Lanza, 2010). This latent transition analysis solution, as well as all following analyses, were specified using the manual three-step approach (Asparouhov & Muthén, 2014) outlined by Morin and Litalien (2017).

Predictors and Outcomes of Profile Membership

The similarity over time of relations between profiles, predictors (*predictive* similarity), and outcomes (*explanatory* similarity) was assessed using tests proposed by Morin et al. (2016), optimized by Morin and Litalien (2017, 2019), and detailed in the online supplements.

Readers interested in learning more about the estimation of models similar to those used in the present study, as referred to: (a) Collins and Lanza (2010) for a comprehensive introduction to latent transition analyses; (b) Morin et al. (2016) for an introduction to tests of profile similarities, and to Morin and Litalien (2017) for the longitudinal extension of these tests; and (c) Morin and Litalien (2019) for a comprehensive user-friendly introduction to the estimation of person-centered analyses.

Results

Latent Profile Analyses

The statistical indicators associated with each of the time-specific latent profile analysis solutions are reported in Table S6, and graphically displayed in Figures S1 and S2, in the online supplements. These indicators failed to converge on a clearly dominant solution at both time points, but the elbow plots revealed a plateauing in the decrease of the values of these indicators starting around three profiles and becoming more pronounced around five profiles at both time points. Solutions including three to five profiles were thus more carefully examined for their heuristic value, theoretical relevance, and statistical adequacy. This examination revealed that these solutions were highly similar across time points, and that the addition of profiles added meaning to the model up to four profiles. However, adding a fifth profile simply resulted in the arbitrary splitting of one profile into smaller ones presenting a comparable configuration. Based on this examination, we decided to retain the four-profile solution at both time points for further analyses.

The fit indices from all longitudinal models are reported in Table 1. Starting with a model of

configural similarity including four profiles per time point, equality constraints were progressively integrated. The next models of *structural*, *dispersion*, and *distributional* similarity all resulted in further decreases in the value of the information criteria and were thus supported by the data. These results support Hypothesis 2. The four-profile model of *distributional* similarity (i.e., same means, variances, and size within each profile over time) was thus retained for interpretation and is graphically represented in Figure 1 (detailed parameter estimates are reported in Tables S7 and S8 of the online supplements). As shown in Table S8 of the online supplements, this solution results in a moderate-to-high classification accuracy (65.4% to 85.5% across profiles at Time 1 and 65.5% to 85.8% at Time 2), consistent with its moderately high entropy (.666).

Profile 1 displays high levels of HP and average levels of OP. This *HP Dominant* profile characterizes 16.05% of the participants. Profile 2 displays low levels of HP and OP. This *Low Passion* profile characterizes 38.89% of the participants. Profile 3 displays high levels of OP and average levels of HP. This *OP Dominant* profile characterizes 27.97% of the participants. Finally, Profile 4 displays average levels of HP and OP. This *Mixed Passion-Average* profile characterizes 17.10% of the participants. Whereas, Profiles 1 to 3 are consistent with Hypothesis 1, Profile 4 only partially supports this hypothesis (see Table S11 of the online supplements for a summary of the hypotheses and whether or not they were supported).

Latent Transitions Analyses

The probability of transitioning from one profile at Time 1 to another profile at Time 2 are reported in Table 2. Membership into Profiles 1 (*HP Dominant*: Stability of 84.0%), 2 (*Low Passion*: Stability of 100.0%), 3 (*OP Dominant*: Stability of 95.7%), and 4 (*Mixed Passion-Average*: Stability of 89.1%) was highly stable over time, thus supporting Hypothesis 3, and suggesting that intervention is likely to require some intensity and/or persistence. For members of the *HP Dominant* at Time 1, transitions mainly involved the *Mixed Passion-Average* (14.6%) and *Low Passion* (1.3%) profiles at Time 2. Similarly, for members of the *Mixed Passion-Average* profile at Time 1, transitions mainly involved the *HP Dominant* profile (10.9%) at Time 2.

Predictors of Profile Membership

As shown in Table 1, in relation to the demographic characteristics, the lowest values on all

information criteria were associated with the null effects model, consistent with a lack of associations between profile membership and these variables. This interpretation was supported by an examination of the parameter estimates associated with all these models, which also revealed a lack of associations between these variables and the profiles. These variables were thus excluded from further analyses.

The next set of results indicated that the associations between our theoretical predictors and profile membership generalized over time (i.e., supporting the model of *predictive* similarity in which the Time 1 predictions were found to be equal to the Time 2 predictions), and in which the predictors did not predict specific profile transitions. The results from this model are reported in Table 3. These results first indicate that work centrality predicted a higher likelihood of membership into the *HP Dominant* (1), *OP Dominant* (3), and *Mixed Passion-Average* (4) profiles relative to the *Low Passion* (2) profile, thus supporting Hypothesis 4. Family orientation also predicted a higher likelihood of membership into the *HP Dominant* (1) and *OP Dominant* (3) profiles relative to the *Low Passion* (2) profile, thus partially supporting Hypothesis 5. Moreover, work centrality and family orientation both predicted a higher likelihood of membership into the *HP Dominant* (1) and *OP Dominant* (3) profiles relative to the *Mixed Passion-Average* (4) profile. Supervisor expectations regarding work-related messages predicted a lower likelihood of membership into the *HP Dominant* (1) profile relative to the *Low Passion* (2) and *Mixed Passion-Average* (4) profiles, and a higher likelihood of membership into the *OP Dominant* (3) profile relative to the *HP Dominant* (1), *Low Passion* (2), and *Mixed Passion-Average* (4) profiles. These results partially support Hypothesis 6.

On its own, the work setting (onsite or remote) did not predict profile membership. However, to investigate whether the role of the predictors differed for employees working onsite (coded 0) or remotely (coded 1), we tested whether the effects of these predictors interacted with work setting. The results from these additional analyses revealed no statistically significant interaction effects.

Outcomes of Profile Membership

As shown in the bottom of Table 1, the model of *explanatory similarity* resulted in the lowest values on the information criteria and was thus supported by the data. The mean profile-specific levels of each outcome are reported in Table 4 and indicate clear differences across profiles that generalized over time (were replicated across time points). Thus, Profile 3 (*OP Dominant*) displayed the highest

levels of work-family conflict and family-work conflict when compared to all other profiles. In addition, Profile 2 (*Low Passion*) also displayed higher levels of work-family conflict than Profile 1 (*HP Dominant*). In contrast, Profile 1 (*HP Dominant*) displayed the highest levels of work-family enrichment and family-work enrichment when compared to all other profiles, whereas Profile 2 (*Low Passion*) displayed the lowest levels on these outcomes. Profiles 3 (*OP Dominant*) and 4 (*Mixed Passion-Average*) did not differ from one another in relation to work-family enrichment and family-work enrichment. Interestingly, levels of job satisfaction, life satisfaction, and family satisfaction were all the highest in Profile 1 (*HP Dominant*). In contrast, the remaining profiles did not differ from one another in relation to life and family satisfaction. However, levels of job satisfaction were higher in Profile 4 (*Mixed Passion-Average*) than in Profiles 2 (*Low Passion*) and 3 (*OP Dominant*), which did not differ from one another on this outcome. These results partially support Hypotheses 7 and 8. Lastly, Profile 2 (*Low Passion*) was associated with the lowest levels of positive work reflection, whereas the other profiles did not differ on this outcome, thus supporting Hypothesis 11. Although we did not identify a *Mixed Passion* profile that entirely matched our expectations (i.e., characterized by high levels of HP and OP), the results associated with the *Mixed Passion-Average* profile partially support Hypotheses 8 and 9.

To further investigate whether these associations differed as a function of working remotely or onsite (employees' work setting could change over time), we estimated multi-group latent profile analysis solutions separately at each time point (with work setting as the grouping variable). The results from these additional analyses are reported in Tables S9 and S10 of the online supplements and confirmed the *configural*, *structural*, *dispersion*, and *distributional* similarity of the four-profile solution across work settings at Time 1 and Time 2. Outcomes were integrated separately to the two multi-group solutions of *distributional* similarity. The Time 1 and Time 2 results both supported the *explanatory* similarity of this solution across samples of employees working remotely or onsite, consistent with the presence of outcome associations corresponding to those previously reported which did not differ across groups.

Discussion

To increase our theoretical understanding of work passion, we sought to identify the various HP

and OP configurations observed among employees. Capitalizing on longitudinal data, we also tested the generalizability of these profiles over time (within-sample stability) and the stability of employees' profile membership (within-person stability) over a three-month period. We finally documented the construct validity of these profiles in relation to theoretically-relevant predictors (i.e., work centrality, family orientation, and supervisor expectations regarding work-related messages) and outcomes (i.e., work-family conflict, family-work conflict, work-family enrichment, family-work enrichment, positive work reflection, and job, life and family satisfaction), while considering whether and how these associations generalize to employees working remotely or onsite.

Work Passion Profiles

Our results revealed that four profiles best summarized the work passion configurations observed in our sample at both time points: (1) *HP Dominant*, (2) *Low Passion*, (3) *OP Dominant*, and (4) *Mixed Passion-Average*. Although these results only partially supported our hypotheses (i.e., a *Mixed Passion-Average* profile with close to average HP and OP was identified rather than a *Mixed Passion* profile characterized by high HP and OP), all of these profiles were expected based on their identification in prior person-centered studies (Li et al., 2020) and the *quadripartite* model of passion (Gillet et al., 2022b; Schellenberg et al., 2019). In addition to providing evidence of replicability for these prior results to the current sample of mixed workers, despite the *Mixed Passion-Average versus Mixed Passion-High* profile difference, our results supported the generalizability of these profiles across two time points taken three months apart, as well as across samples of employees working remotely or onsite. These profiles may thus reflect core psychological mechanisms involved in the experience of work passion, rather than sample-specific or ephemeral phenomena. More generally, the present research is the first person-centered investigation demonstrating the relevance of the *quadripartite* model (Schellenberg et al., 2019) in a Western sample of employees, while enabling the identification of at least one profile (*Mixed Passion-Average* profile) not covered in this theoretical proposition. Our results thus confirm the relevance of this theoretical conceptualization in a Western work context, while also underlining the need for more extensive replication studies.

Importantly, the person-centered approach makes it possible to identify subpopulations of employees displaying moderate levels of HP and OP (e.g., such as the *Mixed Passion-Average*

profile). Our findings thereby extend the dualistic (Vallerand, 2015; Vallerand et al., 2003) and

quadripartite (Schellenberg et al., 2019) models of passion, especially in relation to the HP-OP

synergy, which does not seem to co-occur at high levels. It is noteworthy that the correlation between

HP and OP was not significant at both time points in the present research, which stands in contrast

with previous report of a positive correlation between both types of passion (e.g., Breu & Yasseri,

2022). However, although the combination of high HP and OP may be very rare, it does not mean that

it may not emerge in other samples, thus further highlighting the need for replication.

Moreover, in terms of within-person stability, our results revealed that individual membership into

the four work passion profiles also remained highly stable (84.0% to 100.0%) over a three-month

period. Consistent with the theoretical premise that passion for work is a self-defining identity

characteristic (Vallerand et al., 2003), these rates of stability are aligned with previous results showing

that employees' levels of work passion tend to be highly stable over a similar period (Birkeland &

Nerstad, 2016; Birkeland et al., 2018). From a practical perspective, these rates of stability support the

possible value of profile-based interventions, showing that these profiles neither reflect completely

rigid psychological states, nor purely ephemeral phenomena (Meyer & Morin, 2016; Vallerand,

2015). It is particularly noteworthy that membership into the *HP Dominant* profile was the least stable

over time (84.0%). This observation suggests that it might be harder to maintain a work passion

profile dominated by high levels of HP over time, even over a relatively short period of time (i.e.,

three months). This difficulty could be related to the constant chase of efficiency resulting from an

ever-increasing work intensification to which modern societies are exposed (Huyghebaert-Zouaghi et

al., 2022), as well as to the increasingly blurred work-family boundaries (Kreiner, 2006).

Predictors of Work Passion Profiles

By considering the role of work centrality, family orientation, and supervisor expectations

regarding work-related messages in the prediction of profile membership, our results not only extend

the nomological network of passion for work, but also provide some practical guidance regarding

possible drivers of work passion profiles. In relation to supervisor expectations regarding work-related

messages, our results showed that these expectations seemed to play the dual role of decreasing HP

and increasing OP, being associated with lower likelihood of membership into the *HP Dominant*

profile and with a higher likelihood of membership into the *OP Dominant* profile. These results are consistent with previous evidence showcasing the detrimental role of such expectations (Barber et al., 2019; Derks et al., 2015). Because they feel pressured to quickly respond to work-related demands and to be constantly available for their work, employees exposed to such expectations are more likely to succumb to work pressures during their off-job time, thus making it harder for them to withdraw from their work when they should rather be recovering from it (Barber & Santuzzi, 2015; Braukmann et al., 2018). Employees exposed to such pressures may thus come to devote an excessive amount of time to their work at the expense of their personal life, making it harder for them to experience harmony between both domains (i.e., HP) and increasing the likelihood of becoming obsessive about work (i.e., OP; Vallerand, 2015; Vallerand & Houlfort, 2019).

Work centrality and family orientation were both found to be associated with a higher likelihood of membership into the *HP Dominant* and *OP Dominant* profiles relative to the *Mixed Passion-Average* and *Low Passion* profiles, while work centrality was also associated with a higher likelihood of membership into the *Mixed Passion-Average* profile relative to the *Low Passion* profile. By positioning work at the core of one's life priorities, work centrality tends to lead employees to invest more time and efforts in their work role, which can become an important source of life fulfillment (Tóth-Király et al., 2021), consistent with the positioning of work centrality as a core resource (Bakker et al., 2019). This representation of work centrality is entirely consistent with the observation that it does tend to be associated with higher levels of passion for work, irrespective of the type of passion (i.e., HP and OP; Gillet et al., 2017b; Vallerand, 2015), which could explain most of the effects of work centrality observed in this study. What remains to be investigated, however, are the conditions under which work centrality can lead to profiles dominated by HP (*HP Dominant*), OP (*OP Dominant*), or both (*Mixed Passion-Average*), which may depend on the extent to which one's motives for working can be conceptualized as primarily driven by autonomous reasons and pleasure, by a series of internal or external contingencies, or both (e.g., Ryan & Deci, 2017).

Relative to work centrality, family orientation rather tends to be associated with a greater tendency to favor one's personal life while still engaging in a professional career (Hall et al., 2013), and thus is entirely compatible with the emergence of a more HP for work (Vallerand & Houlfort, 2019). This is

consistent with the idea that employees with a high family orientation are more likely to experience higher levels of positive affect when involved in their family roles, allowing them to benefit from these roles to build extra psychological resources (Greenhaus & Powell, 2006), which they can then implement to support their passion for work in a more harmonious manner (Hobfoll, 2011; Vallerand & Houlfort, 2019). However, these considerations fail to explain how family orientation could come to be associated with a comparable likelihood of membership into the *HP Dominant* and *OP Dominant* profiles. This result is particularly challenging for prior variable-centered results that have consistently positioned family orientation as a negative predictor of OP (Hall et al., 2013). However, this unexpected result could potentially be explained by our adoption of a multivariate perspective in which multiple predictors were jointly considered. This approach allowed us to assess the unique role of each predictor, beyond what they shared with the others, and thus, to identify the most potent predictors of profile membership. As shown in Table S5 of the online supplements, although these predictors all remained reasonably distinct from one another, it remains important to acknowledge that these predictors were not independent from one another and thus likely to play overlapping roles in prediction. Although the correlation between family orientation and supervisor expectations regarding work-related messages remained lower than -.150 at both time points, that between work centrality and family orientation was roughly -.500 at both time points.

Taken together, our results thus suggest that once work centrality is considered, family orientation no longer contributes, on its own, to differentiate between the *HP Dominant* and *OP Dominant* profiles, although both variables can still play a role in the experience of a passion for work, irrespective of the type of passion (HP and OP). In other words, these results suggest that, contrary to our expectations, family orientation acts similarly to work centrality in the prediction of a higher likelihood of membership into both highly passionate profiles, rather than solely into the *HP Dominant* one, perhaps because resources gained in the family context can be used to support both types of passion. Although our findings extend the nomological network of work passion predictors at the work and family interface, future research is needed to more extensively look at individual and organizational resources that might curb high levels of OP and try to unpack the mechanisms underlying the relations, or lack thereof, between family orientation and work passion.

Outcomes of Profile Membership

Further supporting the construct validity of the profiles identified in this study, our results revealed that they shared clear associations with the outcomes. More specifically, these findings clearly support the positive effects of HP and the detrimental effects of OP identified in previous research (e.g., Gillet et al., 2022b; Schellenberg et al., 2019). These results are consistent with an important premise of the dualistic model of passion that harmoniously passionate employees can establish adaptive boundaries between their work and other important life areas, in turn leading to better levels of functioning (Vallerand & Houlfort, 2019). Conversely, obsessively passionate workers engage in their work with a rigid persistence which makes it harder to establish clear boundaries between their work and other life domains, making it more likely that their work will impair their personal and/or family functioning (Houlfort et al., 2018). Importantly, these results also highlight the fact that, despite the aforementioned positive association between family orientation and employees' likelihood of membership into the *OP Dominant* profile, membership into this profile remains associated with less desirable outcomes at the work-family interface.

It is noteworthy that the *HP Dominant* profile did not differ from the *Mixed Passion-Average* profile in terms of work-family conflict, whereas the *OP Dominant* profile did not differ from the *Mixed Passion-Average* profile in terms of work-family enrichment, family-work enrichment, life satisfaction, and family satisfaction. Similarly, the *HP Dominant* profile did not differ from the *Low Passion* and *Mixed Passion-Average* profiles in terms of family-work conflict, and from the *Low Passion* profile in terms of family satisfaction. First, these results suggest that the effects of the work passion profiles are different depending on the nature of the outcomes considered, in line with prior studies showing that HP and OP have differential effects on employees' functioning (Vallerand, 2015; Vallerand & Houlfort, 2019). Second, they confirm the need to better differentiate the *OP Dominant* and *Mixed Passion-Average* profiles, which differ from one another in their levels of OP, and in relation to their aforementioned associations with the predictors. In fact, our results suggest that average levels of HP may be sufficient to compensate for the harmful effects of the high levels of OP observed in the *OP Dominant* profile in relation to work-family enrichment, family-work enrichment, life satisfaction, and family satisfaction. In contrast, the higher levels of HP displayed by *HP*

Dominant employees seem particularly important in the prediction of higher levels of work-family enrichment, family-work enrichment, life satisfaction, and family satisfaction relative to those observed in the *OP Dominant* and *Mixed Passion-Average* profiles. Interestingly, past research has also shown that HP was the most important predictor of work-family enrichment and family-work enrichment (Huyghebaert-Zouaghi et al., 2022) as well as life satisfaction (Lafrenière et al., 2012), possibly because of the known implications of HP for the experience of more positive affect (Vallerand, 2010). Similarly, the benefits of HP are in line with the numerous studies (Gillet et al., 2016, 2017a) showing a positive effect of autonomous motivation (i.e., actions are driven by pleasure and choice) and of experiencing a greater sense of control related to when and how to engage into one's passion (e.g., Lazarus & Folkman, 1984; van Steenberger et al., 2021). Clearly, future research will be needed to better unpack these mechanisms, and to achieve a clearer differentiation between the nature of the *OP Dominant* and *Mixed Passion-Average* profiles identified in this study.

Interestingly, the *OP Dominant* profile displayed higher levels of work-family conflict, family-work conflict, work-family enrichment, and family-work enrichment relative to the *Low Passion* profile, whereas these two profiles did not differ from one another in terms of job, life, and family satisfaction. These results indicate that differences between these two profiles differ from one outcome to another. On the one hand, high levels of OP (i.e., the *OP Dominant* profile) may be related to lower functioning than low levels of OP (i.e., the *Low Passion* profile) due to the negative role played by OP in the former profile (Vallerand, 2015). Schellenberg et al. (2019) as well as Gillet et al. (2022b) have also shown that the *OP Dominant* profile was associated with a worse adjustment than the *Low Passion* profile. On the other hand, OP may also be associated with more positive outcomes linked to the ability to benefit from resources gained in one domain to support activities conducted in the other domain (i.e., work-family enrichment and family-work enrichment). Though OP is generally linked to detrimental consequences (Vallerand & Houlfort, 2019), Amiot et al. (2006) have found that OP was associated with higher psychological adjustment in highly competitive environments, while Lafrenière et al. (2009) have also shown that it was positively related to life satisfaction following the experience of success in one's passionate activity. Schellenberg et al. (2021b) have similarly demonstrated that the *OP Dominant* profile was associated with greater attainment of performance

goals than the *Low Passion* profile. In any case, these results do not suggest that the *OP Dominant* profile is necessarily desirable. Rather, they simply suggest that it might be preferable to be passionate about one's work for outcomes related to the work-family interface, no matter the dominant type of passion, than to experience a complete lack of passion for work.

Finally, and as expected, the *Low Passion* profile was associated with lower levels of positive work reflection than the other profiles. Indeed, *HP Dominant* and *OP Dominant* employees devote a lot of time, effort, and energy to their work, thus experiencing difficulties withdrawing cognitively and emotionally from their work during their off-job time (Braukmann et al., 2018). Similarly, employees within the *Mixed Passion-Average* profile may fail to completely stop thinking about work (e.g., by thinking about enjoyable and satisfying work events or well-accomplished tasks; Sonnentag et al., 2021). In contrast, *Low Passion* employees rather strive for a full psychological detachment from their work (Vallerand, 2010), thus leaving them with a lower ability to positively reflect about their work in their personal times (i.e., lower positive work reflection).

Generalizability to Onsite or Remote Work Contexts

Beyond supporting the replicability of our profiles and of their association with predictors and outcomes over time, our results also supported their generalizability across samples of employees working remotely or onsite. In this regard, these results contrast with previous studies suggesting that work passion may vary as a function of job settings (Fernet et al., 2014; Vallerand & Houlfort, 2019), or with the idea that working remotely may protect employees against the undesirable effects of job demands (e.g., Gillet et al., 2022a). However, these results are aligned with prior research demonstrating the adaptive effects of a profile characterized by high HP and low OP on a various set of work-related indicators of work performance and of well-being in a sample of employees working in very distinct settings (Gillet et al., 2022b; Li et al., 2020). Importantly, our study supports the idea that work passion is a self-defining characteristic (Vallerand et al., 2003) involved in employees' adaptation to the work environment (Fernet et al., 2019). By providing evidence of generalizability, our results are an important step forward in work passion research, supporting the desirability of generic interventions likely to be relevant to many employees.

Limitations and Future Directions

The present research has some limitations, which nevertheless open the way to new research avenues. First, the fact that this study relied solely on self-report measures increases the risk of social desirability and self-report biases. To alleviate these concerns, it would be useful for future studies to consider incorporating objective measures (e.g., organizational data on work performance and absenteeism) and informant ratings of employees' functioning (e.g., colleagues, supervisors, spouse). Second, although our results support the adequacy of the exploratory structural equation modeling representation of responses to our work passion measure, and its superiority relative to a confirmatory factor analytic representation (e.g., Marsh et al., 2013; Tóth-Király et al., 2017), the reliability of the OP factor used in our analyses was lower than desirable, especially at Time 2. Although this low reliability is unlikely to have interfered with the profile estimation process, it would be important for future research to replicate our findings with more established evidence of reliability. Likewise, as highlighted by one reviewer, it could be interesting for future research to further investigate how passion differs from autonomous and controlled forms of behavioral regulations as outlined in self-determination theory (Ryan & Deci, 2017). Third, this study was conducted among a mixed sample of employees working in the British Isles or the United States. Moreover, our study occurred during a national lockdown resulting from the COVID-19 pandemic, which might have significantly impacted individuals' functioning (Huyghebaert-Zouaghi et al., 2022) and our results. Further research is thus needed to generalize the current results in different work settings, countries, languages, and cultures.

Fourth, we did not assess the reasons for which employees ended up working remotely (e.g., whether it was a choice made by employees or imposed by the pandemic) or the context in which this remote work occurred (e.g., access to childcare or to a proper home office, whether employees were trained, supported and provided resources to support their work). It would thus be important for future research to consider how these characteristics might influence the likely impact of remote work on employees' professional and personal experiences. Moreover, our data collection occurred during the national lockdowns occurring in the United States and the British Isles, and more generally, in the midst of a global pandemic which significantly affected individuals' psychological and social functioning, as well as their work and family experiences (Huyghebaert-Zouaghi et al., 2022; Wang et al., 2021). This context could have influenced our results, whose generalizability should thus be

verified. Fifth, the current research assessed the stability of work passion profiles over a three-month period, which was not characterized by any specific or systematic change or transition for most participants. As a result, our estimates of stability could be reduced if longer time intervals were considered, or if continuity and change were assessed across more meaningful transitions or interventions (e.g., professional training). Moreover, despite our reliance on state-of-the-art missing data procedures, it remains true that the transitions themselves (within-person stability) could only be inferred based on information obtained from the subsample (n = 356) who responded both time points (relative to the total sample of n = 442). Future studies should thus examine the extent to which our findings would generalize to longer periods of time, participants (e.g., newcomers in organizations or in professions), transitions, interventions, and changes.

Sixth, work centrality, family orientation, and supervisor expectations regarding work-related messages were the only predictors of interest in our research. Yet, it would be interesting to examine how other personal characteristics (e.g., psychological capital, self-efficacy) as well as hindrance (e.g., role conflict, overload, and ambiguity) and challenge (e.g., role responsibility and complexity) demands relate to employees' work passion profiles. Likewise, more studies are needed to examine whether and how the effects of the profiles observed in this study generalize to other positive (e.g., organizational commitment, organizational citizenship behaviors) and detrimental (e.g., ill-being, turnover) outcomes to better understand the full implications of these profiles. Finally, our treatment of the covariables as either predictors or outcomes was based on theoretical (e.g., Vallerand, 2015; Vallerand & Houlfort, 2019) and statistical (Meyer & Morin, 2016) considerations. However, our research design and the limitations inherent to our analytical method did not allow us to assess reversed causality, reciprocal influence, or spurious associations, nor the possible role of profile membership in the prediction of changes in outcome levels. Therefore, it would be important to assess whether the observed associations between the predictors and the profiles as well as between the profiles and the outcomes can be considered as causal or simply correlational in nature.

Practical Implications

From an intervention perspective, our findings suggest that managers should be particularly attentive to workers experiencing a real or perceived pressure from their supervisors to respond to

work-related messages during their free time. Indeed, our results show that these workers were least likely to belong to the *HP Dominant* profile (associated with the most positive outcomes) and most likely to belong to the *OP Dominant* profile (associated with the worst outcomes). Therefore, changes designed to reduce these expectations could be leveraged to nurture more desirable profiles, and more generally a better functioning. For instance, at the organizational level, these expectations could be reduced by stating clear segmentation norms and encouraging balanced and healthier lifestyles (Kreiner, 2006), by creating well-being-oriented work environments, and by offering enabling versus enclosing work-life policies (Bourdeau et al., 2019). They could also be decreased at the individual level through coaching or counseling (Van Gordon et al., 2017). Furthermore, possible interventions include changes designed to reduce workload sustainably, which might help decrease these expectations in the long run (Derks et al., 2015). More generally, it might be useful to encourage more efficient work recovery processes to protect employees' professional well-being and to facilitate positive spillover between their work and personal roles (Huyghebaert-Zouaghi et al., 2022). Indeed, research has shown that efficient work recovery can be developed and trained (Hahn et al., 2011).

Conclusion

The present research underscores the importance of considering how HP and OP for work combine within distinct subpopulation of employees. More specifically, our findings support the generally desirable effects of high levels of HP consistent with the idea that HP is a powerful personal resource that can help improve employees' functioning. However, they also show that the nature of employees' work passion profiles plays an even more important role in driving associations between work passion, its predictors, and its outcomes, suggesting in part that the benefits of HP or the harm posed by OP depend in part on the context created by these configurations. This recognition is important as it also provides empirical evidence supporting some of the theoretical underpinnings of the *quadripartite* model of passion (Schellenberg et al., 2019) which, although person-centered in nature, had only rarely been investigated in this manner. In doing so, we also revealed that this model might require some further development to accommodate the presence of profiles displaying closer to average levels of passion. From a practical perspective, our findings also support the need to reduce supervisor expectations regarding work-related messages to maintain more desirable profiles,

characterized by high levels of HP and low levels of OP. More generally, our results showed that a person-centered approach to the study of work passion can yield unique insights that would have been missed by relying on more traditional variable-centered analyses.

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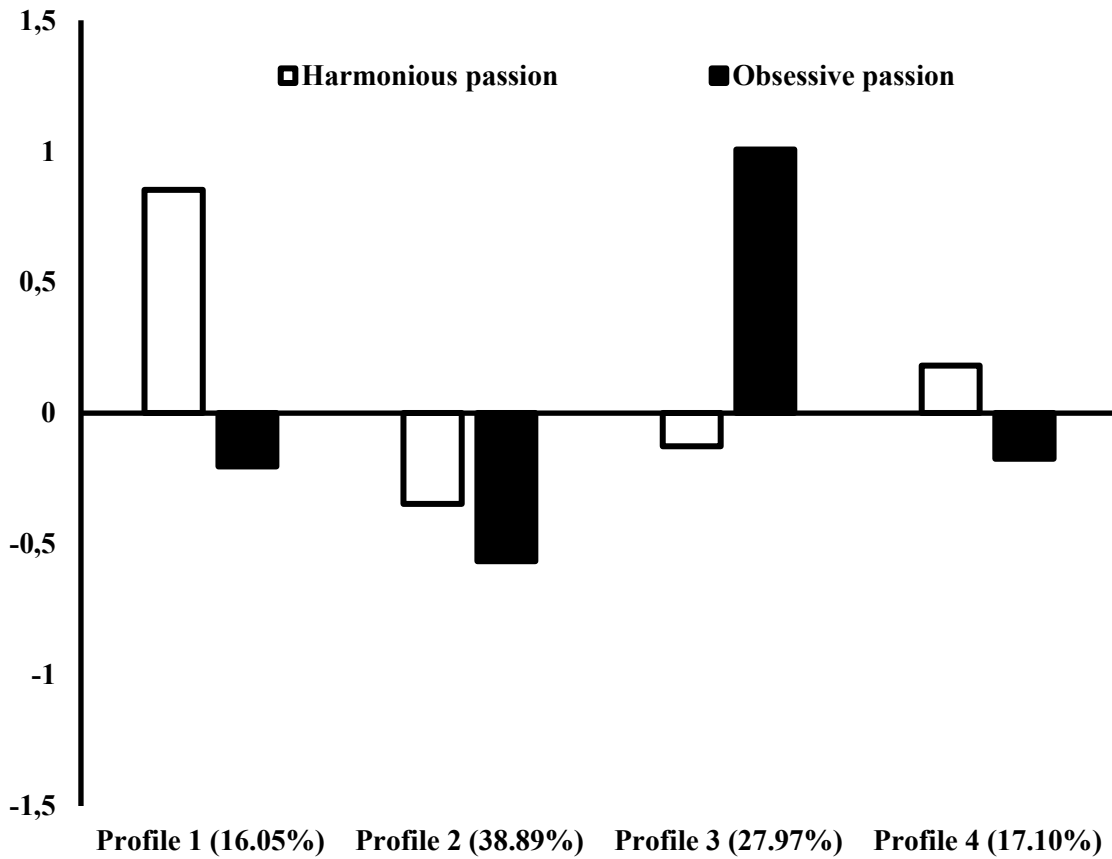
Figure 1. Final Four-Profile Solution
Note. Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average.*

Table 1

Results from the Time-Specific and Longitudinal Models

Model	LL	#fp	Scaling	AIC	CAIC	BIC	ABIC	Entropy
Final Latent Profile Analyses								
Time 1	-1094.936	19	1.118	2227.872	2324.607	2305.607	2245.310	.691
Time 2	-1062.175	19	1.100	2162.351	2259.086	2240.086	2179.789	.746
Longitudinal Latent Profile Analyses								
Configural Similarity	-2157.551	38	1.105	4391.101	4584.571	4546.571	4425.977	.677
Structural Similarity	-2167.543	30	1.215	4395.085	4547.824	4517.824	4422.618	.670
Dispersion Similarity	-2171.370	22	1.420	4386.740	4498.749	4476.749	4406.931	.668
Distributional Similarity	-2172.539	19	1.574	4383.078	4479.813	4460.813	4400.516	.666
Predictive Similarity: Demographics								
Null Effects Model	-2556.310	35	.754	5182.620	5360.815	5325.815	5214.742	.862
Profile-Specific Free Relations with Predictors	-2507.808	125	.768	5265.616	5902.029	5777.029	5380.337	.860
Free Relations with Predictors	-2525.130	65	.756	5180.260	5511.195	5446.195	5239.915	.867
Equal Relations with Predictors	-2543.066	50	.839	5186.133	5440.698	5390.698	5232.022	.864
Predictive Similarity: Predictors								
Null Effects Model	-3985.939	59	1.048	8089.879	8390.266	8331.266	8144.027	.862
Profile-Specific Free Relations with Predictor	-3888.235	131	.948	8038.470	8705.431	8574.431	8158.698	.866
Free Relations with Predictor	-3905.724	83	.935	7977.448	8400.026	8317.026	8053.623	.876
Equal Relations with Predictor	-3920.818	71	1.082	7983.636	8345.119	8274.119	8048.797	.859
Explanatory Similarity								
Free Relations with Outcomes	-7496.769	215	1.181	15423.537	16518.169	16303.169	15620.858	.881
Equal Relations with Outcomes	-7514.030	183	1.201	15394.060	16325.770	16142.770	15562.012	.867

Note. LL: Model loglikelihood; #fp: Number of free parameters; Scaling: Scaling correction factor associated with robust maximum likelihood estimates; AIC: Akaïke information criteria; CAIC: Constant AIC; BIC: Bayesian information criteria; ABIC: Sample size adjusted BIC.

Table 2

Transitions Probabilities

	Profile 1	Profile 2	Profile 3	Profile 4
Profile 1	.840	.013	.000	.146
Profile 2	.000	1.000	.000	.000
Profile 3	.000	.000	1.000	.000
Profile 4	.109	.000	.000	.891

Note. Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average.*

Table 3

Results from the Predictive Analyses

	Profile 1 vs 4		Profile 2 vs 4		Profile 3 vs 4		Profile 1 vs 3		Profile 2 vs 3		Profile 1 vs 2	
Predictors	Coef. (SE)	OR	Coef. (SE)	OR	Coef. (SE)	OR	Coef. (SE)	OR	Coef. (SE)	OR	Coef. (SE)	OR
Centrality	.496 (.229)*	1.642	-.694 (.291)*	.500	.920 (.240)**	2.510	-.424 (.219)	.654	-1.614 (.276)**	.199	1.190 (.294)**	3.287
Family	.513 (.204)*	1.670	-.003 (.188)	.997	.552 (.231)*	1.736	-.039 (.238)	.962	-.555 (.223)*	.574	.516 (.211)*	1.675
Expectations	-.545 (.240)*	.580	.163 (.189)	1.176	.693 (.192)**	2.000	-1.238 (.257)**	.290	-.531 (.182)*	.588	-.707 (.265)**	.493
Work setting	-.306 (.343)	.737	-.429 (.368)	.651	-.538 (.381)	.584	.232 (.362)	1.261	.109 (.319)	1.115	.124 (.346)	1.132

Note. * $p < .05$; ** $p < .01$; SE: Standard error of the coefficient; OR: Odds ratio; the coefficients and OR reflect the effects of the predictors on the likelihood of membership into the first listed profile relative to the second listed profile; work centrality, family orientation, and supervisor expectations regarding work-related messages are estimated from factor scores with a standard deviation of 1 and a mean of 0; work setting was coded 0 for onsite workers and 1 for remote workers; Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average.*

Table 4

Associations between Profile Membership and the Outcomes Taken from the Model of Explanatory Similarity (Equal across Time Points)

	Profile 1 M [CI]	Profile 2 M [CI]	Profile 3 M [CI]	Profile 4 M [CI]	Summary of Statistically Significant Differences
Work-family conflict[fs]	-.570 [-.772; -.368]	-.168 [-.375; .038]	.800 [.648; .952]	-.402 [-.565; -.239]	3 > 2 = 4; 3 > 1 = 4; 2 > 1
Family-work conflict[fs]	-.233 [-.367; -.100]	-.230 [-.396; -.063]	.469 [.265; .673]	-.053 [-.296; .189]	3 > 1 = 2 = 4
Work-family enrichment[fs]	.576 [.424; .727]	-.533 [-.774; -.292]	.134 [-.021; .290]	.245 [.000; .490]	1 > 3 = 4 > 2
Family-work enrichment[fs]	.366 [.170; .562]	-.262 [-.469; -.055]	.050 [-.114; .213]	.053 [-.130; .236]	1 > 2 = 4; 1 > 3 = 4; 3 > 2
Job satisfaction[si]	3.475 [3.330; 3.620]	2.837 [2.684; 2.989]	2.888 [2.724; 3.051]	3.185 [2.983; 3.388]	1 > 4 > 2 = 3
Life satisfaction[si]	3.498 [3.367; 3.628]	3.018 [2.872; 3.163]	2.924 [2.782; 3.066]	3.099 [2.936; 3.261]	1 > 2 = 3 = 4
Family satisfaction[si]	3.536 [3.401; 3.671]	3.315 [3.147; 3.483]	3.111 [2.970; 3.252]	3.245 [3.037; 3.453]	1 > 3 = 4; 1 = 2; 2 = 3 = 4
Positive work reflection[fs]	.363 [.199; .526]	-.496 [-.634; -.357]	.266 [.092; .439]	.166 [-.026; .358]	1 = 3 = 4 > 2

Note. M: Mean; CI: 95% confidence interval; [fs]: the indicators representing our multi-item outcome measures are factor scores estimated with a mean of 0 and a standard deviation of 1; [si]: the indicators from our single-item measures are in their natural units (1 to 4); Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average*.

Online Supplements for:

On the Nature, Predictors, and Outcomes of Longitudinal Work Passion Profiles

Authors' note

These online technical appendices are to be posted on the journal website and hot-linked to the manuscript. If the journal does not offer this possibility, these materials can alternatively be posted on one of our personal websites (we will adjust the in-text reference upon acceptance).

We would also be happy to have some of these materials brought back into the main manuscript, or included as published appendices if you deem it useful. We developed these materials to provide additional technical information and to keep the main manuscript from becoming needlessly long.

Preliminary Measurement Models

Analyses

Due to the complexity of the longitudinal models underlying all constructs assessed in the present study, preliminary analyses were conducted separately for work passion and for our multi-item predictors (work centrality, family orientation, and supervisor expectations regarding work-related messages) and outcomes (work-family conflict: WFC; family-work-conflict: FWC; work-family enrichment: WFE; family-work enrichment: FWE; and positive work reflection) measures. These longitudinal measurement models were estimated using Mplus 8.7 (Muthén & Muthén, 2021) and the maximum likelihood robust (MLR) estimator, which provides parameter estimates, standard errors, and goodness-of-fit that are robust to the non-normality of the response scales used in the present study. These models were estimated with full information maximum likelihood (FIML; Enders, 2010) procedures to handle missing data. Due to the way the online questionnaire was programmed, there were no missing responses for participants who completed our questionnaires at each measurement occasion. FIML is recognized to be as efficient as multiple imputation, but less computationally demanding (Enders, 2010). Given the known oversensitivity of the chi-square test of exact fit (χ^2) to sample size and minor model misspecifications (e.g., Marsh et al., 2005), we relied on sample-size independent goodness-of-fit indices to describe the fit of the alternative models (Hu & Bentler, 1999): The comparative fit index (CFI), the Tucker-Lewis index (TLI), as well as the root mean square error of approximation (RMSEA) and its 90% confidence interval. Values greater than .90 for the CFI and TLI indicate adequate model fit, although values greater than .95 are preferable. Values smaller than .08 or .06 for the RMSEA respectively support acceptable and excellent model fit. We also report composite reliability coefficients associated with each of the a priori factors, calculated from the standardized parameters using McDonald (1970) omega (ω) coefficient:

$$\omega = \frac{(\sum|\lambda_i|)^2}{[(\sum|\lambda_i|)^2 + \sum \delta_i]}$$

where $|\lambda_i|$ are the standardized factor loadings associated with a factor in absolute values, and δi, the item uniquenesses.

For all models, sequential tests of measurement invariance were conducted (Millsap, 2011): (1)

configural invariance; (2) weak invariance (loadings); (3) strong invariance (loadings and intercepts); (4) strict invariance (loadings, intercepts, and uniquenesses); (5) invariance of the latent variance-covariance matrix (loadings, intercepts, uniquenesses, correlated uniquenesses, and latent variances-covariances); and (6) latent means invariance (loadings, intercepts, uniquenesses, correlated uniquenesses, latent variances-covariances, and latent means). These tests were first conducted across groups of employees working remotely or onsite at Time 1 (T1), and then at Time 2 (T2), before being conducted for the total sample across measurement occasions (longitudinal invariance). Like the chi square, chi square difference tests are oversensitive to sample size and minor misspecifications. For this reason, invariance was assessed by considering changes in CFI and RMSEA (Chen, 2007; Cheung & Rensvold, 2002). A ΔCFI/TLI of .010 or less and a ΔRMSEA of .015 or less between a more restricted model and the previous one support the invariance hypothesis.

Work Passion

For the work passion questionnaire, we first estimated, separately at T1 and T2, a confirmatory factor analysis (CFA) solution in which items were only allowed to define their a priori dimension (harmonious passion: HP; and obsessive passion: OP), while allowing all factors to correlate. Following Marsh et al.'s (2013, also see Tóth-Király et al., 2017) recommendations in relation to this measure, we also contrasted this solution to an exploratory structural equation modeling (ESEM) solution in which the factors were defined as in the CFA models, but in which all cross-loadings were freely estimated but assigned a target value of zero using an oblique target rotation procedure (Browne, 2001). The goodness-of-fit results from these alternative work passion models are reported in Table S1. These results clearly support the adequacy of the ESEM model underlying the work passion measure (all CFI and TLI $\geq$ .95; all RMSEA $\leq$ .08) and its superiority relative to the CFA model (ΔCFI = .117 to .155; ΔTLI = .217 to .272; ΔRMSEA = .132 to .150).

The ESEM solution was thus retained for sequential tests of measurement invariance. The results from these tests, reported in Table S1, supported the complete invariance of the model across groups and time points, thus indicating that work passion ratings can be considered fully equivalent over groups and time. Factor scores used in the main analyses were extracted from the final longitudinal model of latent means invariance. Parameter estimates from this final longitudinal model of latent

means invariance are reported in Table S2. These results revealed well-defined HP (λ = .763 to .949, ω = .896) and OP (λ = .506 to .809, ω = .690) factors over time.

Predictors and Outcomes

A CFA model was also estimated for the multi-item predictor and outcome variables at both T1 and T2. This model included a total of eight factors (work centrality, family orientation, supervisor expectations regarding work-related messages, WFC, FWC, WFE, FWE, and positive work reflection) at each time point, and factors were freely allowed to correlate. The goodness-of-fit results for these models are reported in Table S3. These results support the adequacy of the a priori model (with all CFI/TLI $\geq$ .90 and all RMSEA $\leq$ .08), as well as its complete invariance over groups and time points (ΔCFI $\leq$ .010; ΔTLI $\leq$ .010; and ΔRMSEA $\leq$ .015). The parameter estimates and composite reliability scores obtained from the most invariant longitudinal measurement model (latent means invariance) are reported in Table S4. These results show that all factors are well-defined by satisfactory factor loadings (λ = .686 to .979), resulting in satisfactory composite reliability coefficients (ω = .838 to .961). Factor scores were saved from this most invariant measurement model and used as predictor and outcome indicators in the main research. The correlations between all variables are reported in Table S5.

Main Analyses

Latent Profile Analyses

Latent profile analyses examine the multivariate distribution of scores on a set of profile indicators to summarize this distribution via the identification of a finite set of latent subpopulations (or profiles) of participants characterized by distinct configurations on this set of indicators, while allowing for within-profile variability on all indicators (McLachlan & Peel, 2000). These profiles are like prototypes and are called latent to reflect their probabilistic nature (Morin et al., 2018). More precisely, each participant is assigned a probability of membership in all profiles, resulting in a latent profile analysis solution corrected for classification errors.

The decision of how many profiles to retain relies on a consideration of whether the profiles are meaningful, aligned with theory, and statistically adequate (Marsh et al., 2009; Morin, 2016). In this regard, a lower value on the Akaïke Information Criterion (AIC), Consistent AIC (CAIC), Bayesian

Information Criterion (BIC), and sample-size Adjusted BIC (ABIC) indicate better fitting models. Statistically significant *p*-values on the adjusted Lo, Mendell and Rubin's (2001) Likelihood Ratio Test (aLMR), and Bootstrap Likelihood Ratio Test (BLRT) also suggest better fit relative to a model with one fewer profile. Statistical research has shown that the BIC, CAIC, ABIC, and BLRT, but not the AIC and aLMR, were efficient at helping to identify the number of latent profiles (e.g., Diallo et al., 2016, 2017). For this reason, the AIC and aLMR will not be used to guide model comparison and selection and are only reported for purposes of transparency. Moreover, all of these tests present a strong sample size dependency (Marsh et al., 2009), and thus often fail to converge on a specific number of profiles. When this happens, it is usually recommended to rely on a graphical display of these indicators, referred to as an elbow plot, in which the observation of a plateau in the decrease in the value of these indicators helps to pinpoint the optimal solution (Morin et al., 2011). Finally, the classification accuracy (from 0 to 1) is summarized by the entropy, which should not be used to select the optimal number of profiles present in a solution (Lubke & Muthén, 2007).

Longitudinal Tests of Profile Similarity

The sequential strategy devised by Morin et al. (2016) and optimized for longitudinal analyses by Morin and Litalien (2017), starts by assessing if each measurement occasion results in the estimation of the same number of profiles. The two time-specific solutions are then be combined in a longitudinal model of *configural* similarity. Equality constraints are then progressively imposed on the within-profile means (*structural* similarity), variances (*dispersion* similarity), and size (*distributional* similarity). The CAIC, BIC, and ABIC can be used to contrast these models so that each form of profile similarity can be considered supported as long as at least two of these indices decrease following the integration of equality constraints (Morin et al., 2016).

Predictors and Outcomes of Profile Membership

Demographics (sex, age, status, sector, and country) were first considered in a series of four predictive models in which their associations with profile membership were specified using a multinomial logistic regression link function. First, we estimated a null effects model assuming no relations between these variables and the profiles. Second, the effects of these variables were freely estimated, and allowed to vary over time and as a function of T1 profile membership (to assess the

effects on specific profile transitions). Third, predictions were allowed to differ over time only. Finally, a model of *predictive* similarity was estimated by constraining these associations to be equal over time. Relations between our predictors (work centrality, family orientation, supervisor expectations regarding work-related messages, and work setting) and the profiles were then assessed in the same sequence. Associations were assessed between the predictors and the profiles estimated at the same time point, while considering the possibility that predictors could influence specific transitions in profile membership over time. T2 predictions are controlled for what they shared with T1.

Time-specific outcome measures (work-family conflict, family-work conflict, work-family enrichment, family-work enrichment, positive work reflection, job satisfaction, life satisfaction, and family satisfaction) were included and allowed to vary as a function of profile membership at the same time point (Morin et al., 2016; Morin & Litalien, 2017). T2 outcome measures can be considered controlled for what they share with their T1 counterparts (i.e., stability) due to their joint inclusion in these models. *Explanatory* similarity was assessed by constraining these associations to be equal over time. The multivariate delta method was used to test the statistical significance of between-profile differences in outcome levels (Raykov & Marcoulides, 2004).

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Table S1

Goodness-of-Fit Statistics for the Estimated Models (Work Passion)

Description	χ^2 (*df*)	CFI	TLI	RMSEA	90% CI	CM	$\Delta\chi^2$ (*df*)	ΔCFI	ΔTLI	ΔRMSEA
Work Passion										
Time 1 CFA	104.768 (8)*	.883	.781	.165	[.138; .194]	-	-	-	-	-
Time 1 ESEM	4.395 (4)	1.000	.998	.015	[.000; .075]	-	-	-	-	-
Time 2 CFA	125.580 (8)*	.835	.690	.203	[.173; .235]	-	-	-	-	-
Time 2 ESEM	11.144 (4)*	.990	.962	.071	[.023; .122]	-	-	-	-	-
Work Passion: Longitudinal Invariance										
M1. Configural invariance	47.874 (34)	.994	.988	.030	[.000; .049]	-	-	-	-	-
M2. Weak invariance	61.152 (42)*	.992	.987	.032	[.011; .049]	M1	13.439 (8)	-.002	-.001	+.002
M3. Strong invariance	71.152 (46)*	.989	.984	.035	[.017; .051]	M2	10.690 (4)*	-.003	-.003	+.003
M4. Strict invariance	87.271 (52)*	.984	.980	.039	[.024; .053]	M3	15.395 (6)*	-.005	-.004	+.004
M5. Variance-covariance invariance	97.593 (55)*	.981	.977	.042	[.028; .055]	M4	10.741 (3)*	-.003	-.003	+.003
M6. Latent means invariance	99.550 (57)*	.981	.978	.041	[.027; .054]	M5	1.721 (2)	.000	+.001	-.001
Work Passion: Multi-Group Invariance Time 1										
M7. Configural invariance	7.169 (8)	1.000	1.000	.000	[.000; .073]	-	-	-	-	-
M8. Weak invariance	16.599 (16)	.999	.999	.013	[.000; .064]	M7	9.372 (8)	-.001	-.001	+.013
M9. Strong invariance	22.983 (20)	.996	.995	.026	[.000; .066]	M8	6.921 (4)	-.003	-.004	+.013
M10. Strict invariance	24.901 (26)	1.000	1.000	.000	[.000; .050]	M9	3.143 (6)	+.004	+.005	-.026
M11. Variance-covariance invariance	27.643 (29)	1.000	1.000	.000	[.000; .048]	M10	2.702 (3)	.000	.000	.000
M12. Latent means invariance	28.825 (31)	1.000	1.000	.000	[.000; .046]	M11	1.042 (2)	.000	.000	.000
Work Passion: Multi-Group Invariance Time 2										
M13. Configural invariance	18.907 (8)*	.985	.943	.088	[.036; .139]	-	-	-	-	-
M14. Weak invariance	21.158 (16)	.993	.986	.043	[.000; .086]	M13	3.052 (8)	+.008	+.043	-.045
M15. Strong invariance	25.081 (20)	.993	.989	.038	[.000; .079]	M14	3.749 (4)	.000	+.003	-.005
M16. Strict invariance	26.847 (26)	.999	.999	.014	[.000; .061]	M15	2.931 (6)	+.006	+.010	-.024
M17. Variance-covariance invariance	28.032 (29)	1.000	1.000	.000	[.000; .055]	M16	.938 (3)	+.001	+.001	-.014
M18. Latent means invariance	30.579 (31)	1.000	1.000	.000	[.000; .055]	M17	2.574 (2)	.000	.000	.000

Note. * $p < .05$; CFA: Confirmatory factor analyses; ESEM: Exploratory structural equation modeling; χ^2: Scaled chi-square test of exact fit; *df*: Degrees of freedom; CFI: Comparative fit index; TLI: Tucker-Lewis index; RMSEA: Root mean square error of approximation; 90% CI: 90% confidence interval; CM: Comparison model; and Δ: Change in fit relative to the CM.

Table S2

Standardized Factor Loadings (λ) and Uniquenesses (δ) for the M6 Solution (Longitudinal Latent

Means Invariance Work Passion)

Items	Harmonious passion λ	Obsessive passion λ	δ
Harmonious passion			
Item 1	**.859**	*.006*	.263
Item 2	**.763**	.069	.415
Item 3	**.949**	-.062	.093
Obsessive passion			
Item 1	.185	**.809**	.318
Item 2	.182	**.570**	.645
Item 3	-.325	**.506**	.632
ω	.896	.690	

Note. λ: Factor loading; δ: Item uniqueness; ω: Omega coefficient of composite reliability; target factor loadings are indicated in bold; the non-significant parameter ($p > .05$) is marked in italics.

Table S3

Goodness-of-Fit Statistics for the Estimated Models (Predictors and Outcomes)

Description	χ^2 (df)	CFI	TLI	RMSEA	90% CI	CM	$\Delta\chi^2$ (df)	ΔCFI	ΔTLI	ΔRMSEA
Outcomes										
Time 1 CFA	345.227 (94)*	.938	.920	.078	[.069; .087]	-	-	-	-	-
Time 2 CFA	305.983 (94)*	.932	.913	.080	[.070; .090]	-	-	-	-	-
Predictors and Outcomes: Longitudinal Invariance										
M1. Configural invariance	2824.682 (1926)*	.962	.958	.032	[.030; .035]	-	-	-	-	-
M2. Weak invariance	2851.810 (1951)*	.962	.958	.032	[.030; .035]	M1	26.282 (25)	.000	.000	.000
M3. Strong invariance	2872.133 (1976)*	.962	.959	.032	[.029; .035]	M2	18.883 (25)	.000	+.001	.000
M4. Strict invariance	2894.749 (2009)*	.963	.960	.032	[.029; .034]	M3	55.505 (33)*	+.001	+.001	.000
M5. Variance-covariance invariance	2922.453 (2045)*	.963	.961	.031	[.029; .034]	M4	15.613 (36)	.000	+.001	-.001
M6. Latent means invariance	2933.303 (2053)*	.963	.961	.031	[.029; .034]	M5	10.795 (8)	.000	.000	.000
Predictors and Outcomes: Multi-Group Invariance Time 1										
M7. Configural invariance	1494.797 (934)*	.951	.945	.052	[.047; .057]	-	-	-	-	-
M8. Weak invariance	1512.547 (959)*	.952	.947	.051	[.046; .056]	M7	18.699 (25)	+.001	+.002	-.001
M9. Strong invariance	1561.008 (984)*	.950	.946	.052	[.047; .056]	M8	49.152 (25)*	-.002	-.001	+.001
M10. Strict invariance	1588.876 (1017)*	.950	.948	.050	[.046; .055]	M9	41.392 (33)*	.000	+.002	-.002
M11. Variance-covariance invariance	1635.658 (1053)*	.949	.949	.050	[.045; .055]	M10	46.705 (36)	-.001	+.001	.000
M12. Latent means invariance	1651.131 (1061)*	.949	.949	.050	[.045; .055]	M11	15.760 (8)*	.000	.000	.000
Predictors and Outcomes: Multi-Group Invariance Time 2										
M13. Configural invariance	1425.511 (934)*	.952	.946	.054	[.049; .060]	-	-	-	-	-
M14. Weak invariance	1445.408 (959)*	.953	.948	.053	[.048; .059]	M13	20.883 (25)	+.001	+.002	-.001
M15. Strong invariance	1478.457 (984)*	.952	.949	.053	[.047; .059]	M14	32.642 (25)	-.001	+.001	.000
M16. Strict invariance	1499.102 (1017)*	.953	.952	.052	[.046; .057]	M15	36.479 (33)	+.001	+.003	-.001
M17. Variance-covariance invariance	1550.871 (1053)*	.952	.952	.052	[.046; .057]	M16	51.845 (36)*	-.001	.000	.000
M18. Latent means invariance	1559.839 (1061)*	.952	.952	.051	[.046; .057]	M17	8.761 (8)	.000	.000	-.001

Note. * $p < .05$; CFA: Confirmatory factor analyses; χ^2: Scaled chi-square test of exact fit; *df*: Degrees of freedom; CFI: Comparative fit index; TLI: Tucker-Lewis index; RMSEA: Root mean square error of approximation; 90% CI: 90% confidence interval; CM: Comparison model; and Δ: Change in fit relative to the CM.

Table S4

Standardized Factor Loadings (λ) and Uniquenesses (δ) for the M6 Solution (Longitudinal Latent

Means Invariance Predictors and Outcomes)

Items	WC λ	FO λ	SE λ	WFC λ	FWC λ	WFE λ	FWE λ	PWR λ	δ
WC									
Item 1	.727								.471
Item 2	.887								.213
Item 3	.901								.189
Item 4	.775								.399
Item 5	.890								.208
FO									
Item 1		.833							.307
Item 2		.878							.230
Item 3		.932							.130
Item 4		.901							.189
Item 5		.901							.188
SE									
Item 1			.919						.155
Item 2			.838						.298
Item 3			.874						.236
Item 4			.757						.428
WFC									
Item 1				.911					.170
Item 2				.938					.119
Item 3				.931					.133
Item 4				.925					.145
Item 5				.846					.284
FWC									
Item 1					.846				.284
Item 2					.908				.176
Item 3					.920				.153
Item 4					.899				.191
Item 5					.885				.216
WFE									
Item 1						.686			.529
Item 2						.930			.135
Item 3						.913			.166
FWE									
Item 1							.764		.417
Item 2							.748		.440
Item 3							.870		.242
PWR									
Item 1								.876	.233
Item 2								.979	.041
Item 3								.967	.064
ω	.922	.950	.911	.961	.951	.885	.838	.959	

Note. λ: Factor loading; δ: Item uniqueness; ω: Omega coefficient of composite reliability; WC: Work centrality; FO: Family orientation; SE: Supervisor expectations regarding work-related messages; WFC: Work-family conflict; FWC: Family-work conflict; WFE: Work-family enrichment; FWE: Family-work enrichment; PWR: Positive work reflection; all parameters are significant ($p < .05$).

Table S5

Correlations Between Variables

	M	SD	α	ω	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Sex	.043	.497	-	-	-													
2. Age	39.52	10.38	-	-	.039	-												
3. Status	.010	.306	-	-	-.134**	.008	-											
4. Sector	.042	.494	-	-	-.238**	.106*	.025	-										
5. Country	.019	.393	-	-	.146**	-.040	-.071	-.098*	-									
6. Harmonious passion (T1)†	4.72	1.333	.890	.896	-.031	.064	-.005	.007	.119*	-								
7. Obsessive passion (T1)†	2.59	1.126	.640	.690	-.036	-.021	-.117*	-.109*	-.005	-.008	-							
8. Work centrality (T1)†	1.73	.739	.920	.922	-.016	-.005	-.055	-.087	.077	.114*	.479**	-						
9. Family orientation (T1)†	3.82	.923	.950	.950	-.005	-.020	.097*	.112*	.004	.124**	-.124**	-.504**	-					
10. Expectations (T1)†	2.28	1.060	.900	.911	-.010	.006	.031	-.104*	.059	-.166**	.416**	.304**	-.136**	-				
11. WFC (T1)†	3.37	1.664	.960	.961	-.023	.009	-.074	.018	-.140**	-.402**	.434**	.203**	-.011	.562**	-			
12. FWC (T1)†	2.47	1.312	.940	.951	.092	.037	.009	.024	-.063	-.141**	.284**	.149**	.128**	.302**	.594**	-		
13. WFE (T1)†	3.33	.853	.860	.885	-.115*	.089	-.026	.118*	-.014	.614**	.187**	.205**	.112*	-.038	-.143**	-.043	-	
14. FWE (T1)†	3.72	.725	.810	.838	-.129**	-.046	.025	.102*	-.097*	.356**	.070	-.171**	.464**	-.055	.021	-.019	.568**	-
15. Positive reflection (T1)†	2.26	.916	.960	.959	-.039	.090	.006	.007	.043	.460**	.252**	.208**	.079	.046	-.050	.062	.552**	.299**
16. Job satisfaction (T1)	3.03	.911	-	-	-.066	.024	.006	.005	.062	.579**	-.002	.104*	.092	-.208**	-.363**	-.171**	.541**	.267**
17. Life satisfaction (T1)	3.09	.834	-	-	-.101*	-.039	.016	.139**	.010	.447**	-.104*	-.069	.244**	-.200**	-.290**	-.136**	.422**	.370**
18. Family satisfaction (T1)	3.31	.809	-	-	-.025	-.105*	-.021	.132**	-.007	.277**	-.074	-.176**	.271**	-.110*	-.182**	-.110*	.247**	.356**
19. Work setting (T1)	.064	.480	-	-	.092	-.086	-.055	-.034	.000	-.018	-.045	-.047	.044	-.092	.029	.123**	-.017	.017
20. Harmonious passion (T2)†	4.76	1.279	.890	.896	.003	.072	.006	-.008	.086	.893**	-.061	.085	.084	-.183**	-.413**	-.158**	.550**	.313**
21. Obsessive passion (T2)†	2.57	1.036	.530	.690	-.052	-.025	-.133**	-.102*	-.038	.008	.900**	.477**	-.161**	.379**	.401**	.252**	.189**	.038
22. Work centrality (T2)†	1.78	.790	.930	.922	.041	.004	-.059	-.111*	.040	.110*	.429**	.843**	-.537**	.275**	.171**	.150**	.164**	-.203**
23. Family orientation (T2)†	3.86	.931	.950	.950	-.030	.010	.075	.122*	-.025	.131**	-.110*	-.442**	.866**	-.148**	.002	.156**	.133**	.482**
24. Expectations (T2)†	2.22	1.078	.920	.911	-.053	-.012	.026	-.120*	.040	-.145**	.414**	.279**	-.138**	.877**	.526**	.234**	-.010	-.017
25. WFC (T2)†	3.30	1.661	.960	.961	-.048	-.026	-.089	-.007	-.117*	-.354**	.425**	.194**	-.002	.531**	.843**	.477**	-.132**	.049
26. FWC (T2)†	2.43	1.354	960	.951	.082	-.031	.027	-.016	-.053	-.154**	.268**	.061	.165**	.292**	.535**	.760**	.004	.051
27. WFE (T2)†	3.40	.867	.900	.885	-.104*	.066	.017	.072	-.036	.611**	.138**	.176**	.089	-.056	-.203**	-.046	.782**	.520**
28. FWE (T2)†	3.74	.782	.850	.838	-.143**	-.033	.044	.118*	-.095*	.331**	.038	-.145**	.414**	-.087	-.018	-.070	.458**	.729**
29. Positive reflection (T2)†	2.28	.948	.960	.959	-.071	.015	-.027	.013	.024	.440**	.297**	.264**	.101*	.052	-.050	.104*	.554**	.266**
30. Job satisfaction (T2)	3.03	.864	-	-	-.006	.116*	.001	-.006	.064	.547**	-.044	.073	.098	-.219**	-.337**	-.150**	.469**	.240**
31. Life satisfaction (T2)	3.11	.799	-	-	-.079	-.030	.069	.151**	-.026	.420**	-.129**	-.097	.273**	-.176**	-.235**	-.079	.339**	.323**
32. Family satisfaction (T2)	3.26	.803	-	-	-.042	-.099	.038	.149**	-.020	.273**	-.151**	-.203**	.332**	-.188**	-.218**	-.066	.217**	.339**
33. Work setting (T2)	.065	.480	-	-	.090	-.047	-.114*	.014	.061	.050	-.094	-.047	.080	-.112*	-.073	.087	.035	.027

Note. * $p < .05$; ** $p < .01$; M: Mean scale scores; SD: Standard deviation; α: Cronbach's alpha; ω: Omega coefficient of composite reliability; † variables estimated from factor scores with a mean of 0 and a standard deviation of 1 in the main analyses; sex was coded 0 for women and 1 for men; status was coded 0 for employed full-time and 1 for employed part-time; sector was coded 0 for private sector and 1 for public sector; country was coded 0 for UK and 1 for USA; work setting was coded 0 for onsite workers and 1 for remote workers; WFC: Work-family conflict; FWC: Family-work conflict; WFE: Work-family enrichment; and FWE: Family-work enrichment.

Table S5 (Continued)

Correlations Between Variables

	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
15. Positive reflection (T1)†	-																		
16. Job satisfaction (T1)	.443**	-																	
17. Life satisfaction (T1)	.312**	.567**	-																
18. Family satisfaction (T1)	.174**	.352**	.729**	-															
19. Work setting (T1)	.024	-.014	-.049	-.029	-														
20. Harmonious passion (T2)†	.404**	.533**	.412**	.231**	.028	-													
21. Obsessive passion (T2)†	.228**	.017	-.097*	-.068	-.042	-.054	-												
22. Work centrality (T2)†	.230**	.097*	-.087	-.171**	.049	.117*	.476**	-											
23. Family orientation (T2)†	.062	.079	.242**	.298**	-.015	.099*	-.143**	-.526**	-										
24. Expectations (T2)†	.041	-.201**	-.218**	-.122*	-.106*	-.178**	.399**	.278**	-.132**	-									
25. WFC (T2)†	-.050	-.362**	-.294**	-.173**	-.016	-.424**	.416**	.162**	.007	.585**	-								
26. FWC (T2)†	.053	-.161**	-.138**	-.094*	.056	-.180**	.237**	.117*	.167**	.325**	.599**	-							
27. WFE (T2)†	.507**	.490**	.417**	.258**	-.003	.602**	.165**	.176**	.103*	-.051	-.189**	-.037	-						
28. FWE (T2)†	.300**	.222**	.344**	.362**	.003	.325**	.047	-.206**	.473**	-.077	-.014	-.052	.575**	-					
29. Positive reflection (T2)†	.583**	.400**	.296**	.147**	-.004	.434**	.263**	.256**	.109*	.005	-.096*	.107*	.529**	.318**	-				
30. Job satisfaction (T2)	.341**	.740**	.445**	.251**	.029	.569**	-.053	.080	.075	-.235**	-.361**	-.160**	.484**	.228**	.387**	-			
31. Life satisfaction (T2)	.251**	.493**	.734**	.591**	-.019	.389**	-.142**	-.122*	.278**	-.196**	-.300**	-.112*	.366**	.354**	.295**	.555**	-		
32. Family satisfaction (T2)	.139**	.361**	.615**	.706**	.011	.226**	-.155**	-.223**	.357**	-.184**	-.240**	-.113*	.240**	.384**	.126*	.368**	.750**	-	
33. Work setting (T2)	.028	.068	.027	.022	.794**	.075	-.080	.037	-.005	-.117*	-.073	.026	.017	-.008	.016	.076	.013	.014	-

Note. * *p* < .05; ** *p* < .01; M: Mean scale scores; SD: Standard deviation; α: Cronbach's alpha; ω: Omega coefficient of composite reliability; † variables estimated from factor scores with a mean of 0 and a standard deviation of 1 in the main analyses; sex was coded 0 for women and 1 for men; status was coded 0 for employed full-time and 1 for employed part-time; sector was coded 0 for private sector and 1 for public sector; country was coded 0 for UK and 1 for USA; work setting was coded 0 for onsite workers and 1 for remote workers; WFC: Work-family conflict; FWC: Family-work conflict; WFE: Work-family enrichment; and FWE: Family-work enrichment.
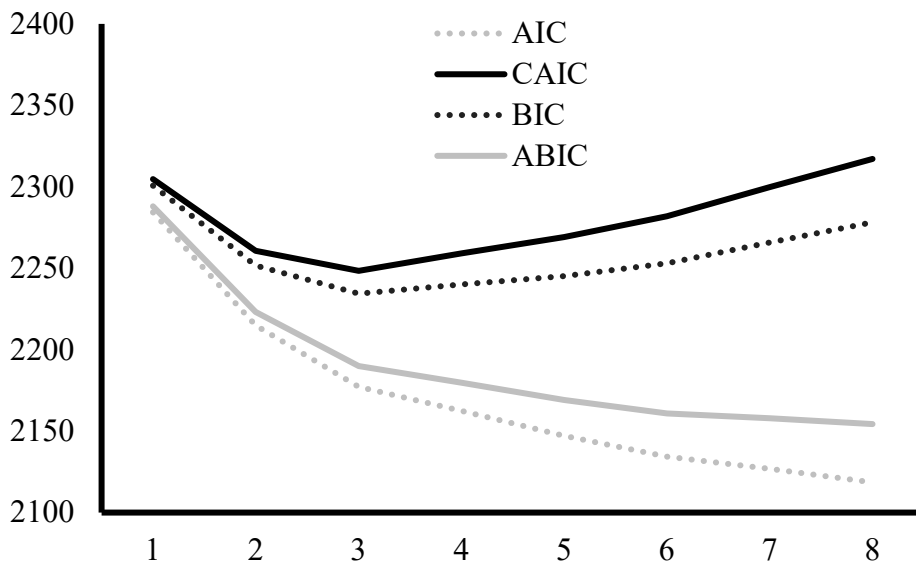
Table S6

Results from the Latent Profile Analysis Models at Times 1 and 2

Model	LL	#fp	Scaling	AIC	CAIC	BIC	ABIC	Entropy	aLMR	BLRT
Time 1										
1 Profile	-1199.928	4	.974	2407.855	2428.220	2424.220	2411.526	Na	Na	Na
2 Profiles	-1154.236	9	1.004	2326.472	2372.294	2363.294	2334.732	.566	< .001	< .001
3 Profiles	-1119.212	14	.946	2266.425	2337.703	2323.703	2279.274	.681	< .001	< .001
4 Profiles	-1094.936	19	1.118	2227.872	2324.607	2305.607	2245.310	.691	.116	< .001
5 Profiles	-1073.945	24	.993	2195.889	2318.081	2294.081	2217.916	.736	.015	< .001
6 Profiles	-1062.615	29	.921	2183.230	2330.878	2301.878	2209.845	.768	.001	< .001
7 Profiles	-1048.710	34	1.013	2165.419	2338.524	2304.524	2196.624	.768	.213	.013
8 Profiles	-1041.950	39	1.006	2161.900	2360.461	2321.461	2197.693	.779	.187	.016
Time 2										
1 Profile	-1138.166	4	.993	2284.331	2304.697	2300.697	2288.002	Na	Na	Na
2 Profiles	-1098.457	9	.931	2214.914	2260.736	2251.736	2223.174	.788	< .001	< .001
3 Profiles	-1074.558	14	.997	2177.116	2248.394	2234.394	2189.965	.744	.015	< .001
4 Profiles	-1062.175	19	1.100	2162.351	2259.086	2240.086	2179.789	.746	.088	< .001
5 Profiles	-1049.523	24	1.003	2147.045	2269.237	2245.237	2169.072	.701	.085	.079
6 Profiles	-1038.165	29	.948	2134.329	2281.977	2252.977	2160.944	.728	.005	< .001
7 Profiles	-1029.387	34	.865	2126.774	2299.878	2265.878	2157.978	.803	.081	< .001
8 Profiles	-1020.267	39	1.012	2118.534	2317.095	2278.095	2154.327	.778	.333	.182

Note. LL: Model loglikelihood; #fp: Number of free parameters; scaling: Scaling correction factor associated with robust maximum likelihood estimates; AIC: Akaïke information criteria; CAIC: Constant AIC; BIC: Bayesian information criteria; ABIC: Sample size adjusted BIC; aLMR: Adjusted Lo-Mendel-Rubin likelihood ratio test; and BLRT: Bootstrap likelihood ratio test.
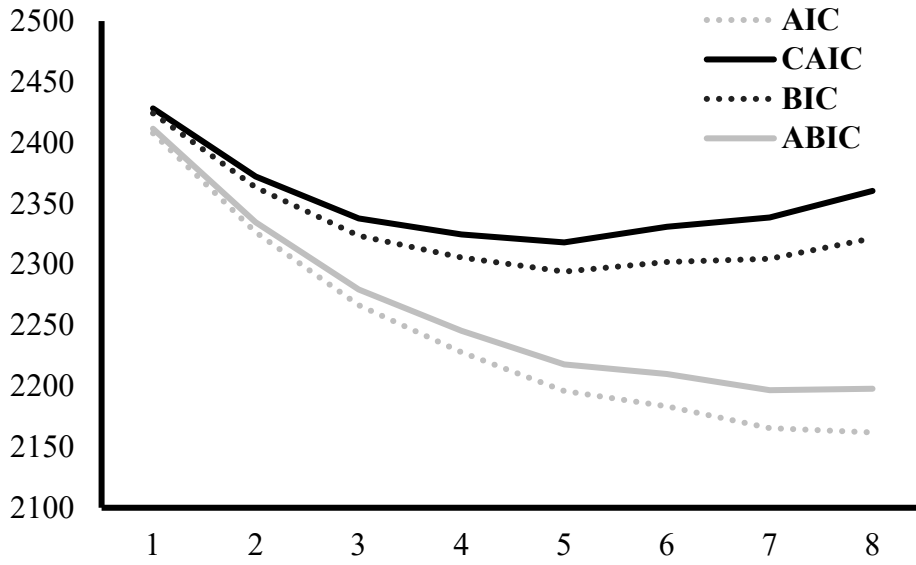
Figure S1

Elbow Plot of the Value of the Information Criteria for Solutions Including Different Numbers of Latent Profiles at Time 1

Figure S2

Elbow Plot of the Value of the Information Criteria for Solutions Including Different Numbers of Latent Profiles at Time 2

Table S7

Detailed Parameter Estimates from the Final LPA Solution (Distributional Similarity)

	Profile 1 Mean [CI]	Profile 2 Mean [CI]	Profile 3 Mean [CI]	Profile 4 Mean [CI]
Harmonious passion	.853 [.814; .892]	-.346 [-.547; -.145]	-.127 [-.390; .136]	.182 [.123; .242]
Obsessive passion	-.203 [-.511; .105]	-.565 [-.678; -.452]	1.006 [.743; 1.268]	-.174 [-.647; .298]
	Profile 1 Variance [CI]	Profile 2 Variance [CI]	Profile 3 Variance [CI]	Profile 4 Variance [CI]
Harmonious passion	.014 [.009; .019]	1.225 [1.005; 1.444]	.937 [.643; 1.230]	.023 [.000; .046]
Obsessive passion	.489 [.246; .732]	.176 [.128; .223]	.412 [.230; .594]	.374 [.041; .706]

Note. CI = 95% confidence interval; the profile indicators are estimated from factor scores with a mean of 0 and a standard deviation of 1; Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average.*

Table S8

Classification Accuracy: Average Probability of Membership into Each Latent Profile (Column) as a Function of the Most Likely Profile Membership (Row)

	Profile 1	Profile 2	Profile 3	Profile 4
Time 1				
Profile 1	.753	.175	.071	.001
Profile 2	.022	.855	.053	.070
Profile 3	.041	.035	.855	.069
Profile 4	.000	.259	.087	.654
Time 2				
Profile 1	.736	.175	.087	.002
Profile 2	.032	.842	.061	.065
Profile 3	.031	.052	.858	.059
Profile 4	.000	.249	.096	.655

Note. Profile 1: *Harmonious Passion Dominant*; Profile 2: *Low Passion*; Profile 3: *Obsessive Passion Dominant*; and Profile 4: *Mixed Passion-Average.*

Table S9

Results from the Latent Profile Analysis Models Estimated Separately Across Groups and Time Points

Model	LL	#fp	Scaling	AIC	CAIC	BIC	ABIC	Entropy	aLMR	BLRT
Onsite Workers: Time 1										
1 Profile	-437.156	4	.948	882.312	898.563	894.563	881.901	Na	Na	Na
2 Profiles	-424.261	9	.982	866.521	903.084	894.084	865.595	.633	.009	.020
3 Profiles	-413.364	14	.998	854.729	911.605	897.605	853.288	.724	.024	.150
4 Profiles	-401.574	19	.893	841.148	918.337	899.337	839.193	.794	.161	.333
5 Profiles	-388.763	24	.825	825.526	923.028	899.028	823.057	.830	.104	< .001
6 Profiles	-377.107	29	.836	812.214	930.029	901.029	809.231	.838	.115	.044
7 Profiles	-368.084	34	.926	804.167	942.296	908.296	800.670	.850	.282	.037
8 Profiles	-354.492	39	.901	786.984	945.425	906.425	782.972	.887	.032	< .001
Onsite Workers Time 2										
1 Profile	-339.308	4	.917	686.617	701.962	697.962	685.313	Na	Na	Na
2 Profiles	-329.577	9	1.048	677.154	711.681	702.681	674.220	.652	.217	< .001
3 Profiles	-319.179	14	.994	666.359	720.067	706.067	661.795	.728	.214	< .001
4 Profiles	-311.264	19	1.100	660.529	733.418	714.418	654.334	.834	.710	.375
5 Profiles	-302.090	24	.897	652.179	744.250	720.250	644.355	.815	.340	.032
6 Profiles	-294.383	29	.810	646.765	758.017	729.017	637.310	.884	.195	< .001
7 Profiles	-286.406	34	1.111	640.811	771.245	737.245	629.726	.845	.748	< .001
8 Profiles	-278.613	39	.819	635.226	784.841	745.841	622.511	.845	.043	< .001
Remote Workers: Time 1										
1 Profile	-760.954	4	.973	1529.909	1548.505	1544.505	1531.820	Na	Na	Na
2 Profiles	-722.179	9	.960	1462.358	1504.199	1495.199	1466.659	.874	< .001	< .001
3 Profiles	-695.639	14	.933	1419.279	1484.364	1470.364	1425.970	.572	.003	< .001
4 Profiles	-679.795	19	.955	1397.591	1485.921	1466.921	1406.671	.691	.013	< .001
5 Profiles	-668.577	24	.835	1385.155	1496.730	1472.730	1396.625	.789	< .001	< .001
6 Profiles	-657.457	29	.873	1372.914	1507.734	1478.734	1386.774	.777	.046	.062
7 Profiles	-646.734	34	.888	1361.468	1519.533	1485.533	1377.718	.802	< .001	.143
8 Profiles	-637.416	39	.822	1352.831	1534.141	1495.141	1371.471	.757	.004	< .001
Remote Workers Time 2										
1 Profile	-599.394	4	1.032	1206.787	1224.540	1220.540	1207.862	Na	Na	Na
2 Profiles	-570.444	9	.967	1158.888	1198.831	1189.831	1161.306	.762	< .001	< .001
3 Profiles	-554.962	14	.944	1137.923	1200.056	1186.056	1141.685	.761	.015	< .001
4 Profiles	-543.233	19	1.022	1124.466	1208.790	1189.790	1129.571	.793	.110	.095
5 Profiles	-532.407	24	.896	1112.814	1219.328	1195.328	1119.262	.844	.131	.074
6 Profiles	-522.254	29	.869	1102.507	1231.211	1202.211	1110.299	.862	.037	< .001
7 Profiles	-511.446	34	.875	1090.892	1241.786	1207.786	1100.027	.900	.112	< .001
8 Profiles	-506.077	39	1.070	1090.155	1263.240	1224.240	1100.633	.890	.008	< .001

Note. LL: Model loglikelihood; #fp: Number of free parameters; scaling: Scaling correction factor associated with robust maximum likelihood estimates; AIC: Akaïke information criteria; CAIC: Constant AIC; BIC: Bayesian information criteria; ABIC: Sample size adjusted BIC; aLMR: Adjusted Lo-Mendel-Rubin likelihood ratio test; and BLRT: Bootstrap likelihood ratio test.

Table S10

Results from the Multi-Group Models

Model	LL	#fp	Scaling	AIC	CAIC	BIC	ABIC	Entropy
Multi-Group Tests of Similarity (Time 1)								
Configural Similarity	-1371.895	39	.887	2821.790	3020.351	2981.351	2857.583	.775
Structural Similarity	-1376.871	31	.959	2815.742	2973.573	2942.573	2844.193	.703
Dispersion Similarity	-1381.911	23	1.048	2809.822	2926.922	2903.922	2830.931	.687
Distributional Similarity	-1383.096	20	1.112	2806.193	2908.019	2888.019	2824.548	.691
Multi-Group Explanatory Similarity (Time 1)								
Free Relations with Outcomes	-5298.259	100	1.052	10796.518	11305.649	11205.649	10888.295	.755
Equal Relations with Outcomes	-5312.688	68	1.095	10761.377	11107.586	11039.586	10823.785	.745
Multi-Group Tests of Similarity (Time 2)								
Configural Similarity	-1085.036	39	.941	2248.073	2438.195	2399.195	2275.469	.804
Structural Similarity	-1095.255	31	.880	2252.510	2403.633	2372.633	2274.287	.831
Dispersion Similarity	-1099.816	23	1.064	2245.633	2357.756	2334.756	2261.790	.732
Distributional Similarity	-1100.920	20	.963	2241.841	2339.339	2319.339	2255.890	.804
Multi-Group Explanatory Similarity (Time 2)								
Free Relations with Outcomes	-4242.912	100	1.138	8685.824	9173.318	9073.318	8756.072	.850
Equal Relations with Outcomes	-4258.399	68	1.140	8652.797	8984.292	8916.292	8700.566	.841

Note. LL: Model loglikelihood; #fp: Number of free parameters; Scaling: Scaling correction factor associated with robust maximum likelihood estimates; AIC: Akaïke information criteria; CAIC: Constant AIC; BIC: Bayesian information criteria; and ABIC: Sample size adjusted BIC.

Table S11

Summary of the Hypotheses Tested in the Present Study

Hypotheses	Results	Supported
1. At least four profiles will be identified. These profiles will be characterized by matching (i.e., Low Passion and Mixed Passion) or different (i.e., HP Dominant and OP Dominant) levels of HP and OP.	A four-profile solution was retained: HP Dominant, OP Dominant, Low Passion, and Mixed Passion-Average.	Partially
2. The work passion profiles will display evidence of configural, structural, dispersion, and distribution within-sample similarity.	The four-profile model of distributional similarity was retained.	Yes
3. The work passion profiles will display a moderate ($\geq$ 50%) to high ($\geq$ 65%) level of within-person stability.	Membership into the four profiles was highly stable over time.	Yes
4. Work centrality will be positively associated with membership into the Mixed Passion, HP Dominant, and OP Dominant profiles relative to the Low Passion one.	Work centrality predicted a higher likelihood of membership into the HP Dominant, OP Dominant, and Mixed Passion-Average profiles relative to the Low Passion profile.	Yes
5. Family orientation will be associated with membership into the HP Dominant and Low Passion profiles relative to the OP Dominant one.	Family orientation predicted a higher likelihood of membership into the HP Dominant and OP Dominant profiles relative to the Low Passion profile.	Partially
6. Supervisor expectations about work-related messages will be associated with membership into the OP Dominant and Low Passion profiles relative to the HP Dominant one, and into the OP Dominant profile relative to the Low Passion one.	Supervisor expectations regarding work-related messages predicted a lower likelihood of membership into the HP Dominant profile relative to the Low Passion and Mixed Passion-Average profiles, and a higher likelihood of membership into the OP Dominant profile relative to the HP Dominant, Low Passion, and Mixed Passion-Average profiles.	Partially
7. The HP Dominant profile will display lower levels of WFC and FWC, higher levels of WFE and FWE, and higher levels of job, life, and family satisfaction relative to profiles characterized by lower levels of HP and similar low levels of OP (Low Passion) and by lower levels of HP and higher levels of OP (OP Dominant).	The OP Dominant profile displayed the highest levels of WFC and FWC when compared to all other profiles. The Low Passion profile also displayed higher levels of WFC than the HP Dominant profile. The HP Dominant profile displayed the highest levels of WFE and FWE when compared to all other profiles, whereas the Low Passion profile displayed the lowest levels on these outcomes. The OP Dominant and Mixed Passion-Average profiles did not differ from one another in relation to WFE and FWE. Levels of job satisfaction, life satisfaction, and family satisfaction were all the highest in the HP Dominant profile. The remaining profiles did not differ from one another in relation to life and family satisfaction. Levels of job satisfaction were higher in the Mixed Passion-Average profile than in the Low Passion and OP Dominant profiles, which did not differ from one another on this outcome.	Partially
8. The OP Dominant profile will display higher levels of WFC and FWC, lower levels of WFE and FWE, and lower levels of job, life, and family satisfaction relative to profiles characterized by lower levels of OP and similar low levels of HP (Low Passion) and by lower levels of OP and higher levels of HP (HP Dominant).		Partially
9. The HP Dominant profile will display lower levels of WFC and FWC, higher levels of WFE and FWE, and higher levels of job, life, and family satisfaction relative to the Mixed Passion profile.		Partially
10. The OP Dominant profile will display higher levels of WFC and FWC, lower levels of WFE and FWE, and lower levels of job, life, and family satisfaction relative to the Mixed Passion profile.		Partially
11. The Low Passion profile will be associated with lower levels of positive work reflection than the three other profiles.	The Low Passion profile was associated with the lowest levels of positive work reflection, whereas the other profiles did not differ on this outcome.	Yes