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 (Δ CFI = .117 to .155; Δ TLI = .217 to .272; Δ RMSEA = .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 (Δ CFI \leq .010; Δ TLI \leq .010; and Δ RMSEA \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).

References used in this supplement

- Browne, M.W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research*, *36*, 111-150. https://doi.org/10.1207/S15327906MBR3601_05
- Chen, F.F. (2007). Sensitivity of goodness of fit indexes to lack of measurement. *Structural Equation Modeling*, *14*, 464-504. https://doi.org/10.1080/10705510701301834
- Cheung, G.W., & Rensvold, R.B. (2002). Evaluating goodness-of fit indexes for testing measurement invariance. *Structural Equation Modeling*, *9*, 233-255. https://doi.org/10.1207/S15328007SEM0902_5
- Diallo, T.M.O, Morin, A.J.S., & Lu, H. (2016). Impact of misspecifications of the latent variancecovariance and residual matrices on the class enumeration accuracy of growth mixture models. *Structural Equation Modeling*, 23, 507-531. https://doi.org/10.1080/10705511.2016.1169188
- Diallo, T.M.O., Morin, A.J.S., & Lu, H. (2017). The impact of total and partial inclusion or exclusion of active and inactive time invariant covariates in growth mixture models. *Psychological Methods*, 22, 166-190. https://doi.org/10.1037/met0000084
- Enders, C.K. (2010). Applied missing data analysis. Guilford.
- Hu, L.-T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55. https://doi.org/10.1080/10705519909540118
- Lo, Y., Mendell, N.R., & Rubin, D.B. (2001). Testing the number of components in a normal mixture. *Biometrika*, 88, 767-778. https://doi.org/10.1093/biomet/88.3.767
- Lubke, G., & Muthén, B.O. (2007). Performance of factor mixture models as a function of model size, covariate effects, and class-specific parameters. *Structural Equation Modeling*, 14, 26-47. https://doi.org/10.1207/s15328007sem1401_2
- Marsh, H.W., Hau, K., & Grayson, D. (2005). Goodness of fit in structural equation models. In A. Maydeu-Olivares & J.J. McArdle (Eds.), *Contemporary psychometrics* (pp. 275-340). Erlbaum.
- Marsh, H.W., Lüdtke, O., Trautwein, U., & Morin, A.J.S. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling*, *16*, 191-225.

- https://doi.org/10.1080/10705510902751010
- Marsh, H.W., Vallerand, R.J., Lafrenière, M.-A.K., Parker, P., Morin, A.J.S., Carbonneau, N., Jowett, S., Bureau, J.S., Fernet, C., Guay, F., Abduljabbar, A.S., & Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and languages. *Psychological Assessment*, 25, 796-809. https://doi.org/10.1037/a0032573
- McDonald, R. (1970). Theoretical foundations of principal factor analysis, canonical factor analysis, and alpha factor analysis. *British Journal of Mathematical & Statistical Psychology*, 23, 1-21. https://doi.org/10.1111/j.2044-8317.1970.tb00432.x
- McLachlan, G., & Peel, D. (2000). Finite mixture models. Wiley.
- Millsap, R. (2011). Statistical approaches to measurement invariance. Taylor & Francis.
- Morin, A.J.S., & Litalien, D. (2017). Webnote: Longitudinal tests of profile similarity and latent transition analyses. Substantive Methodological Synergy Research Laboratory.
- Morin, A.J.S., Bujacz, A., & Gagné, M. (2018). Person-centered methodologies in the organizational sciences. *Organizational Research Methods*, *21*, 803-813. https://doi.org/10.1177/1094428118773856
- Morin, A.J.S., Meyer, J.P., Creusier, J., & Biétry, F. (2016). Multiple-group analysis of similarity in latent profile solutions. *Organizational Research Methods*, *19*, 231-254. https://doi.org/10.1177/1094428115621148
- Morin, A.J.S., Morizot, J., Boudrias, J.-S., & Madore, I. (2011). A multifoci person-centered perspective on workplace affective commitment: A latent profile/factor mixture analysis.
 Organizational Research Methods, 14, 58-90. https://doi.org/10.1177/1094428109356476
- Muthén, L.K., & Muthén, B.O. (2021). Mplus user's guide. Muthén & Muthén.
- Raykov, T., & Marcoulides, G.A. (2004). Using the delta method for approximate interval estimation of parameter functions in SEM. *Structural Equation Modeling*, 11, 621-637. https://doi.org/10.1207/s15328007sem1104_7
- Tóth-Király, I., Bőthe, B., Rigó, A., & Orosz, G. (2017). An illustration of the exploratory structural equation modeling (ESEM) framework on the passion scale. *Frontiers in Psychology*, 8, 1968. https://doi.org/10.3389/fpsyg.2017.01968

 Table S1

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

Description	$\chi^2(df)$	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 $Standardized\ Factor\ Loadings\ (\lambda)\ and\ Uniquenesses\ (\delta)\ for\ the\ M6\ Solution\ (Longitudinal\ Latent$ $Means\ Invariance\ Work\ Passion)$

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	$\chi^2(df)$	CFI	TLI	RMSEA	90% CI	CM	$\Delta \chi^2 (df)$	ΔCFI	ΔTLI	Δ RMSEA
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 Inva	riance									
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]	M 3	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 Inva-	riance 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 Inva-	riance 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 $Standardized\ Factor\ Loadings\ (\lambda)\ and\ Uniquenesses\ (\delta)\ for\ the\ M6\ Solution\ (Longitudinal\ Latent$ $Means\ Invariance\ Predictors\ and\ Outcomes)$

Items	WCλ	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
$\frac{\omega}{N}$.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: Workfamily 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**			.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**			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 S6Results 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.

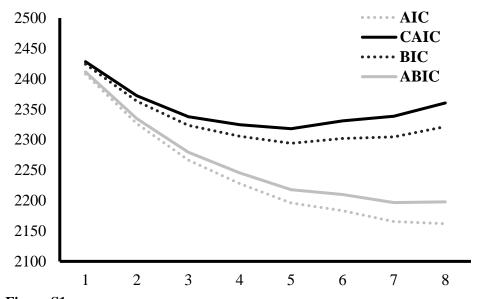


Figure S1Elbow Plot of the Value of the Information Criteria for Solutions Including Different Numbers of Latent Profiles at Time 1

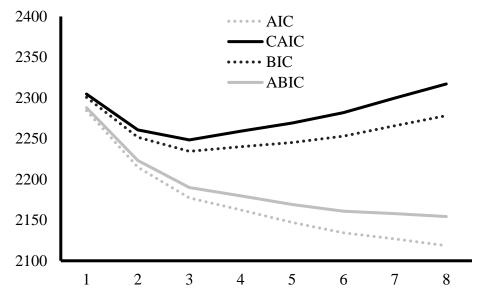


Figure S2Elbow Plot of the Value of the Information Criteria for Solutions Including Different Numbers of Latent Profiles at Time 2

Table S7

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

	Profile 1	Profile 2	Profile 3	Profile 4
	Mean [CI]	Mean [CI]	Mean [CI]	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	Profile 2	Profile 3	Profile 4
	Variance [CI]	Variance [CI]	Variance [CI]	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

Results from th	he Latent Profi						d Time Point			
Model	LL	#fp	Scaling	AIC	CAIC	BIĆ	ABIC	Entropy	aLMR	BLRT
Onsite Worke	rs: 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 Worke										
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 Work										
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 Work										
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 S10Results 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 S11Summary of the Hypotheses Tested in the Present Study

Hypotheses 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 (≥ 50%) to high (≥ 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	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).	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	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.	profiles did not differ from one another in relation to life and family satisfaction. Levels of job satisfaction were higher in the Mixed Passion-	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.	Average profile than in the Low Passion and OP Dominant profiles, which did not differ from one another on this outcome.	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

Supplements for Passion Profiles S22