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Systemic Agility and Job Strain: A Mediation Model

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ABSTRACT

While turbulent environments and crises have an impact on Job Strain and create stress within the companies, there are many approaches about how to adapt and thrive in an increasingly turbulent operating environment, however the extant literature on the subject is mainly qualitative. The case study examines the impact of *VUCAness*, defined as the level of turbulence in the operating environment (independent variable) on Job Strain (dependent variable), mediated by the *Systemic Agility* (mediating variable), defined as the level of cultural agility. The mediation variable is assessed using the significant domains that emerge from our review of the literature and quantifies the positioning of the observed organisations on a continuum between legacy and agile culture, between modern and postmodern perspectives. Job strain is measured by Karasek's established Job Content Questionnaire. The case study illustrates the partial mediation effect of the *Systemic Agility*, on Job Strain using 307 observations collected in a company group made of two distinct groups. The study confirms the partial mediation effect of *Systemic Agility* on Job Strain and suggests that, above a certain level of agility, the mediation effect turns from negative to positive, reducing the stress induced by the operating environment. This quantitative case study suggests that the agile culture mediates stress at the workplace under turbulent working conditions.

Keywords: Agile culture, Job Strain, *VUCAness*, Adaptation, Mediation Analysis

INTRODUCTION

In today's rapidly evolving business landscape, organisations face numerous challenges that require them to continuously adapt in order to thrive (Barrand & Deglaine, 2018). As the operating context becomes increasingly dynamic and volatile, there is a growing need to understand how organisations can navigate these turbulent environments (Millar, Groth, & Mahon, 2018). While there is a wealth of approaches and debate on this topic, much of the available literature focuses on qualitative insights and specific case studies (Rath, Grosskopf, & Barmeyer, 2021).

This case study research aims to contribute to the literature by testing the impact of operating environment turbulence on Job Strain, with the mediating role of agile culture. The concept refers to the ability to respond and adapt quickly to changing market conditions and customer

demands. It encompasses flexibility, adaptability and responsiveness in strategy, processes, and culture (Karvonen, Sharp, & Barroca, 2018). In this study, we hypothesised that the ability to develop agility plays a mediating role in the relationship between turbulence in the operating environment and Job Strain experienced by employees. To measure the independent and mediating variables, i.e., turbulence in the operating environment and the agile culture, a questionnaire that leverages on the literature has been conceived. It aims to quantify the positioning of organisations on a continuum between legacy and agile practices and, assesses the organisation's culture, strategy by positioning them on a continuum between modern and postmodern perspectives (Hatch & Cunliffe, 1997). On the other hand, the dependent variable, Job Strain, is measured using the well-established Job Content Questionnaire (Karasek, et al., 1998). This questionnaire assesses various aspects, such as job demands, latitude for decision, support from colleagues and hierarchy to determine the level of Job Strain experienced by employees.

The JCQ section of the questionnaire aims to capture employees' self-reported perceptions of their Job Strain under the influence of turbulences in the operating environment and the relative agile culture.

LITERATURE REVIEW

The Working Environment Has Changed and Keep Changing

Today we live in an ever-changing environment, identified by the term *'VUCA'*, which brings with it the volatility, uncertainty, ambiguity and complexity of phenomena and the resulting problems that affect today's society (Peterson, 2021). The question of how organisations can successfully deal with the *VUCA* environment has been a dominant topic in both industry and academia for decades. A number of researchers in the 1960s developed concepts on how to deal with such an environment: they spoke of agility and, in particular, of agile organisations capable of dealing with an unpredictable and uncertain environment (Çetin, F. & Tolay E., 2022). *VUCA* largely influences organisational culture, which, according to an empirical study by Ton et al. (2013), significantly influences knowledge sharing and job satisfaction, for better or worse, depending on the ability to adapt (Oliveira, Borges, Rodrigues, Silva, & Martins, 2022). To operate in VUCA conditions, it is imperative to keep the context under control through continuous adaptation (Barrand & Deglaine, 2018). According to Senge (1990), a systemic perspective enables the self-renewal of organisations and improves their ability to adapt to change in order to survive and thrive (Scholtens, Salome & Petroll, Carla & Rivas, Carlos & Fleer, Joke & Konkolÿ Thege, Barna., 2021). If the *VUCA* has found its place in the literature, the nominalization of this acronym into *VUCAness* is emerging and may be found in recent studies that use the environmental turbulence as an independent variable (Araki & Cotellessa, 2020).

Job Strain

The inability of an organisation to respond to changes in the marketplace and to adapt to the environment in which it operates can lead to imbalances that create stressful situations, sometimes resulting in suboptimal performance. Work-related stress is an alarming phenomenon worldwide and has been recognised as a serious public health problem due to its negative impact on the physical, mental, emotional, and psychological well-being of employees in various occupations (Charzyńska, Habibi Soola, Mozaffari, & Mirzaei, 2023). On the topic of occupational stress and harmful psychosocial risks for workers, many studies based on

theoretical models have been carried out in the literature (Siegrist, Wege, & Pühlhofer, 2009), (Glendon, 1995), (Leka & Jain, 2010), (Cox, 1993). In 1979, the Swedish psychologist and sociologist Karasek introduced the demand-control or 'job-strain' model, which has become one of the most widely used models of psychosocial working conditions and health in occupational stress research (Preckel, 2005). The results of the original model suggest that the relationship between high job demand (JD) and low decision latitude (DL) defines a state of 'Job Strain' or 'perceived job stress', which may explain chronic stress levels and increased cardiovascular risk (Baldasseroni, et al., 2001).

Framing Agility

Hatch's Studies on Modern and Postmodern Perspectives:

The development and functioning of organisations with their internal and external environment have been studied by organisational theory. In particular, Mary Jo Hatch has made significant contributions to the understanding of organisational culture and identity by exploring the modern and postmodern perspectives of organisational theory and highlighting their main features: the modern perspective focuses on efficiency, rationality and stability, while the postmodern perspective challenges the assumptions of the modern perspective and emphasises the subjective and socially constructed nature of organisations (Hatch & Cunliffe, 1997). Hatch's study often emphasises the importance of understanding organisations in their cultural and social context. Modern and postmodern perspectives can be understood as lenses through which organisations approach business agility. From a modern perspective, business agility can be seen as the ability to respond quickly to market changes, adapt to new technologies and maintain a competitive advantage. From a postmodern perspective, business agility can be seen as the ability to manage complexity, embrace ambiguity and adapt to rapidly changing environments (Hatch & Cunliffe, 1997).

Spiral Dynamics:

In 1996, Don Beck and Christopher Cowan developed Spiral Dynamics, a model of human development and cultural evolution based on the work of the psychologist Graves. At the heart of Spiral Dynamics is the concept of 'memes', which are value systems or patterns of thought that influence individuals and societies and evolve in response to the challenges and opportunities presented by the environment. Indeed, adaptation is an essential aspect of Spiral Dynamics. As the environment presents new challenges or opportunities, individuals and societies are driven to evolve and develop new ways of thinking and behaving (Beck & Cowan, 2005).

Enterprise Agility:

The concept of Enterprise Agility often makes the difference between mechanistic and organic design of an organisation (Sherehiy, Karwowski, & Layer, 2007), and we find in the literature a number of attributes that describe the organic nature of Enterprise Agility, such as learning and self-development and acceptance of new responsibilities (Plonka, 1997), empowered employees and self-directed teams (Gunasekaran, 1999), responsiveness to external change and knowledge sharing (Breu, Hemingway, Strathern, & Bridger, 2002), proactive, adaptive and generative behaviours (Dyer & Shafer, 2003). The need to adapt to the context is also a key attribute of Enterprise Agility through proactive, reactive, or tolerant behaviour (Griffin & Hesketh, 2003). The literature review suggests several taxonomies to classify the

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characteristics of agile organisations (Sherehiy, Karwowski, & Layer, 2007).

Take Away from The Literature

The paradigm shift suggested in the literature reports changes in the practices, moving from legacy to agile, from modern to postmodern.

Table 1: Agility boundaries mapping with existing theories

	Legacy/Modern boundary	Agile/Postmodern boundary
(Hatch & Cunliffe, 1997)	Modern perspective	Postmodern perspective
(Sherehiy, Karwowski, & Layer, 2007)	Mechanistic design	Organic design
(Beck & Cowan, 2005)	Blue/Orange 'memes'	Yellow/Turquoise 'memes'

Table 2: Key domains identified in the literature to contribute to agile culture

Domains	Description	Sources
Sense of Purpose	How the organisation creates the sense of purpose through shared vision and values	The influence of corporate social responsibilities on sustainable financial performance: Mediating role of shared vision capabilities and moderating role of entrepreneurship (Luo, Chuan, & Minxin, 2022)
Management Practices	How the organisation makes things done leveraging on management practices and leadership	- The Role of Agile Leadership in Organisational Agility (Melis & Aleem, 2020) - Agile Leadership and Agile Management on Organisational Level - A Systematic Literature Review (Theobald, Prenner, Krieg, & Schneider, 2020)
Organisation Practices	How the organisation is structured and ruled	- A review of Enterprise Agility: Concepts, frameworks, and attributes (Sherehiy, Karwowski, & Layer, 2007) - Out with the old and in with the new? The relationship between traditional and new organisational practices (Palmer & Dunford, 2002) - The Importance of the Organisational Structure to be Competitive in *VUCA* World (Kaya, 2022)
Information/ Communication	How the organisation uses information and communicate	- Influence of Organisational Culture on Organisational Effectiveness: The Mediating Role of Organisational Communication (Gochhayat, Giri, & Suar, 2017) - Organisational culture and a safety-conscious work environment: the mediating role of employee communication satisfaction (Silla, Navajas, & Koves, 2017)
Behaviours	Which are the behavioural patterns in the organisation	- A methodology for achieving agility in manufacturing organisations (Sharifi & Zhang, 2000) - A formal framework for collective intelligence (Sulis, 1999) - The Impact of Transformational Leadership on Employee Sustainable Performance: The Mediating Role of Organisational Citizenship Behaviour (Jiang, Weiping & Zhao, Xianbo & Ni, Jiongbin, 2017)

		- Adaptable behaviours for successful work and career adjustment (Griffin & Hesketh, 2003)
Methods	Which are the organisation rituals and methods to serve the organisational purpose	Agile Methodologies: Organisational Adoption Motives, Tailoring, and Performance (Johnson & Hall, 1988)

While the *VUCAness* alters the Job Strain, there is a need for further research into how organisations adapt to the turbulent context in which they operate and how the adapted practices might mediate stress at work. In addition, studies on organisational theories such as Mc Gregor's Theory X and Y have not found conclusive empirical support (Lawter, Kopelman, & Prottas, 2015). The transition from a modern to a postmodern perspective occurs because there is a need to adapt, while failure to adapt may cause additional stress.

RESEARCH DESIGN AND METHODOLOGY

This case study research measures the relationships between *VUCAness,* and Job Strain and how the agile culture affects the relationship, in other words how does the agile culture mediate the effect of turbulent environment on:

- H1: Agile culture mediates the Job Strain
- H2: There is a threshold value in agile culture, below that threshold the mediating effect of organisation's agility on Job Strain is negative and above that the mediating effect becomes positive.

The case study is based on observations gathered in a company group made of two separate groups in which perceptions have been collected from their entire workforce leveraging a quantitative methodology. The research design uses a convenience sample, where participants are selected based on their availability and willingness to participate and share their perceptions of how their respective group experiences the key variables of the study. The unit of analysis is the individual respondent, and the data set is used to verify the first hypothesis while a group comparison by business unit is performed to test the second hypothesis.

The research uses a questionnaire as the primary data collection instrument. The questionnaire is based on a model derived from the existing literature for measuring Job Strain, which has demonstrated reliability and validity in measuring the variables of interest through the Job Content Questionnaire (Mauss, Herr, & Theorell, 2018). The agile culture has been modelled leveraging on literature review and called *Systemic Agility*. The *Systemic Agility* construct factors in the 6 key domains (sense of purpose, management practices, organisation practices, information practices, methods, behaviours). It provides a fair view of the organisational positioning in the continuum between legacy/modern and agile/postmodern boundaries, using a scale that assesses the practices. By combining the use of an established and an emerging model, the study aims to build on previous research and contribute to the existing body of knowledge in this area by modelling a meaningful set of factors that contribute to the mediation effects of the VUCAness on Job Strain. The inclusion of all staff provides a comprehensive understanding of the perceptions within each group and allows for a more representative analysis of the phenomenology.

Partial Least Squares Structural Equation Modelling (PLS SEM) is used to analyse the fit of the

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data for the complete data set (Ringle, Wende, & Becker, 2022). This analysis assesses the relationships between the variables and determines whether they fit the hypothesised model, the unit of analysis is the individual respondent. The PLS SEM analysis also examines whether the observed differences between the two groups, using a multigroup analyses protocol, have an impact on factor loadings and mediation effects. By PLS SEM on individual observations and through a multigroup analysis protocol, this research aims to provide a comprehensive analysis of the data collected from all individuals and from the two groups. The results will shed light on potential differences in the variables of interest and their impact on various relationships within each group. The findings will contribute to the understanding of *VUCAness* of Context, Job Strain and *Systemic Agility* to provide valuable insights for leaders and researchers in the field.

Modelling the Relationships between VUCAness of the Context, Job Strain and Systemic Agility

To determine the influence of organisation's agility, a model is proposed that explores the relationship between the VUCAness of the context (independent variable) and the Job Strain (dependent variable), while Systemic Agility is tested as a mediator. The latent variable VUCAness (V) is the reflection of 3 items that test the VUCAness of the operating environment. Job Strain (JS) is a second order reflexive construct derived from Karasek's Job Content Questionnaire in which the best loading items have been selected and reflected in the first order latent variables of Job Control (JC), Job Demand (JD) and Job Support (JSu). The latent variable illustrating Systemic Agility (SA) is a second order construct made up of 6 latent variables, namely Purpose (P), Management Practices (Ma), Organisation Practices (O), Information Practices (I), Methods (Me) and Behaviours (B). The first order latent variables are formative while SA is reflexive. In the questionnaire, the *Systemic Agility* items are scored on a continuum that ranges from modern to postmodern posture. For example, and to contribute to measuring the Sense of Purpose P, the respondent has to provide his perspective between a first statement "Performance is measured by multiple indicators such as financial figures, employee and customer satisfaction, social responsibility index" (postmodern posture) and a second statement "Performance is based on financial key performance indicators" (modern posture) to illustrate where he perceived the organisation in the paradigm shift.

The boundaries of *Systemic Agility* correspond to the elements from the literature review, while the intermediate positioning may correspond to a stage in the adaptation process.

The constructs used to measure the mediating effect of *Systemic Agility* on Job Strain are defined as follows:

Table 3: Constructs and latent variables description

Construct	Latent variable	Description	Source
Context *VUCAness* (V)	1st order construct	Describe the Volatility, the Uncertainty, the Complexity, and the Ambiguity of the operating environment	(Peterson, 2021) (Çetin, F. & Tolay E., 2022) Ton et al. (2013) (Barrand & Deglaine, 2018)
Systemic Agility (SA)	Sense of Purpose (P)	Describe how the organisation creates the sense of purpose	(Luo, Chuan, & Minxin, 2022)

			(Sherehiy, Karwowski, & Layer, 2007)
	Management Practices (Ma)	Describe how the organisation makes things done	(Melis & Aleem, 2020) (Theobald, Prenner, Krieg, & Schneider, 2020)
	Organisation Practices (O)	Describe the organisation's structure and policy	(Sherehiy, Karwowski, & Layer, 2007) (Palmer & Dunford, 2002)
	Information Practices (I)	Describe how the organisation uses information	(Gochhayat, Giri, & Suar, 2017) (Silla, Navajas, & Koves, 2017)
	Behaviours (B)	Describe the behavioural patterns in the organisation	(Sharifi & Zhang, 2000) (Sulis, 1999) (Jiang, Weiping & Zhao, Xianbo & Ni, Jiongbin, 2017) (Griffin & Hesketh, 2003)
	Methods (Me)	Describe the organisation's rituals and methods	(Johnson & Hall, 1988)
Job Strain (JS)	Job demand (JD)	Describe the psychological load imposed by the job	(Karasek, et al., 1998)
	Job control (JC)	Describe the decision latitude for the job	(Karasek, et al., 1998)
	Job support (JSu)	Describe the support received by the colleagues and the hierarchy	(Johnson & Hall, 1988)

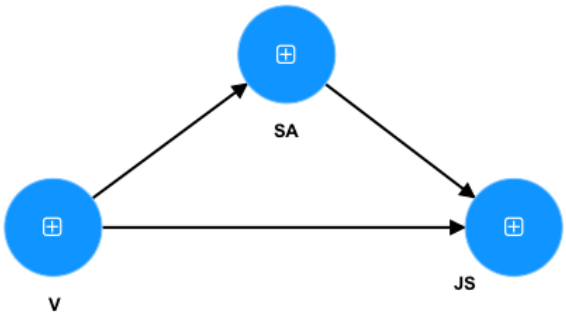

Figure 1: Mediation model to explore the influence of *Systemic Agility* on Job Strain

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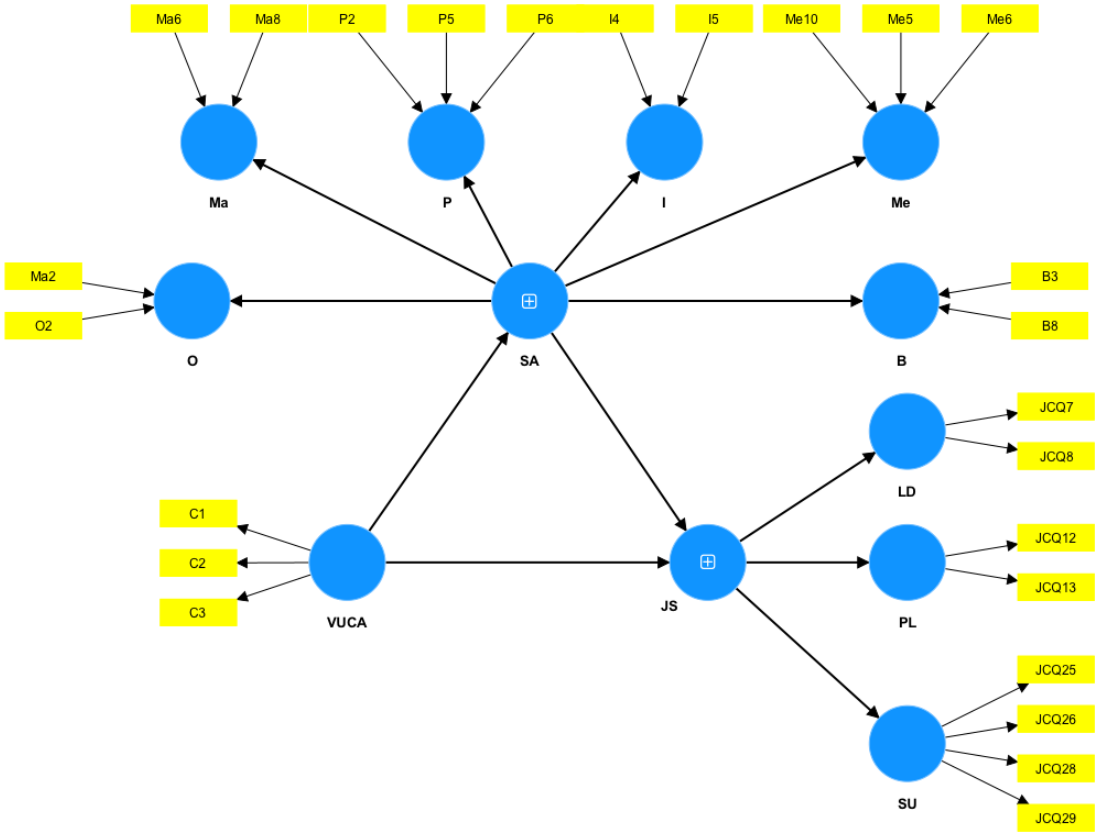

Figure 2: Mediation model with formative SA items and reflective *VUCA* and JS items

FINDINGS

Observations' Analysis

The observations were analysed under the lens of a sample t-test (Derrick, Toher, & White, 2017) to determine if there was a significant difference between the means of two independent groups in the constructs, prior to conducting a path analysis under the lens of Partial Least Squares Structural Equation Modelling to determine if there was a significant influence of the *Systemic Agility* on Job Strain induced by context *VUCAness* (Sarstedt, Hair, Nitzl, Ringle, & Howard, 2020).

Observations Summary

In the first group (Group A), 214 observations were collected from 250 employees, giving a margin of error of 3% with a CI of 95%. In the second group (Group B), 93 observations out of 130 employees give a margin of error of 5% with a CI of 95%. The distribution of SA is flatter for all groups with a tail to the right, the distribution of V is more concentrated around the mean for Group A than for Group B, while the tail is to the left for all groups.

Table 4: Group statistics for Group A and Group B

Groups		SA	V	JS
Group A	N	214	214	214
	Mean	2.6606	2.9735	2.7029
	Std. Error of Mean	0.04641	0.05238	0.03258
	Std. Deviation	0.67895	0.76629	0.47658

	Kurtosis	-0.111	0.453	-0.121
	Skewness	0.363	-0.379	-0.169
Group B	N	93	93	93
	Mean	3.2115	2.9606	2.7406
	Std. Error of Mean	0.07333	0.10165	0.04046
	Std. Deviation	0.70713	0.98030	0.39015
	Kurtosis	-0.488	-0.253	-0.155
	Skewness	0.264	-0.521	-0.087
Total	N	307	307	307
	Mean	2.8275	2.9696	2.7143
	Std. Error of Mean	0.04177	0.04767	0.02579
	Std. Deviation	0.73179	0.83528	0.45185
	Kurtosis	-0.223	0.238	-0.046
	Skewness	0.339	-0.458	-0.174

Are the Differences in Means Significant Between the Groups?

We observe differences in means for SA between the observed groups of -11%, while the difference in means for V is 0.3% and for JS is -0.8%. The sample t-test shows that the difference in means between groups is significant for SA.

The Levene's test for equality of variance is not accepted (p = 0.590), which leads to the use of the t-test for equality of variance not accepted with significant sides (p = 0.000). The same procedure applied to V and JS shows non-significant differences in the means.

Table 5: Independent sample T-Test for Equality of means

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				One-Sided p	Two-Sided p			Lower	Upper
SA	EVA*	0.290	0.590	0.000	0.000	-0.55090	0.08540	-0.71894	-0.38286
	EVnA**			0.000	0.000	-0.55090	0.08678	-0.72222	-0.37959
V	EVA*	7.073	0.008	0.450	0.901	0.01295	0.10391	-0.19152	0.21742
	EVnA**			0.455	0.910	0.01295	0.11436	-0.21310	0.23899
JS	EVA*	3.801	0.052	0.251	0.503	-0.03771	0.05617	-0.14824	0.07282
	EVnA**			0.234	0.469	-0.03771	0.05194	-0.14010	0.06468

(*Equal variance assumed; **Equal variance not assumed)

Assessment of the Model

Full Dataset Analysis:

The model was tested using the PLS-SEM algorithm in SmartPLS on the full dataset made of the

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two groups and showed fair construct validity and reliability (Ringle, Wende, & Becker, 2022).

Table 6: Construct validity and reliability of the model

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
JS	0.818	0.849	0.461
LD	0.826	0.894	0.852
PL	0.794	0.895	0.829
SU	0.906	0.914	0.780
VUCA	0.756	0.887	0.673

The average variance extracted for JS appears to be below the desired threshold of 0.5, indicating a lower convergent validity of the second order construct. This value can be considered acceptable given the AVE reported for the first-order construct and the optimal composite reliability (CR = 0.849) reported for the JS latent variable; if the AVE is less than 0.5 but the composite reliability is greater than 0.6, the convergent validity of the construct may still be adequate (Fornell & Larcker, 1981). The discriminant validity analysis reports below threshold scores for all relevant constructs.

Table 7: Discriminant validity - Heterotrait - Monotrait (HTMT) - Matrix

	LD	PL	SU	VUCA
LD				
PL	0.1290			
SU	0.340	0.274		
VUCA	0.2530	0.3630	0.259	

The collinearity statistics (VIF) for the outer model of the formative items contributing to the first-order construct of *Systemic Agility* show fair values ranging from 1.103 (Ma2) to 2.018 (Ma8). The convergent and discriminant validity measures provide evidence of a good fit between the data and the model, opening the door to mediation analysis.

Mediation Analysis

The mediation analysis conducted to assess the mediating role of Cultural Agility, measured by *Systemic Agility*, in the relationship between *VUCAness* and Job Strain, used the bootstrapping procedure in SmartPLS on the complete dataset. The results indicated an indirect effect of *VUCAness* on Job Strain for all observations (Table 8). The results showed a significant indirect effect of *VUCAness* on Job Strain for all observations (**β** = -0.062, t = 2.924, p-value = 0.003) and for Group A (**β** = -0.136, t = 3.922, p-value < 0.001). The overall effect of *VUCAness* on Job Strain appears to be significant for all observations (**β** = -0.272, t = 5.175, p-value < 0.001) and for Group A (**β** = -0.362, t = 6.477, p-value < 0.001). This shows *Systemic Agility*, partially mediates the relationship between *VUCAness* and Job Strain.

Table 8: Mediation results for all the respondents

	Total effect (V -> JS)	Direct effect (V -> JS)	Indirect effect (V -> JS)					
								Percentile bootstrap 95% confidence interval

Data	Coefficient	T value	p value	Coefficient	T value	p value	Hypothesis	Coefficient	Std. Dev	T value	p value	Lower	Uper
All	-0.272	5.175	0.000	-0.210	4.150	0.000	V -> SA -> JS	-0.062	0.021	2.924	0.003	-0.106	-0.025

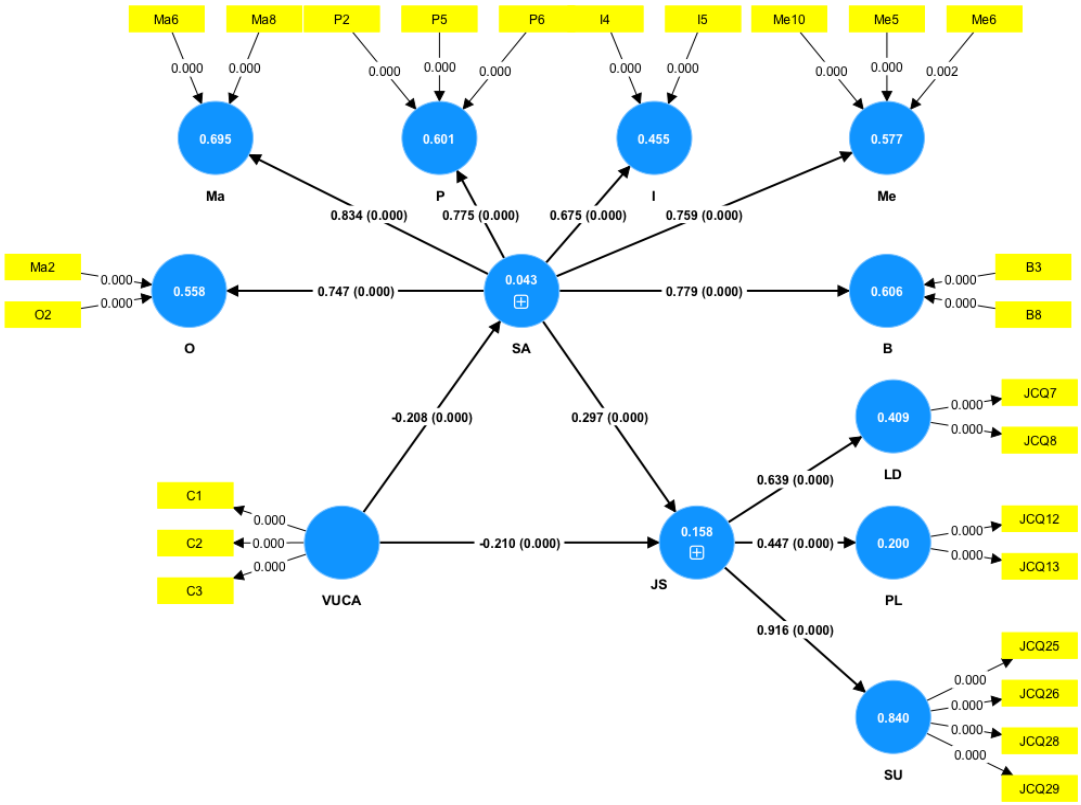

Figure 3: Mediation model loadings and p-value (inner model) and p-value (outer model)

Multigroup Analysis

To explore the second hypothesis and considering that the Group B has a higher Systemic Agility, a bootstrap multigroup analysis is performed in SmartPLS to explore the differences between the groups. For the Group A, the mediation is partial and negative while for the Group B, the mediation is partial and positive, but does not appear to be significant according to the data collected (p-value 0.602).

Table 9: Multigroup analysis results

	Total effect (V -> JS)			Direct effect (V -> JS)			Indirect effect (V -> JS)						
												Percentile bootstrap 95% confidence interval	
Group	Coefficient	T value	p value	Coefficient	T value	p value	Hypothesis	Coefficient	Std. Dev	T value	p value	Lower	Upper
Group A	-0.362	6.477	0.000	-0.226	3.818	0.000	V -> SA -> JS	-0.136	0.035	3.922	0.000	-0.203	-0.073
Group B	-0.102	0.804	0.421	-0.125	0.521	0.602	V -> SA -> JS	0.023	0.047	0.478	0.633	-0.075	0.112

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DISCUSSION

While Group A and Group B report a significant difference in their perceived *Systemic Agility* (-0.5509, p-value < 0.001), their perceptions of *VUCAness* and Job Strain are quite similar and the small differences are not significant, providing the research with a first set of data to test the influence of *Systemic Agility* on Job Strain. Looking at the consolidated dataset, we observe an average *Systemic Agility* (2.8275) that seems to be slightly lower than the *VUCAness* (2.9696) reported by the respondents. In this context, we observe a significant partial negative mediation of SA on JS (indirect effect -0.062, p-value < 0.001). Similarly, when looking at Group A, the average SA (2.6606) appears to be lower than the *VUCAness* (2.6606) and leads to a significant partial negative mediation of SA on JS (indirect effect -0.135, p-value < 0.001). In Group B, SA (3.2115) is higher than *VUCAness* (2.9606), while the mediation effect of SA on JS is positive and does not appear to be significant (indirect effect: 0.023, p-value = 0.602).

Table 10: Summary of observations

Group	Average SA	Average *VUCAness*	Indirect effect *VUCAness* -> SA -> JS
All	2.8275	2.9696	-0.062 (p-value < 0.001)
Gr. A	2.6606	2.973	-0.135 (p-value < 0.001)
Gr. B	3.2115	2.9606	0.023 (p-value = 0.602)

While the mediation analysis on the full data set confirms the partial mediation of *Systemic Agility* on Job Strain (H1), we observe a potential typing point in the sign of the partial mediation effect of SA on JS that can't be confirmed by the observations gathered in this case study (H2). The typing point may be represented by the ratio of SA and *VUCAness*. When SA/*VUCAness* < 1, the partial mediation is negative, and when SA/*VUCAness* > 1, the partial mediation is positive. Further observations are needed to confirm the emerging hypothesis.

When associated to the critical role of self-regulation, the level of *Systemic Agility* may generate negative or positive emotions and affect Job Strain. A higher *Systemic Agility* may be associated to positive emotions (pride, excitement, surprise), provides resources and liabilities, the learning and adapting experiences gained from the experience appears as an overarching supporting background as described in the AAA (appraisals, attributions, adaptation) model of job stress (Mackey & Perrewé, 2014). There is a relationship between the methods' domain of the *Systemic Agility* that refers mainly to the ability of learning from the experience in a context of continuous improvement. The negative mediation observed when the *Systemic Agility* is lower than the perceived *VUCAness* may be associated as well with the inability of the organisation to deal with the tensions. Specific triggering events or uncertainty contribute to the emergence of tension while a common pattern of coping mechanisms – corporate culture, awareness raising, channels, changes and reflection – is functional to tensions processing while determining the outcome (Kurt, 2019).

CONCLUSION

The model designed for this study is useful and supports the purpose of the research. *Systemic Agility*, intended and measured as a maturity scale in the continuum ranging from modern to postmodern paradigm, partially mediates the impact of the effervescent operational context, measured as the *VUCAness* of the context, on Job Strain. In other words, the cultural and strategic elements that make up *Systemic Agility* can increase strain if the organisation is too

modern, in which case the organisation and its management add intrinsic stress to the extrinsically generated stress; tensions handling generates more tensions. The data may suggest that a "high enough" level of *Systemic Agility* could potentially reduce stress at work and provide tool to handle tensions, but additional observations are needed to confirm this statement. The mediation analysis based on Group B's observations illustrates the soothing effect of *Systemic Agility* on stress, although this result does not appear to be significant, possibly due to the more platykurtic and therefore spread distribution.

The influence of *Systemic Agility* illustrated in the case study research is encouraging and calls for further analysis on a wider range of agile organisations to confirm the positive mediation influence of *Systemic Agility* on Job Strain. It's an invitation for corporate to develop their *Systemic Agility* through the domains that matters such as the Sense of Purpose, their Management Practices, their Organisation Practices, the way they manage information, the Methods they use and finally their Behaviors to keep the *VUCAness* at bay.

Disclosure Statement

No potential conflict of interest was reported by the authors who declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability Statement

The data that support the findings of this study are available from https://doi.org/10.7910/DVN/OMNQJH.

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