



**WORKING PAPER SERIES**

**WP 2022-006**

**September 2022**



# **Detaching from the organizational and looking inwards? A mediational analysis of employee-related and organization-related constructs**

---

**Leonel Prieto**

Texas A&M International University

**Md Farid Taludker**

Texas A&M International University

**The responsibility for views expressed, and accuracy of facts given are those of the authors. Such opinions do not necessarily reflect the position of Texas A&M International University, the A.R. Sanchez, Jr. School of Business, or the Center for the Study of Western Hemispheric Trade.**

# Detaching from the organizational and looking inwards? A mediational analysis of employee-related and organization-related constructs<sup>1</sup>

Leonel Prieto<sup>2</sup>

Associate Professor, Division of International Business and Technology Studies, A. R. Sanchez, Jr. School of Business, Texas A&M International University, Laredo, Texas, USA

Md Farid Taludker

Doctoral Student (Management), A. R. Sanchez, Jr. School of Business, Texas A&M International University, Laredo, Texas, USA

*The COVID pandemic has exacerbated and created uncertainties in almost any domain of life intensifying social deficits in firms and employees which should be addressed for individuals and firms to adjust, survive, and thrive in the medium and long terms. This research focuses on the individual employee-organization schism by examining multiple model configurations among agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change while maintaining the effects of general uncertainty, workplace unsafety, economic insecurity, and employee stress invariant. Findings indicate a) unexpected positive relationships between employee stress and agility, creativity, and resilience, and b) employee stress negatively associated with belongingness at work, organizational commitment, and willingness to embrace organizational change. Results suggest a detachment of employees from the organization and an increased focus on the self. Furthermore, different model configurations resulted in different path coefficients signs and magnitudes implying different theoretical and practical implications.*

**Keywords:** *employee stress, agility, belongingness at work, creativity, model configuration*

## I. Introduction

The last few decades scholars have pointed out an increase in society's fragmentation, uncertainty, and individualism as well as a decrease in trust (Citrin and Stoker 2018; Davis 2017). In addition, structural socio-economic changes have augmented job precariousness (Alston 2017; Kalleberg 2018). Furthermore, the last two years, the COVID pandemic has exacerbated and created uncertainties in almost any life domain increasing anxiety and fear due to disruption of social and economic activities (Cavallieri 2021; Hu, Ye, and Tan 2021; Manchia et al. 2022). Uncertainty sources include restricted flows of goods, services, and capital within and between countries affecting supply and demand (Barro, Ursúa, and Weng 2020; Barua 2020; Cavallieri 2021); unpredictability about COVID's pandemic duration, its transition to an endemic situation, potential

---

<sup>1</sup> This article has been published by IABE in *Journal of International Management Studies* on June 2022, available at: <http://dx.doi.org/10.18374/JIMS-22-1.5>.

<sup>2</sup> Address correspondence to Leonel Prieto, Associate Professor, Division of International Business and Technology Studies, A. R. Sanchez, Jr. School of Business, Texas A&M International University, 5201 University Boulevard, Laredo, Texas 78041. Email: [lprieto@tamiu.edu](mailto:lprieto@tamiu.edu)

appearance of multiple virus' mutants, evolution of (targeted) vaccines, COVID treatments and prevention, effects of long COVID, and unknowns about government and employers' health support (Falco, Girardi, Dal Corso, Yıldırım, and Converso 2021; Fiskin 2021; Manchia et al. 2022) as well as unpredictability of governments interventions' duration, and on the creation, survival, and performance of businesses (Barua 2020; Cavalhieri 2021).

All these changes have added to the confusion in the psychology and behavior of employees (Manchia et al. 2022; Pfefferbaum and North 2020). In other words, the increased intersectionality between the economic, health, social, and political realms seem to increase uncertainty, anxiety, employee stress, resentment, and lack of self-worth (Fiskin 2021; Peters, McEwen, and Friston 2017). In turn, such effects negatively impact relationships with co-workers and supervisors, employee health, morale, sense of belonging, absenteeism, tardiness, turnover, inability to concentrate on the job, employees' perceptions about their organizations, and productivity (E. Anderson, Carleton, Diefenbach, and Han 2019; Bakker and de Vries 2021; Liu and Liu 2020; Willis, Reynolds, and Lee 2019).

Some of the above changes and effects were created or intensified by the COVID crisis. Research shows that during crises, because of the need to survive, initially, individuals intensify their looking inwards (Casillas et al. 2019; van der Kolk 2000). Thereafter, integration of change, the need to make high-stake decisions, and/or recovery may require distinctive patterns of interactions and decision-making. In this regard, the uncertain situation exacerbated by the COVID-19 pandemic may have prompted employees re-examining the meaning of work and life (Cook 2021; Field 2021). Alignment between employee and organization underlines almost any desirable employee and organizational outcome. Thus, it is important to investigate whether the ongoing crisis has impacted employee-organization attachment.

To address such question this research systematically assesses a large and diverse set of relationships between employee agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change while maintaining the effects of general uncertainty, workplace unsafety, economic insecurity, and employee stress invariant. These constructs encompass a) a subset of constructs strongly related to the individual (e.g., agility, creativity, and resilience), and b) a subset of constructs closely related to the organization (e.g., belongingness at work, organizational commitment, and willingness to embrace organizational change). The multiplicity of mediational analyses examined in this study has not been investigated before nor studied under the current uncertain conditions.

Constructs examined are crucial for organizational survival, adaptation, and thriving (Anderson, Potočnik, and Zhou 2014; Den Hartog, De Hoogh, and Keegan 2007). For example, agility has been cited as central for improvisation, collaboration (Harrald 2006), creating value in uncertain environments (Dupont 2019), adaptability and innovation (Petermann and Zacher 2020) and performance (Liang, Lupina-Wegener, Ullrich, and van Dick 2021). Likewise, creativity has been positively associated with extra-role behaviors (Eschleman, Madsen, Alarcon, and Barelka 2014), innovation and success (Zhou and Hoever 2014), organizational commitment (Hou, Gao, Wang, Li, and Yu 2011), resilience (Fan, Cai, and Jiang 2021), health and well-being (Greaves and Farbus 2006), and performance (Eschleman et al. 2014; Zhou and Hoever 2014). Further justification of the relationships studied (see Figure 1) is provided in Section 2.

For pragmatic and methodological reasons research usually focuses on a few construct relationships at a time, studied at specific time periods, and in particular firms, industries, regions and/or countries (Parzefall, Seeck, and Leppänen 2008). Isolated research results make them susceptible to unaccounted factor effects. Thus, there may be ambiguity in both the type and

magnitude of effects. Likewise, it is an open question as to whether results based on only a few relationships will hold when considered in sets of more complicated and numerous relationships. This weakness of research results may explain why many research findings may not apply in practice as simplification of complexity is contrary to the multi-dimensionality frequently characterizing practical situations. One way to deal with this shortcoming is to jointly examine a relatively large set of construct relationships. Multiple model configurations offer a more reliable indication of specific relationships given that variations in associations, owing to the examination of different sets of relationships, constructs, samples, and/or contexts, may lead to contradictory results (Tierney et al. 2021).

Although there is outstanding past research in most of the constructs examined in this study (Amabile, Conti, Coon, Lazenby, and Herron 1996; N. Anderson et al. 2014; Barasa, Mbau, and Gilson 2018; Baumeister and Leary 1995; Beehr and Newman 1978; Ganster and Rosen 2013; Hartwig, Clarke, Johnson, and Willis 2020; Katz, Rudolph, and Zacher 2019; Manchia et al. 2022; Peters et al. 2017; Porter et al. 1974; Postmes, Wichmann, van Valkengoed, and van der Hoef 2019; Rockstuhl et al. 2020; Salmen and Festing 2021; Tierney, Farmer, and Graen 1999; Weick and Sutcliffe 2006; Zhou and Hoever 2014) many constructs as well as construct combinations have been insufficiently studied. Thus, there is the need to study new construct configurations, confirm findings in new contexts, strengthen the validity of prior research results, explore the boundary conditions of research models, and/or expand prior knowledge (Busse, Kach, and Wagner 2017; Tierney et al. 2021). Systematically examining constructs' effects may generate different results and different implications for both research and practice. Focusing on three employee-related and three organization-related constructs, we examine, for illustrative purposes, 30 different model configurations encompassing more than 400 relationships.

We base our modeling on separate research findings and construct a large set of models aiming to validate the set of separate research findings and to look at a larger, and more complicated set of relationships. Our approach responds to calls for further complicating model relationships and increasing attention to contextual effects (Parzefall et al. 2008; Tierney et al. 2021).

The set of constructs examined shares two important features: a) it resonates with the current times by including intensified employee stress-related effects as well as constructs that may be deemed as crucial individual, and organizational, resources for dealing with the contemporaneous situation, and b) it systematically studies, via different model configurations, constructs that examined at different points in time may be viewed as mediators, moderators, antecedents, and outcomes. However, owing to space limitations, we do not address moderating effects.

Results from this study suggest employees detaching from the organization and increasingly looking inwards. Progress in employee well-being, and organizational performance will require, among others, closing, and improving, such schism. The results also expose the impact of model configuration on both the nature and the intensity of the studied relationships.

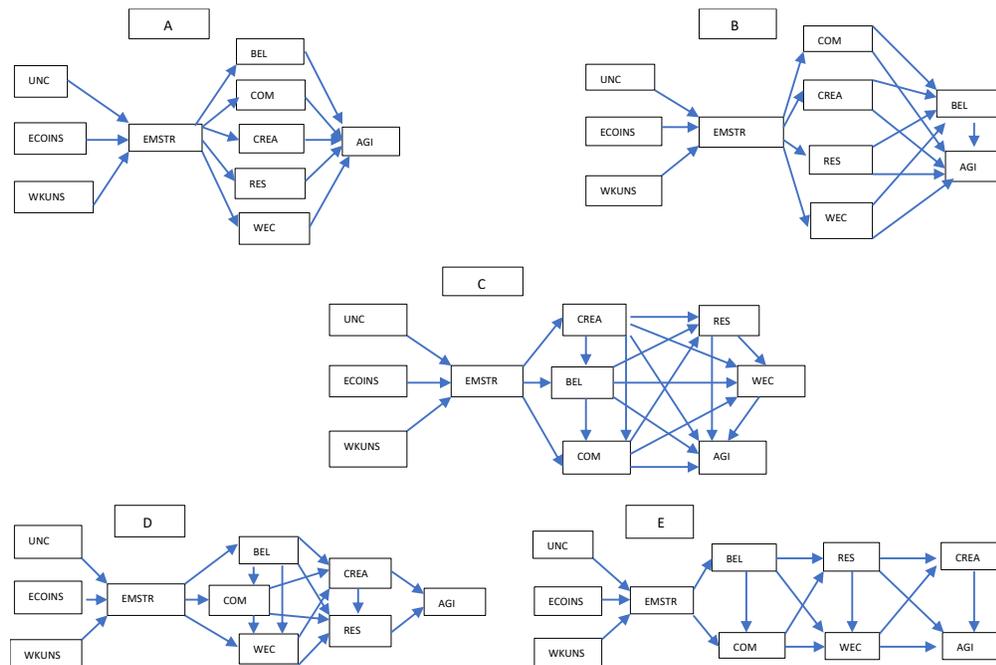
This paper makes two theoretical contributions to the literature. First, findings pointing to the positive effects of employee stress on agility, resilience, and creativity while prompting questions about their duration when considered in conjunction with negative effects of employee stress on belongingness at work, organizational commitment, and willingness to embrace organizational change suggest employees' decreased attention to the organizational realm and an increased attention to the self. Second, this research systematically studies a diverse set of model configurations showing that the sign and strength of constructs' relationships depend on specific set of relationships, exhibiting research results' contextual dependence.

## II. Literature review and hypotheses

This study is based on social exchange theory (Richard and Emerson 1976), perceived organizational support theory (Rockstuhl et al. 2020), spill-over theory (Frezza, Whitmarsh, Schäfer, and Schrader 2019), and trauma theory (Berlant 2011). The rationale is that the usual employee assessment of costs and rewards in her/his relationship with the work organization may be altered by the employee stressful and uncertain situation intensified by the COVID pandemic.

This section provides justification for the paths constituting the diverse set of model configurations researched (see Figure 1).

**Figure 1.** Model configuration types.



Uncertainty (Fiskin 2021; Peters et al. 2017), workplace unsafety (Falco et al. 2021; Havermans et al. 2018), and economic insecurity (Cavallieri 2021; Hacker 2019) have been positively associated with employee stress. The stress-related relationships antecede, in all model configurations, the set of focal relationships examined.

Employee stress has been negatively associated with agility (Leask and Ruggunan 2021; Li, Xia, Meng, and Zhang 2020); belongingness at work (Postmes et al. 2019; Willis et al. 2019); organizational commitment (Wang et al. 2020); creativity (Liu and Liu 2020; Salmen and Festing 2021); resilience (Hartwig et al. 2020; Manchia et al. 2022; Salmen and Festing 2021); and willingness to embrace organizational change (Bakker and de Vries 2021; Walinga 2008). Uncertainty and stress, at low levels, may increase creativity (Barasa et al. 2018; Beghetto 2019). However, considering both the overwhelming evidence in the extant literature and the current pandemic conditions, leads to:

***Hypothesis 1.*** *Employee stress will be negatively associated with agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change.*

Prior research shows positive associations between agility and: belongingness at work (Chatwani 2019; Kogut and Zander 1996); organizational commitment (Qader 2021; Sya and Mangundjaya 2020); creativity (Awan et al. 2021; Findsrud 2020); resilience (Ivanov 2020; Pulakos, Kantrowitz, and Schneider 2019); and willingness to embrace organizational change (Fietz, Hillmann, and Guenther 2021; Lill and Wald 2021). Similarly, past research shows positive associations between belongingness at work and: organizational commitment (Afshari 2021; Bergami and Bagozzi 2000), creativity (Carmeli, Atwater, and Levi 2011; Cohen-Meitar, Carmeli, and Waldman 2009), resilience (Breakwell 2021; White, Slater, Turner, and Barker 2021), and willingness to embrace organizational change (Lupina-Wegener, Liang, van Dick, and Ullrich 2020; Price and van Dick 2012). Likewise, prior research indicates positive correlations between creativity and resilience (Amabile et al. 1996); creativity and willingness to embrace organizational change (Anderson et al. 2014; Zhang and Bartol 2010); and resilience and willingness to embrace organizational change (Barasa et al. 2018; Moran 2016). This research evidence leads to:

***Hypothesis 2.*** *Agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change will be positively intercorrelated.*

Path models rely on co-dependent linear combinations; therefore, different model configurations may generate different path coefficients and different confidence intervals. Changes in direction, magnitude, and statistical significance of path coefficients depend on the nature, number, and strength of constructs' direct and indirect effects in each model configuration. Thus, we pose:

***Hypothesis 3.*** *The mediating effects among agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change will be a function of model configuration.*

### **III. Method**

Construct scales with proven psychometric properties were used. Questionnaire items were randomized. Participants' anonymity and confidentiality were guaranteed. Three check questions (e.g., Respond with "Strongly disagree" to this item) were included in the questionnaire.

To examine mediating effects among agility, belongingness at work, organizational commitment, creativity, resilience, and willingness to embrace organizational change, 30 model configurations were examined. The five model configuration types that were studied appear in Figure 1. In each configuration type, each of the studied employee outcomes appears as the target outcome. The arrangements of the remaining five employee outcomes examined, in each model configuration, were determined at random. In all model configurations, general uncertainty, workplace unsafety, and economic insecurity antecede employee stress.

### ***Data collection***

The questionnaire was administered using Mechanical Turk. Middle managers were asked to complete an online questionnaire. Respondents received financial compensation for their participation. Participants were from a variety of locations, organizations, and industries in the United States resulting in a quasi-randomized sample. Data were collected during summer 2021. Mechanical Turk respondents may be regarded a generalization of a population (Buhrmester et al. 2011), and they may provide honest answers due to the worker reputation mechanism implemented by the site (Peer, Vosgerau, and Acquisti 2014). Likewise, data gathered via Mechanical Turk may be more representative of a given country than data obtained from student samples or from only one or a few organizations. Analyses include only questionnaires that were complete, answers to the check questions were correct, and respondents spent a minimum response time. After “cleaning” the data, from a total of 1024 respondents a set of 584 complete questionnaires was obtained.

### ***Control variables***

The relationships examined may be impacted by age, gender, educational level, marital status, job tenure, and industry (Katz et al. 2019; Purg, Cacciatore, and Gerbec 2021; Slepecky et al. 2017; Yang, Wei, and Zhou 2022). All control variables were included in all analyses, although most were not statistically significant.

### ***Measures***

*Agility* was measured using five items from the scale developed by Braun, Hayes, DeMuth, and Taran (2017). An example item is, “I continuously work to understand what is going on in other areas of my work to see if I need to make changes in what I’m doing.” *Belongingness at work* was measured with four items from a scale by Malone, Pillow, and Osman (2012). An example item is, “I have close bonds with my coworkers.” *Organizational commitment* was measured with three items from a scale by Mowday, Steers, and Porter (1979). An example item is, “I would be very happy to spend the rest of my career with this organization.” *Creativity* was measured with eight adapted items from a scale by Tierney et al. (1999). An example item is, “I try out new ideas and approaches to problems.” *Economic insecurity* was measured with two items from a scale by Dominitz and Manski (1996). An example item is, “What do you think is the chance that you will lose your job during the next 12 months?” *Resilience* was measured with six items from a scale by Braun et al. (2017). An example item is, “I bounce back quickly when confronted with setbacks.” *General uncertainty* was measured with four items from a scale by Ashill and Jobber (2010). An example item is, “How often do you feel you have the information you need to understand how factors relevant to your job will change in the future?” *Workplace unsafety* was measured with 12 items from a scale by Hayes, Perander, Smecko, and Trask (1998). Example items are, “My job is unsafe,” and “My co-workers ignore safety rules.” *Employee stress* was measured with seven adapted items from a scale by Cohen, Kamarck, and Mermelstein (1983). An example item is, “In the last 12 months, how often have you felt that you were unable to control the important things in your life?” *Willingness to embrace organizational change* was measured with four items from a scale by Miller et al. (1994). An example item is, “From my perspective changes in the organization are for the better.”

Agility, belongingness at work, creativity, organizational commitment, resilience, and willingness to embrace organizational change were measured using a Likert-type response option ranging from 1 = *strongly disagree* to 7 = *strongly agree*. General uncertainty and employee stress were measured with a Likert-type response option ranging from 1 = *never* to 5 = *very often*. Economic insecurity was measured with a Likert-type response ranging from 1 = *almost no chance* to 5 = *almost certain*. Respondents were asked to think about the range of possible outcomes and how likely they are to occur during the next 12 months. Workplace unsafety was measured using a Likert-type response option ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

### ***Common method variance***

The following design measures were taken to minimize common method variance: use of items from scales with proven psychometric properties, use of different scales, item order randomization, use of three check questions (e.g., Respond with “strongly agree” to this item) to verify respondents’ attention in answering, use of only response sets answered within a minimum response time, use of reversed items, and use of a moderate length questionnaire to lessen respondents’ boredom and fatigue. Furthermore, Harman’s one-factor test (Podsakoff, MacKenzie, Lee, and Podsakoff 2003) explained 33.92% of the variance. Applying the correlation market technique (Lindell and Whitney 2001), that is, adjusting the original correlations by the correlation between creativity and age (-.009), showed no statistical differences ( $p > 0.05$ ) between the original and the corrected correlations. The conjunction of the questionnaire design measures, Harman’s one-factor test, and the results from the correlation marker technique suggest, agreeing with Spector (2006), that common method variance was not a major problem.

### ***Model assessment***

Items loadings were higher than .5 (Hair, Black, Babin, Anderson, and Tatham 2010). Cross-loadings were minor. Cronbach’s alpha, Dijkstra/Henseler rho, and composite reliability were .702, .709, .803; .866, .866, .908; .775, .776, .870; .827, .833, .866; .728, .729, .880; .802, .829, .856; .918, .922, .928; .835, .840, .876; .712, .739, .822; and .872, .875, .902 for agility, belongingness at work, organizational commitment, creativity, economic insecurity, resilience, workplace unsafety, employee stress, general uncertainty, and willingness to embrace organizational change, respectively. Constructs’ Cronbach alpha were above .70 (Nunnally 1978). Rhos higher than .60 are considered reliable (Dijkstra and Henseler 2015). Composite reliability higher than .70 is deemed reliable (Brunner and Süß 2005). We assessed discriminant validity using the heterotrait-monotrait (HTMT) ratio criterion running 5,000 bootstrapping samples. Out of 55 binary construct combinations only the pair belongingness at work-willingness to embrace organizational change was higher than 1 (1.06). A HTMT value lower than 1 is considered acceptable (Henseler, Ringle, and Sarstedt 2015). Variance inflation factors were below 3.0 suggesting no major multicollinearity problems (Kock 2015).

Examination of univariate skewness and kurtosis shows few kurtosis values outside the  $\pm 1$  range considered acceptable (Hair et al. 2010). Mardia’s multivariate normality analysis, using the procedure available at <https://webpower.psychstat.org/models/kurtosis>, indicated statistically significant results ( $p < .001$ ) for both skewness and kurtosis, suggesting lack of multivariate normality. Thus, path coefficients’ bias corrected confidence intervals based on PLS’ 5000 bootstrapping samples were estimated.

The ranges for the adjusted coefficient of determination for agility were .163-.590, .164-.591, .127-.590, .166-.591, and .168-.589, for model types A, B, C, D, and E, respectively. The ranges for the adjusted coefficient of determination for belongingness at work were .508-.732, .509-.732, .509-.731, .138-.619, and .139-.621, for model types A, B, C, D, and E, respectively. The ranges for the adjusted coefficient of determination for organizational commitment were .511-.634, .511-.632, .469-.631, .132-.664, and .147-.665, for model types A, B, C, D, and E, respectively. The ranges for the adjusted coefficient of determination for creativity were .204-.698, .202-.698, .202-.697, .139-.554, and .201-.669, for model types A, B, C, D, and E, respectively. The ranges for the adjusted coefficient of determination for resilience were .144-.711, .146-.709, .147-.710, .101-.708, and .086-.660, for model types A, B, C, D, and E, respectively. The ranges for the adjusted coefficient of determination for willingness to embrace organizational change were .515-.633, .517-.633, .514-.633, .480-.660, and .480-.627, for model types A, B, C, D, and E, respectively.

### ***Sample demographics***

27% of the respondents were female. 41.2 % were 29 years old or younger, 42.2 % were from 30 to 39 years, and 16.6 % were 50 years or older. 45.8% were White, 42.6% were Asian, 6.2% were African American, and 5.4% were from other races/ethnicities. 76.9% were married, 19.2% were never married, and 3.9% were divorced, separated, or widowed. 67.2% had bachelor's degree, 20.2% had a graduate degree, 6.3% had an Associate degree, and 6.3% had high school or lower. 22.4% worked in education, professional and scientific services; 22.2% worked in banking and financial services; 16.3% worked in manufacturing, mining, and quarrying; 7.8% worked in accounting and consulting; 7.3% worked in construction and real estate; and 24% worked in other economic sectors. Regarding tenure, 33.1% had worked from 1 to 4 years, 30.7% 8 to 12 years, 27.2% 4 to 8 years, 6.6% more than 12 years, and 1.7% less than one year.

## **IV. Results**

Table 1 shows means and construct inter-correlations. Agility, creativity, and resilience had larger means than belongingness at work, organizational commitment, and willingness to embrace organizational change. Agility, creativity, and resilience were strongly positively inter-correlated as were belongingness at work, organizational commitment, and willingness to embrace organizational change.

Table 2 shows that path coefficients, and their corresponding 95% bias corrected CIs for general uncertainty, workplace unsafety, and economic insecurity on employee stress are  $\beta = .488$  (CI .417 to .552),  $\beta = .307$  (CI .226 to .389), and  $\beta = .147$  (CI .079 to .221), respectively. The effects of general uncertainty, workplace unsafety, and economic insecurity on employee stress were held constant throughout all analyses.

There were moderate to strong effects of employee stress on agility ( $\beta = .395$ , CI .303 to .473), creativity ( $\beta = .442$ , CI .347 to .521), resilience ( $\beta = .378$ , CI .274 to .462), belongingness at work ( $\beta = -.691$ , CI -.735 to -.640), organizational commitment ( $\beta = -.691$ , CI -.737 to -.638), and willingness to embrace organizational change ( $\beta = -.704$ , CI -.75 to -.647) (see Table 2).

**Table 1.** Constructs' means and correlations.

	Means (SD)	AGI	BEL	COM	CREA	ECOINS	RES	WKUNS	EMSTR	UNC
AGI	5.208 (.837)									
BEL	3.476(1.490)	-.304**								
COM	3.468(1.416)	-.311**	.785**							
CREA	5.278(.811)	.715**	-.311**	-.314**						
ECOINS	3.360(1.051)	.280**	-.732**	-.688**	.294**					
RES	5.268(.860)	.731**	-.275**	-.274**	.813**	.280**				
WKUNS	3.202(.937)	.283**	-.825**	-.765**	.312**	.705**	.241**			
EMSTR	3.532(.683)	.397**	-.704**	-.711**	.442**	.670**	.375**	.727**		
UNC	3.562(.736)	.437**	-.660**	-.613**	.443**	.617**	.405**	.645**	.771**	
WEC	3.141(1.152)	-.333**	.782**	.677**	-.349**	-.642**	-.326**	-.679**	-.712**	-.660**

Notes: N= 584, \*\*p<0.01(2-tailed). AGI= agility, BEL= Belongingness at work, COM= Organizational commitment, CREA= Creativity, ECOINS=economic insecurity, RES= Resilience, WKUNS= Workplace unsafety, EMSTR= employee stress, and UNC= Uncertainty.

**Table 2.** Stress’ antecedents and outcomes.

<b>Relationships</b>	<b>Path Coefficients and 95% Bias Corrected CIs</b>
Economic insecurity- Employee Stress	.147 [.079 to .221]
Uncertainty- Employee Stress	.488 [.417 to .552]
Workplace Unsafety- Employee Stress	.307 [.226 to .389]
Employee Stress-Agility	.395 [.303 to .473]
Employee Stress-Belonging at Work	-.691 [-.735 to -.640]
Employee Stress-Commitment	-.691 [-.737 to -.638]
Employee Stress-Creativity	.442 [.347 to .521]
Employee Stress-Resilience	.378 [.274 to .472]
Employee Stress-Willingness to Embrace Organizational Change	-.704 [-.750 to -.647]

Note: N=584.

Against expectations agility, creativity, and resilience were positively related to employee stress. The latter had significant quadratic effects on agility (.208; CI .126 to .273), creativity (.234; CI .155 to .300), and resilience (.250; CI .165 to .314). Employee stress did not have significant quadratic effects on belongingness at work, commitment, or willingness to embrace organizational change. These results partly support Hypothesis 1.

Belongingness at work, organizational commitment, and willingness to embrace organizational change – organization related constructs – are positively intercorrelated as were agility, resilience, and creativity – employee related constructs. Against expectations, relationships involving combinations of constructs between these construct subsets tended to be statistically non-significant or negative (see Tables 3, 4, and 5). Such relationships were non-significant in the 12 model configurations pertaining to model types A and B. Due to space limitations, those are not shown here but are available upon request. Tables 3, 4, and 5 show the mediating effects for model configurations C, D, and E, respectively.

Seven of 48 relationships, ten of 40, and 15 of 34 relationships between employee-related and organization-related construct subsets changed from being non-significant, in configurations A and B, to negative, in configurations C, D, and E, respectively. Furthermore, in configuration D, the relationship between employee stress and resilience became twice non-significant. These results partly support Hypothesis 2.

Tables 3, 4, and 5, show a large variability in path coefficients’ magnitude. For example, Table 4 shows the path coefficients for the belongingness at work-resilience relationship varying from -.174 (significant) to -.018, non-significant. The above results support Hypothesis 3.

## V. Discussion

Unexpectedly, path coefficients between employee stress and agility, creativity, and resilience were positive, and moderate (see Table 2). Moderate effects may reveal employee stress’ quadratic effects reflecting individuals’ initial and mid-term reactions for dealing with increasing job and life precariousness, and for adapting to the current situation. Likewise, quadratic responses result in lower determination coefficients for agility, creativity, and resilience than those for

**Table 3.** Path coefficients and confidence intervals for model configuration C.

DV	AGI	DV	BEL	DV	COM	DV	CREA	DV	RES	DV	WEC
Path	Coeff. & CI	Path	Coeff. & CI								
Bel-agi	-.018 (-.127 to .094)	Agi-bel	-.008 (-.077 to .063)	Agi-bel	-.022 (-.090 to .036)	Agi-bel	-.022 (-.087 to .040)	Agi-crea	.672 (.594 to .735)	Agi-bel	-.022 (-.086 to .042)
Bel-com	.561 (.472 to .646)	Agi-com	-.096 (-.200 to .012)	Agi-com	-.062 (-.153 to .028)	Agi-com	-.019 (-.072 to .035)	Agi-res	.310 (.239 to .384)	Agi-com	-.019 (-.075 to .033)
Bel-res	-.023 (-.099 to .053)	Com-bel	.463 (.388 to .534)	Agi-crea	.252 (.161 to .346)	Agi-crea	.247 (.149 to .344)	Bel-agi	-.007 (-.156 to .137)	Agi-crea	.684 (.609 to .744)
Bel-wec	.639 (.542 to .733)	Crea-agi	.348 (.231 to .454)	Agi-res	.702 (.637 to .756)	Agi-res	.716 (.657 to .766)	Bel-com	.561 (.470 to .646)	Agi-res	.312 (.240 to .381)
Com-agi	-.062 (-.171 to .039)	Crea-bel	-.015 (-.191 to .064)	Agi-wec	-.043 (-.113 to .018)	Agi-wec	-.018 (-.094 to .060)	Bel-crea	.003 (-.110 to .119)	Agi-wec	-.012 (-.088 to .064)
Com-res	-.004 (-.084 to .076)	Crea-com	-.070 (-.196 to .050)	Bel-com	.650 (.562 to .738)	Bel-com	.560 (.474 to .649)	Bel-res	.037 (-.052 to .120)	Bel-com	.560 (.474 to .642)
Com-wec	.134 (.029 to .243)	Crea-res	.800 (.752 to .841)	Bel-crea	-.040 (-.115 to .032)	Bel-crea	-.019 (-.111 to .067)	Bel-wec	.529 (.428 to .623)	Bel-crea	-.068 (-.177 to .032)
Crea-agi	.332 (.211 to .443)	Crea-wec	-.033 (-.114 to .046)	Bel-res	-.039 (-.053 to .123)	Bel-res	-.051 (-.151 to .048)	Com-agi	-.145 (-.269 to -.012)	Bel-res	-.011 (-.085 to .061)
Crea-bel	.008 (-.062 to .073)	Res-agi	.423 (.325 to .518)	Bel-wec	.545 (.469 to .617)	Bel-wec	.641 (.539 to .731)	Com-crea	-.017 (-.128 to .096)	Bel-wec	.642 (.543 to .737)
Crea-com	.005 (-.047 to .052)	Res-bel	.023 (-.052 to .103)	Crea-com	-.038 (-.146 to .066)	Com-crea	-.022 (-.112 to .063)	Com-res	.021 (-.047 to .097)	Com-crea	-.029 (-.135 to .077)
Crea-res	.803 (.758 to .841)	Res-com	.068 (-.043 to .175)	Res-com	.034 (-.058 to .126)	Com-res	-.004 (-.100 to .092)	Com-wec	.024 (-.079 to .134)	Com-res	.013 (-.060 to .086)

**Table 3.** Path coefficients and confidence intervals for model configuration C (continued).

DV	AGI	DV	BEL	DV	COM	DV	CREA	DV	RES	DV	WEC
Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI
Crea-wec	-.032 (-.132 to .070)	Res-wec	-.105 (-.227 to .013)	Res-crea	.604 (.514 to .688)	Com-wec	.132 (.026 to .243)	Crea-res	.584 (.507 to .654)	Com-wec	.113 (.026 to .245)
Res-agi	.435 (.338 to .530)	Emstr-crea	.433 (.336 to .515)	Emstr-agi	.391 (.298 to .472)	Res-crea	.608 (.514 to .694)	Emstr-bel	-.691 (-.734 to -.638)	Crea-res	.589 (.510 to .660)
Res-wec	-.092 (-.197 to .021)	Emstr-res	.024 (-.042 to .092)	Emstr-bel	-.682 (-.737 to -.619)	Res-wec	-.107 (-.188 to -.023)	Emstr-com	-.303 (-.388 to -.222)	Crea-wec	-.030 (-.131 to .076)
Emstr-bel	-.694 (-.747 to -.632)	Emstr-wec	-.689 (-.748 to -.613)	Emstr-wec	-.311 (-.393 to -.228)	Emstr-agi	.391 (.296 to .472)	Emstr-wec	-.322 (-.406 to -.237)	Res-wec	-.083 (-.189 to .028)
Emstr-com	-.306 (-.386 to -.224)	Wec-agi	-.071 (-.26 to -.018)	Wec-com	.133 (.025 to .229)	Emstr-bel	-.682 (-.736 to -.616)	Wec-agi	-.223 (-.365 to -.062)	Emstr-agi	.391 (.296 to .470)
Emstr-crea	.433 (.338 to .517)	Wec-bel	.464 (.389 to .536)	Wec-crea	-.027 (-.110 to .061)	Emstr-com	-.297 (-.385 to -.213)	Wec-crea	-.109 (-.210 to -.012)	Emstr-bel	-.682 (-.735 to -.618)
Wec-agi	-.014 (-.099 to .074)	Wec-com	.622 (.541 to .691)	Wec-res	-.126 (-.227 to -.025)	Wec-crea	-.026 (-.113 to .064)	Wec-res	-.073 (-.158 to .017)	Emstr-com	-.297 (-.384 to -.214)

Notes: DV = dependent variable. AGI = Agility; BEL = Belongingness at work; COM = Organizational commitment; CRE = Creativity; RES = Resilience; EMSTR = Employee stress; and WEC = Willingness to embrace organizational change. N = 584.

**Table 4.** Path coefficients and confidence intervals for model configuration D.

DV	AGI	DV	WEC	DV	COM	DV	RES	DV	BEL	DV	CRE
Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI						
Bel-com	.561 (.472 to .644)	Agi-bel	-.160 (-.269 to -.049)	Agi-com	-.222 (-.333 to -.099)	Agi-bel	-.032 (-.103 to .044)	Agi-bel	-.046 (-.097 to .006)	Agi-cre	.675 (.601 to .740)
Bel-cre	-.001 (-.145 to .137)	Agi-com	-.058 (-.142 to .033)	Agi-res	.307 (.233 to .379)	Agi-com	-.051 (-.136 to .037)	Agi-wec	-.031 (-.130 to .074)	Agi-wec	-.017 (-.091 to .059)
Bel-res	.036 (-.057 to .129)	Agi-cre	.644 (.542 to .736)	Bel-agi	-.048 (-.139 to .039)	Agi-cre	.645 (.565 to .713)	Com-agi	-.091 (-.152 to .035)	Bel-agi	-.041 (-.138 to .058)
Bel-wec	.531 (.427 to .627)	Agi-res	.311 (.239 to .388)	Bel-cre	.015 (-.096 to .128)	Agi-wec	-.057 (-.138 to .025)	Com-cre	.021 (-.082 to .121)	Bel-com	.561 (.471 to .643)
Com-cre	-.118 (-.244 to .013)	Bel-com	.748 (.687 to .801)	Bel-res	.046 (-.026 to .119)	Bel-com	.647 (.551 to .732)	Com-res	-.018 (-.090 to .053)	Bel-res	-.018 (-.151 to .110)
Com-res	-.002 (-.075 to .080)	Bel-wec	.644 (.542 to .736)	Bel-wec	.546 (.468 to .619)	Bel-res	-.174 (-.307 to -.044)	Com-wec	.612 (.526 to .684)	Bel-wec	.641 (.543 to .732)
Com-wec	.023 (-.081 to .131)	Com-wec	.136 (.029 to .245)	Cre-agi	.679 (.604 to .739)	Com-res	-.152 (-.277 to -.019)	Cre-agi	.335 (.209 to .441)	Com-agi	-.084 (-.184 to .014)
Cre-agi	.347 (.230 to .455)	Cre-bel	-.163 (-.310 to -.016)	Cre-res	.584 (.508 to .659)	Cre-bel	-.023 (-.095 to .048)	Cre-res	.801 (.751 to .840)	Com-res	.006 (-.111 to .130)
Cre-res	.793 (.742 to .835)	Cre-com	-.031 (-.122 to -.054)	Cre-wec	-.044 (-.118 to .016)	Cre-com	-.024 (-.117 to .064)	Cre-wec	-.057 (-.185 to .075)	Com-wec	.132 (.024 to .243)
Res-agi	.447 (.346 to .542)	Cre-res	.591 (.508 to .660)	Res-com	-.091 (-.211 to .022)	Cre-wec	-.006 (-.086 to .095)	Res-agi	.433 (.340 to .533)	Res-agi	.695 (.637 to .746)
Str-bel	-.691 (-.738 to -.641)	Res-bel	-.010 (-.162 to .149)	Str-bel	-.691 (-.732 to -.638)	Str-agi	.394 (.303 to .472)	Res-wec	-.090 (-.218 to .040)	Res-wec	-.108 (-.190 to -.022)

**Table 4.** Path coefficients and confidence intervals for model configuration D (continued).

DV	AGI	DV	WEC	DV	COM	DV	RES	DV	BEL	DV	CRE
Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI
Str- com	-.304 (-.386 to -.221)	Res-wec	-.113 (-.189 to -.045)	Str-cre	.441 (.327 to .541)	Str-cre	.184 (.107 to .271)	Str- com	-.690 (-.735 to -.635)	Str-bel	-.690 (-.735 to -.640)
Str-wec	-.321 (-.401 to -.234)	Str-agi	.392 (.301 to .472)	Str-wec	-.307 (-.392 to -.222)	Str-wec	-.684 (-.747 to -.604)	Str-cre	.445 (.329 to .543)	Str- com	-.304 (-.386 to -.222)
Wec-cre	-.258 (-.392 to -.106)	Str-cre	.180 (.103 to .266)	Wec-agi	-.057 (-.149 to .040)	Wec-bel	.750 (.702 to .788)	Str-res	.012 (-.069 to .091)	Str-res	.363 (.242 to .469)
Wec-res	-.089 (-.187 to .007)	Str-res	-.005 (-.066 to .054)	Wec-res	-.066 (-.154 to .019)	Wec-com	.133 (.027 to .239)	Wec-bel	.755 (.710 to .793)	Wec-cre	-.117 (-.194 to -.052)

Notes: DV = dependent variable. AGI = Agility; BEL = Belongingness at work; COM = Organizational commitment; CRE = Creativity; RES = Resilience; STR = Employee stress; and WEC = Willingness to embrace organizational change. N = 584.

**Table 5.** Path coefficients and confidence intervals for model configuration E.

DV	WEC	DV	CREA	DV	BEL	DV	RES	DV	COM	DV	AGI
Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI
Agi-bel	-.022 (-.089 to .039)	Agi-bel	-.064 (-.141 to .012)	Agi-bel	.446 (.334 to .548)	Agi-bel	-.028 (-.111 to .056)	Agi-bel	-.027 (-.114 to .050)	Bel-com	.561 (.471 to .648)
Agi-com	-.081 (-.139 to -.027)	Agi-com	-.078 (-.136 to -.025)	Com-crea	.022 (-.080 to .121)	Agi-com	-.174 (-.284 to -.055)	Agi-com	-.183 (-.295 to -.061)	Bel-res	-.160 (-.290 to -.036)
Agi-crea	.686 (.614 to .743)	Agi-crea	.684 (.605 to .741)	Com-res	-.027 (-.084 to .031)	Bel-res	.014 (-.151 to .167)	Bel-com	.748 (.692 to .793)	Bel-wec	.639 (.541 to .731)
Bel-com	.751 (.694 to .800)	Bel-com	.751 (.691 to .798)	Com-wec	.614 (.528 to .682)	Bel-wec	.662 (.568 to .749)	Crea-agi	.346 (.228 to .452)	Com-res	-.136 (-.250 to -.009)
Bel-crea	-.071 (-.182 to .032)	Bel-crea	-.067 (-.177 to .034)	Crea-res	.804 (.757 to .840)	Com-bel	.745 (.690 to .792)	Crea-bel	-.052 (-.131 to .034)	Com-wec	.135 (.026 to .240)
Com-crea	-.024 (-.130 to .088)	Com-crea	-.035 (-.148 to .077)	Crea-wec	-.071 (-.186 to .058)	Com-res	-.101 (-.229 to .035)	Crea-com	-.154 (-.270 to -.041)	Crea-agi	.335 (.212 to .447)
Com-res	-.029 (-.083 to .028)	Res-agi	.695 (.635 to .747)	Res-agi	.696 (.635 to .747)	Com-wec	.150 (.049 to .254)	Res-agi	.425 (.328 to .523)	Res-agi	.434 (.335 to .533)
Com-wec	.614 (.525 to .682)	Res-bel	.026 (-.051 to .099)	Res-bel	.029 (-.048 to .099)	Crea-agi	.674 (.602 to .738)	Res-crea	.778 (.727 to .821)	Res-crea	.780 (.730 to .822)
Crea-res	.804 (.759 to .840)	Res-wec	-.070 (-.159 to .011)	Res-wec	-.102 (-.231 to .018)	Crea-bel	-.052 (-.137 to .030)	Emstr-res	.271 (.159 to .381)	Res-wec	-.120 (-.194 to -.047)
Crea-wec	-.072 (-.189 to .053)	Emstr-res	.372 (.268 to .460)	Emstr-com	-.691 (-.737 to -.635)	Crea-com	-.170 (-.284 to -.058)	Emstr-wec	-.702 (-.749 to -.645)	Emstr-bel	-.691 (-.735 to -.641)
Res-wec	-.100 (-.233 to .021)	Emstr-wec	-.678 (-.740 to -.601)	Emstr-crea	.446 (.334 to .548)	Emstr-agi	.099 (.033 to .165)	Wec-agi	-.069 (-.123 to -.013)	Emstr-com	-.304 (-.386 to -.220)

**Table 5.** Path coefficients and confidence intervals for model configuration E (continued).

DV WEC		DV CREA		DV BEL		DV RES		DV COM		DV AGI	
Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI	Path	Coeff. & CI
Emstr-agi	.394 (.301 to .474)	Wec-agi	-.096 (-.156 to -.039)	Wec-agi	-.097 (-.156 to -.039)	Emstr-crea	.438 (.343 to .520)	Wec-crea	-.083 (-.150 to -.021)	Wec-agi	-.068 (-.125 to -.015)
Emstr-bel	-.683 (-.735 to -.620)	Wec-bel	.754 (.707 to .792)	Wec-bel	.757 (.711 to .795)	Wec-res	-.276 (-.425 to -.094)	Wec-res	-.139 (-.270 to .012)	Wec-crea	-.079 (-.144 to -.017)

*Notes:* DV = dependent variable. AGI = Agility; BEL = Belongingness at work; COM = Organizational commitment; CREA = Creativity; RES = Resilience; EMSTR = Employee stress; and WEC = Willingness to embrace organizational change. N = 584.

belongingness at work, organizational commitment, and willingness to embrace organizational change. These findings agree with prior research showing stress' quadratic effects on employee and firm outcomes (Bakker and de Vries 2021; Beehr and Newman 1978). Similarly, moderate to strong, and pervasive, effects of employee stress on the employee outcomes examined agree with extant research indicating that employee stress may be ubiquitous in the workplace and in individuals' life. (Beehr and Newman 1978; Ganster and Rosen 2013; Peters et al. 2017; Pfefferbaum and North 2020; Salmen and Festing 2021).

Given the COVID pandemic, employees seeking to figure out how to remain attached to life may have reassessed life's meaning. Employee stress and general uncertainty's positive effects on agility, creativity, and resilience may be viewed as individuals responding by focusing on self (Berlant 2011; Wang et al. 2020). In addition, employee stress large negative effects on belongingness at work, organizational commitment, and willingness to embrace organizational change suggest employee detaching from the organization. COVID pandemic effects may have accelerated this bifurcation. Given stress' negative effects on employees, psychological detachment is beneficial, initially, for employees' well-being (Hahn and Dormann 2013; Vahia, Jeste, and Reynolds 2020; Wang et al. 2020). However, recovery from negative traumatic effects requires love and compassion (Berlant 2011). Similarly, at the organizational level, quality relationships are required to make sense, properly organize, and quickly respond under uncertain and employee stressful conditions (Weick and Sutcliffe 2006). Paradoxically, it is the lack of such relationships that seems to explain the triggering of the alluded detachment.

The effects of stress, and perceptions about it, may depend on the particulars of the individual self as well as on the positioning of the individual in the organization (Talbot et al. 1992), and in life (Bourdieu, Champagne, Duval, Poupeau, and Rivière 2020). The dataset examined in this study includes respondents from a range of organizations, industries, and regions in the USA. The findings may reflect such variability. More than 80% of respondents in the sample were younger than 40 years, more than 87% had a bachelor's degree or higher, and the majority worked in professional or scientific services, education, or finance. Thus, they seem to have the human capital, capacities, and capabilities that would support their focus on the self. In less resource-endowed individuals, medium to high employee stress levels may have mostly negative effects.

Model configuration had, in some cases, an effect on the nature, and strength of certain relationships (see Tables 3, 4, and 5). Consequently, for a given dataset, research findings may be a function of the model configuration examined. Thus, different model configurations may have different implications for both research and practice. The findings of this study clearly illustrate the contextual dependence of research results.

## **VI. Theoretical implications**

Employees' increased focus on the self in lieu of attention on the organization requires validation by further studies. Similarly, it remains to be seen whether such changed focus is maintained in the long run. We may return to the "old days." Nonetheless, the effects of rethinking the meaning of life and work on the employee-organization relationship may remain.

The results show that model configuration may have an impact on model results as well as on research's theoretical and managerial implications. Theoretically, moving towards more comprehensive and complicated models helps to put into perspective research results obtained

when considering only a few factors. Many other factors and model configurations have yet to be studied. A logical extension will be to integrate moderating effects in these analyses.

## **VII. Managerial implications**

The results of this study may be the product of circumstances faced by employees in the last 2 years. Consequently, it may be premature to formulate managerial recommendations. At the same time, since change is likely to continue and evolve, the sooner measures are taken the better even when the situation is not clear.

The recovery, survival, and thriving of firms require synergies among the outcomes examined. Since relationships between the employee-related construct subset (e.g., agility, creativity, resilience) and the organization-related construct subset (e.g., belongingness at work, organizational commitment, and willingness to embrace organizational change) were either non-significant or negative, not only potential synergies among crucial resources were not obtained but, in some cases, cancelling out, and negative, effects were generated. This inefficient use of resources in times of crisis is worrisome. It is necessary to close the separation between the employee-related and the organization-related constructs. Time will tell whether, and how, firms and employees may close such gaps. In particular, the above discussed detachment of employees from the organization needs to be acknowledged and properly addressed by managers. Such need is in line with increased attention to social sustainability issues within organizations that propose a greater degree of attention to the soft/social side of the organization. Inattention to this requirement may be deemed as unethical and it is unlikely to lead to competitive advantages in a future in which talent is increasingly becoming the most limiting factor.

The diverse set of model configurations studied suggests that it is necessary to emphasize the contextual dependence of research results. Since more varied and comprehensive models may involve more reality components, results from such models may evoke the attention of practitioners thereby helping to close the gap between theory and practice.

## **VIII. Limitations and future research**

First, the data were obtained during pandemic times. It is an open question as to whether knowledge generated in the past will apply to current conditions. Conversely, one may question whether knowledge produced under the current circumstances will be of the same, or different, type than priorly created knowledge. Time may provide answers. Second, due to practical limitations only 10 constructs were examined. The models focused on mediating effects. Future research may include other factors, other model configurations, and other relationships (e.g., moderating effects). Third, these analyses pertain to the dataset obtained. Validation with multiple datasets is necessary. Suggested future research could contribute to the literature examining effects of stress and uncertainty on employee outcomes.

## IX. Conclusion

Results suggest that employees may have shifted their attention away from the organization and prioritized the self. The future of employees and firms requires closing such gap.

The study results illustrate that different model configurations may produce different results and different recommendations highlighting the importance of relationships' specificity. Further studies may address the research limitations discussed and change the understanding of the effects of stress on organizational dynamics as well as that of the interrelations among the employee outcomes examined.

*The authors report there are no competing interests to declare.*

## References

- Afshari, L. 2021. "Identification through meaning-making: identity enactment towards organizational commitment." *Human Resource Development International Ahead-of-Print*, 1-22.
- Alston, P. 2017. "Universal Basic Income as a Social Rights-based Antidote to Growing Economic Insecurity." *Public Law & Legal Theory Research Paper Series, Working Paper No. 17-51*, NYU School of Law, New York.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., and Herron, M. 1996. "Assessing the work environment for creativity." *Academy of Management Journal* 39 (5): 1154-1184.
- Anderson, E., Carleton, R., Diefenbach, M., and Han, P. 2019. "The Relationship Between Uncertainty and Affect." *Frontiers in Psychology* 10: 2504.
- Anderson, N., Potočnik, K., and Zhou, J. 2014. "Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework." *Journal of Management* 40 (5): 1297-1333.
- Ashill, N. J., and Jobber, D. 2010. "Measuring state, effect, and response uncertainty: Theoretical construct development and empirical validation." *Journal of Management* 36 (5): 1278-1308.
- Awan, U., Bhatti, S. H., Shamim, S., Khan, Z., Akhtar, P., and Balta, M. E. 2021. "The Role of Big Data Analytics in Manufacturing Agility and Performance: Moderation–Mediation Analysis of Organizational Creativity and of the Involvement of Customers as Data Analysts." *British Journal of Management* 33 (3): 1200-1220.
- Bakker, A. B., and de Vries, J. D. 2021. "Job Demands–Resources theory and self-regulation: New explanations and remedies for job burnout." *Anxiety, Stress, & Coping*, 34 (1): 1-21.
- Barasa, E., Mbau, R., and Gilson, L. 2018. "What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience." *International Journal of Health Policy and Management* 7 (6): 491-503.
- Barro, R. J., Ursúa, J. F., and Weng, J. 2020. "The Coronavirus and the Great Influenza Pandemic: Lessons from the “Spanish Flu” for the Coronavirus’s Potential Effects on Mortality and Economic Activity." *NBER Working Paper No. 26866*. National Bureau of Economic Research, Cambridge, MA.
- Barua, S. 2020. "Understanding Coronanomics: The economic implications of the coronavirus (COVID-19) pandemic." *Available at SSRN 3566477*.

- Baumeister, R. F., and Leary, M. R. 1995. "The need to belong: desire for interpersonal attachments as a fundamental human motivation." *Psychological Bulletin* 117 (3): 497-529.
- Beehr, T. A., and Newman, J. E. 1978. "Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review 1." *Personnel Psychology* 31 (4): 665-699.
- Beghetto, R. A. 2019. "Structured uncertainty: How creativity thrives under constraints and uncertainty." In *Creativity under duress in education? Creativity Theory and Action in Education*, Vol. 3., edited by C. Mullen, 27-40. Cham: Springer.
- Bergami, M., and Bagozzi, R. P. 2000. "Self-categorization and commitment as distinct aspects of social identity in the organization: Conceptualization, measurement, and relation to antecedents and consequences." *British Journal of Social Psychology* 39 (4): 555-577.
- Berlant, L. 2011. *Cruel optimism*. Durham: Duke University Press.
- Bourdieu, P., Champagne, P., Duval, J., Poupeau, F., and Rivière, M.-C. 2020. *Habitus and Field: General Sociology, Volume 2: Lectures at the Collège de France (1982-1983)*. Polity Press.
- Braun, T. J., Hayes, B. C., DeMuth, R. L. F., and Taran, O. A. 2017. "The development, validation, and practical application of an employee agility and resilience measure to facilitate organizational change." *Industrial and Organizational Psychology* 10 (4): 703-723.
- Breakwell, G. M. 2021. "Identity resilience: its origins in identity processes and its role in coping with threat." *Contemporary Social Science* 16 (5): 573-588.
- Brunner, M., and Süß, H.-M. 2005. "Analyzing the reliability of multidimensional measures: An example from intelligence research." *Educational and Psychological Measurement* 65 (2): 227-240.
- Buhrmester, M., Kwang, T., and Gosling, S. D. 2011. "Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality, Data?" *Perspectives on Psychological Science* 6 (1): 3–5. <https://doi.org/10.1177/1745691610393980>
- Busse, C., Kach, A. P., and Wagner, S. M. 2017. "Boundary conditions: What they are, how to explore them, why we need them, and when to consider them." *Organizational Research Methods* 20 (4): 574-609.
- Carmeli, A., Atwater, L., and Levi, A. 2011. "How leadership enhances employees' knowledge sharing: the intervening roles of relational and organizational identification." *The Journal of Technology Transfer* 36 (3): 257-274.
- Casillas, J. C., Moreno-Menéndez, A. M., Barbero, J. L., and Clinton, E. 2019. "Retrenchment Strategies and Family Involvement: The Role of Survival Risk." *Family Business Review* 32 (1): 58–75. <https://doi.org/10.1177/0894486518794605>
- Cavaliere, K. E. 2021. "Economic insecurity as a risk factor during the COVID-19 pandemic." *Journal of Health Disparities Research and Practice* 14 (1): 8.
- Chatwani, N. 2019. "Agility Revisited." In *Organisational Agility*, 1-21. Cham: Palgrave Pivot.
- Citrin, J., and Stoker, L. 2018. "Political trust in a cynical age." *Annual Review of Political Science* 21: 49-70. <https://doi.org/10.1146/annurev-polisci-050316-092550>
- Cohen-Meitar, R., Carmeli, A., and Waldman, D. A. 2009. "Linking meaningfulness in the workplace to employee creativity: The intervening role of organizational identification and positive psychological experiences." *Creativity Research Journal* 21 (4): 361-375.
- Cohen, S., Kamarck, T., and Mermelstein, R. 1983. "Una medida global de estrés percibido." *Journal de Salud y Conducta Social* 24: 385-396.
- Cook, I. 2021. "Who is driving the great resignation?" *Harvard Business Review*, September 15.

- Davis, E. 2017. *Post-Truth: Why We Have Reached Peak Bullshit and What We Can Do About It*. London: Little, Brown Book Group.
- Den Hartog, D. N., De Hoogh, A. H., and Keegan, A. E. 2007. "The interactive effects of belongingness and charisma on helping and compliance." *Journal of Applied Psychology* 92 (4): 1131.
- Dijkstra, T. K., and Henseler, J. 2015. "Consistent and asymptotically normal PLS estimators for linear structural equations." *Computational Statistics & Data Analysis* 81: 10-23.
- Dominitz, J., and Manski, C. F. 1996. "Perceptions of economic insecurity: Evidence from the survey of economic expectations." *NBER Working Paper No. 5690*. National Bureau of Economic Research, Cambridge, MA.
- Dupont, L. 2019. "Agile innovation: Creating value in uncertain environments." *Journal of Innovation Economics & Management* 28 (1): 1-5.
- Eschleman, K. J., Madsen, J., Alarcon, G., and Barelka, A. 2014. "Benefiting from creative activity: The positive relationships between creative activity, recovery experiences, and performance-related outcomes." *Journal of Occupational and Organizational Psychology* 87 (3): 579-598.
- Falco, A., Girardi, D., Dal Corso, L., Yıldırım, M., and Converso, D. 2021. "The perceived risk of being infected at work: An application of the job demands–resources model to workplace safety during the COVID-19 outbreak." *PloS one* 16 (9): e0257197.
- Fan, M., Cai, W., and Jiang, L. 2021. "Can Team Resilience Boost Team Creativity Among Undergraduate Students? A Sequential Mediation Model of Team Creative Efficacy and Team Trust." *Frontiers in Psychology* 12: 2033.
- Field, A. 2021. "From 'the great resignation' to 'the great reimagination'." *Deloitte Insights in the Wall Street Journal*, November 3. <https://deloitte.wsj.com/articles/from-the-great-resignation-to-the-great-reimagination-01635961940?page=1>
- Fietz, B., Hillmann, J., and Guenther, E. 2021. "Cultural effects on organizational resilience: Evidence from the NAFTA Region." *Schmalenbach Journal of Business Research* 73 (1): 5-46.
- Findsrud, R. 2020. "An agile approach to service innovation: creating valuable service innovation with agile resource integration." *Journal of Creating Value* 6 (2): 190-207.
- Fiskin, G. 2021. "The relationship between perceived stress, uncertainty emotions and hopelessness regarding pandemics in pregnant women." *Journal of Community Psychology* Ahead-of-Print: 1-16.
- Frezza, M., Whitmarsh, L., Schäfer, M., and Schrader, U. 2019. "Spillover effects of sustainable consumption: Combining identity process theory and theories of practice." *Sustainability: Science, Practice and Policy* 15 (1): 15-30.
- Ganster, D. C., and Rosen, C. C. 2013. "Work stress and employee health: A multidisciplinary review." *Journal of Management* 39 (5): 1085-1122.
- Greaves, C. J., and Farbus, L. 2006. "Effects of creative and social activity on the health and well-being of socially isolated older people: outcomes from a multi-method observational study." *The Journal of the Royal Society for the Promotion of Health* 126 (3): 134-142.
- Hacker, J. S. 2019. *The great risk shift: The new economic insecurity and the decline of the American dream*, 2<sup>nd</sup> Edition. New York: Oxford University Press.
- Hahn, V. C., and Dormann, C. 2013. "The role of partners and children for employees' psychological detachment from work and well-being." *Journal of Applied Psychology* 98 (1): 26.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. 2010. *Multivariate Data Analysis*, 7<sup>th</sup> Edition. Upper Saddle River, New Jersey: Prentice Hall.
- Harrald, J. R. 2006. "Agility and discipline: Critical success factors for disaster response." *The Annals of the American Academy of Political and Social Science* 604 (1): 256-272.
- Hartwig, A., Clarke, S., Johnson, S., and Willis, S. 2020. "Workplace team resilience: A systematic review and conceptual development." *Organizational Psychology Review* 10 (3-4): 169-200.
- Havermans, B. M., Brouwers, E. P., Hoek, R. J., Anema, J. R., van der Beek, A. J., and Boot, C. R. 2018. "Work stress prevention needs of employees and supervisors." *BMC Public Health*, 18: 642.
- Hayes, B. E., Perander, J., Smecko, T., and Trask, J. 1998. "Measuring perceptions of workplace safety: Development and validation of the work safety scale." *Journal of Safety Research* 29 (3): 145-161.
- Henseler, J., Ringle, C. M., and Sarstedt, M. 2015. "A new criterion for assessing discriminant validity in variance-based structural equation modeling." *Journal of the Academy of Marketing Science* 43 (1): 115-135.
- Hou, Y., Gao, G., Wang, F., Li, T., and Yu, Z. 2011. "Organizational commitment and creativity: the influence of thinking styles." *Annals of Economics and Finance* 12 (2): 411-431.
- Hu, Y., Ye, B., and Tan, J. 2021. "Stress of COVID-19, Anxiety, Economic Insecurity, and Mental Health Literacy: A Structural Equation Modeling Approach." *Frontiers in Psychology* 12: 707079. <https://doi.org/10.3389/fpsyg.2021.707079>
- Ivanov, D. 2020. "Viable supply chain model: integrating agility, resilience and sustainability perspectives—lessons from and thinking beyond the COVID-19 pandemic." *Annals of Operations Research*, 1-21.
- Kalleberg, A. L. 2018. "Job insecurity and well-being in rich democracies." *The Economic and Social Review* 49 (3): 241-258.
- Katz, I. M., Rudolph, C. W., and Zacher, H. 2019. "Age and career commitment: Meta-analytic tests of competing linear versus curvilinear relationships." *Journal of Vocational Behavior* 112: 396-416.
- Kock, N. 2015. "Common method bias in PLS-SEM: A full collinearity assessment approach." *International Journal of e-Collaboration (ijec)* 11 (4): 1-10.
- Kogut, B., and Zander, U. 1996. "What firms do? Coordination, identity, and learning." *Organization Science* 7 (5): 502-518.
- Leask, C., and Ruggunan, S. 2021. "A temperature reading of COVID-19 pandemic employee agility and resilience in South Africa." *S A Journal of Industrial Psychology* 47 (1): 1-12.
- Li, Y., Xia, X., Meng, F., and Zhang, C. 2020. "Association between physical fitness and anxiety in children: a moderated mediation model of agility and resilience." *Frontiers in Public Health* 8: 468.
- Liang, S., Lupina-Wegener, A., Ullrich, J., and van Dick, R. 2021. "'Change is Our Continuity': Chinese Managers' Construction of Post-Merger Identification After an Acquisition in Europe." *Journal of Change Management* 22 (1): 59-78.
- Lill, P. A., and Wald, A. 2021. "The agility-control-nexus: A levers of control approach on the consequences of agility in innovation projects." *Technovation* 107: 102276.
- Lindell, M. K., and Whitney, D. J. 2001. "Accounting for common method variance in cross-sectional research designs." *Journal of Applied Psychology* 86 (1): 114-121.
- Liu, J., and Liu, Y. 2020. "Reducing the harmful impact of work stress on creativity? Buffering model of available resources." *Open Journal of Social Sciences* 8 (2): 98383.

- Lupina-Wegener, A. A., Liang, S., van Dick, R., and Ullrich, J. 2020. "Multiple organizational identities and change in ambivalence: The case of a Chinese acquisition in Europe." *Journal of Organizational Change Management* 33 (7): 1253-1275.
- Malone, G. P., Pillow, D. R., and Osman, A. 2012. "The general belongingness scale (GBS): Assessing achieved belongingness." *Personality and Individual Differences* 52 (3): 311-316.
- Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., de Quervain, D., van Amelsvoort, T., Bisson, J. I., et al. 2022. "The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves." *European Neuropsychopharmacology* 55: 22-83.
- Miller, V. D., Johnson, J. R., and Grau, J. 1994. "Antecedents to willingness to participate in a planned organizational change." *Journal of Applied Communication Research* 22 (1): 59-80.
- Moran, K. A. 2016. "Organizational resilience: Sustained institutional effectiveness among smaller, private, non-profit US higher education institutions experiencing organizational decline." *Work* 54 (2): 267-281.
- Mowday, R. T., Steers, R. M., and Porter, L. W. 1979. "The measurement of organizational commitment." *Journal of Vocational Behavior* 14 (2): 224-247.
- Nunnally, J. C. 1978. "An overview of psychological measurement." In *Clinical Diagnosis of Mental Disorders*, edited by B. B. Wolman, 97-146. Boston, MA: Springer.
- Parzefall, M.-R., Seeck, H., and Leppänen, A. 2008. "Employee innovativeness in organizations: a review of the antecedents." *Finnish Journal of Business Economics* 2 (8): 165-182.
- Peer, E., Vosgerau, J., and Acquisti, A. 2014. "Reputation as a sufficient condition for data quality on Amazon Mechanical Turk." *Behavior Research Methods* 46 (4): 1023–1031. <https://doi.org/10.3758/s13428-013-0434-y>
- Petermann, M. K., and Zacher, H. 2020. "Agility in the workplace: Conceptual analysis, contributing factors, and practical examples." *Industrial and Organizational Psychology* 13 (4): 599-609.
- Peters, A., McEwen, B. S., and Friston, K. 2017. "Uncertainty and stress: Why it causes diseases and how it is mastered by the brain." *Progress in Neurobiology* 156: 164-188.
- Pfefferbaum, B., and North, C. S. 2020. "Mental health and the Covid-19 pandemic." *New England Journal of Medicine* 383 (6): 510-512.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. 2003. "Common method biases in behavioral research: a critical review of the literature and recommended remedies." *Journal of Applied Psychology* 88 (5): 879.
- Porter, L. W., Steers, R. M., Mowday, R. T., and Boulian, P. V. 1974. "Organizational commitment, job satisfaction, and turnover among psychiatric technicians." *Journal of Applied Psychology* 59 (5): 603.
- Postmes, T., Wichmann, L. J., van Valkengoed, A. M., and van der Hoef, H. 2019. "Social identification and depression: A meta-analysis." *European Journal of Social Psychology* 49 (1): 110-126.
- Price, D., and van Dick, R. 2012. "Identity and change: Recent developments and future directions." *Journal of Change Management* 12 (1): 7-11.
- Pulakos, E. D., Kantrowitz, T., and Schneider, B. 2019. "What leads to organizational agility: It's not what you think." *Consulting Psychology Journal: Practice and Research* 71 (4): 305-320.
- Purg, P., Cacciatore, S., and Gerbec, J. Č. 2021. "Establishing ecosystems for disruptive innovation by cross-fertilizing entrepreneurship and the arts." *Creative Industries Journal*, DOI: 10.1080/17510694.2021.1969804.

- Qader, M. A. A. 2021. "The Role of Organizational Agility and its Impact on Achieving Organizational Commitment a Field Study: Jordan Cement Company." *NVEO-Natural Volatiles & Essential Oils Journal / NVEO* 8 (4): 2858-2876.
- Richard, E., and Emerson, R. 1976. "Social exchange theory." *Annual Review of Sociology* 2 (1): 335-362.
- Rockstuhl, T., Eisenberger, R., Shore, L. M., Kurtessis, J. N., Ford, M. T., Buffardi, L. C., and Mesdaghinia, S. 2020. "Perceived organizational support (POS) across 54 nations: A cross-cultural meta-analysis of POS effects.: *Journal of International Business Studies* 51 (6): 933-962.
- Salmen, K., and Festing, M. 2021. "Paving the way for progress in employee agility research: A systematic literature review and framework." *The International Journal of Human Resource Management* Ahead-of-Print: 1-54.
- Slepecky, M., Stanislav, V., Kotianova, A., Kotian, M., Ryniak, J., Korpala, B. B., Zatkova, M., Popelkova, M., Prasko, J., and Latalova, K. 2017. "Readiness to change, insight and motivation in hospitalized alcohol-dependent patients in three countries." *European Psychiatry* 41 (S1): S878-S879.
- Spector, P. E. 2006. "Method Variance in Organizational Research: Truth or Urban Legend?" *Organizational Research Methods* 9 (2): 221-232. <https://doi.org/10.1177/1094428105284955>
- Sya, I. S., and Mangundjaya, W. 2020. "The Moderating Effect of Perceived Organizational Support in Relationship between Affective Commitment and Workforce Agility in Workplace." Paper presented at the ICAS-PGS 2019: Proceedings of the 3rd International Conference on Administrative Science, Policy, and Governance Studies, ICAS-PGS 2019, October 30-31, Universitas Indonesia, Depok, Indonesia.
- Talbot, R., Cooper, C., and Barrow, S. 1992. "Creativity and stress." *Creativity and Innovation Management* 1 (4): 183-193.
- Tierney, B. T., Anderson, E., Tan, Y., Claypool, K., Tangirala, S., Kostic, A. D., Manrai, A. K., and Patel, C. J. 2021. "Leveraging vibration of effects analysis for robust discovery in observational biomedical data science." *PLoS Biology* 19 (9): e3001398. <https://doi.org/10.1371/journal.pbio.3001398>
- Tierney, P., Farmer, S. M., and Graen, G. B. 1999. "An examination of leadership and employee creativity: The relevance of traits and relationships." *Personnel Psychology* 52 (3): 591-620.
- Vahia, I. V., Jeste, D. V., and Reynolds, C. F. 2020. "Older adults and the mental health effects of COVID-19." *JAMA* 324 (22): 2253-2254.
- van der Kolk, B. 2000. "Trauma, neuroscience, and the etiology of hysteria: An exploration of the relevance of Breuer and Freud's 1893 article in light of modern science." *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry* 28 (2): 237-262.
- Walinga, J. 2008. "Toward a theory of change readiness: The roles of appraisal, focus, and perceived control." *The Journal of Applied Behavioral Science* 44 (3): 315-347.
- Wang, P., Chu, P., Wang, J., Pan, R., Sun, Y., Yan, M., Jiao, L., Zhan, X., and Zhang, D. 2020. "Association between job stress and organizational commitment in three types of Chinese university teachers: Mediating effects of job burnout and job satisfaction." *Frontiers in Psychology* 11: 576768.
- Weick, K. E., and Sutcliffe, K. M. 2006. "Mindfulness and the quality of organizational attention." *Organization Science* 17 (4): 514-524.

- White, C. A., Slater, M. J., Turner, M. J., and Barker, J. B. 2021. "More positive group memberships are associated with greater resilience in Royal Air Force (RAF) personnel." *British Journal of Social Psychology* 60 (2): 400-428.
- Willis, L., Reynolds, K. J., and Lee, E. 2019. "Being well at work: The impact of organizational climate and social identity on employee stress and self-esteem over time." *European Journal of Work and Organizational Psychology* 28 (3): 399-413.
- Yang, L., Wei, J., and Zhou, J. 2022. "How Job Tenure Weakens the Positive Influence of Education on Creative Performance through Task Performance." *Sustainability* 14 (1): 537.
- Zhang, X., and Bartol, K. M. 2010. "Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement." *Academy of Management Journal* 53 (1): 107-128.
- Zhou, J., and Hoever, I. J. 2014. "Research on workplace creativity: A review and redirection." *Annual Review of Organizational Psychology and Organizational Behavior* 1 (1): 333-359.