# Exploring The Relationship Between Job Autonomy And Organizational Commitment In Turbulent Times: The Role Of Employee Engagement

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Abstract: This paper develops and tests a holistic model that depicts and examines the relationships among job autonomy, its drivers, as well as employee engagement and influence organizational commitment. This paper is among the first works to deal with such a complex framework which considers the interrelationships among numerous constructs and their effects on organizational commitment. A questionnaire was designed to measure the influence of Job autonomy and its drivers on organizational commitment while taking into consideration the impact of turbulent times and organizational commitment on these relationships. Data collected from a sample of 317 respondents working in Ethiopian commercial banks were used to test the proposed relationships. The proposed model proved to be fit. The hypotheses were supported, and implications were discussed.

Keywords: -Job autonomy, organizational commitment, employee engagement, organizational tenure and turbulent times

# 1. INTRODUCTION

Organizational commitment in the twenty-first century has become the center of attention in the service industry (i.e. hospitals, academic institutions, banks, hotels,) and industrial sectors (Rosario Núñez, 2020). Human resource departments in the service industry seen OC as an important aspect so far.

(Ghavifekr & Adewale, 2019) stated that a major factor in service quality is the degree of trust and commitment that employees show when interacting with customers. Because the service industry has grown exponentially in the twenty-first century, much of the scholarly attention during this decade has been spent on trying to study OC in the service context.

As per (Hidalgo-Peñate, 2020) there are various matters in today's world that shape the organizational commitment and make it interesting focus of the study. Firstly, it is said that these days it is much more common that people change jobs and companies during their career than it has been before.

Secondly, it is more challenging to get younger employees committed to the organization; they are committed to their job or career rather than the organization (Colquitt, 2019). Also, it has been found that during economic crisis, when the work environment is very insecure, employees become less committed to organizations (de la Torre-Ruiz, 2019). This brings up yet another challenge for HR departments.

Previous studies have provided evidence of several factors which can influence or determine the level of commitment in an employee. An assessment of past studies, e.g. Luo (2015), Anttila (2014), Wang (2015), Chang (2015),

Bufquin (2017), Kalfa (2018), and J. Lee (2018), reveals that organizational factors such as culture, leadership, structure and top management support have appeared often to be relevant to the study of organizational commitment.

While in this study, the researcher intended to test the influence of Job Autonomy in the context of turbulent times. Job autonomy is among several other job conditions (task variety, feedback, completion of task, task significance, and task importance) included in Hackman and Oldham's job characteristics model that is believed to have an impact on employees' responses to work. Job autonomy, by definition, is the freedom and discretion allowed of employees in facets of method, schedule, and criteria to perform their tasks and responsibilities (Hackman & Oldham, 1976; Malinowska, 2018).

The present study therefore systematically reviews prior empirical research and the theoretical anchors of Job Autonomy and Organizational Commitment in the context of turbulent times. In doing so, it makes a number of important contributions to both the academic literature and to practice. First, by examining different effects of three types of Job Autonomy on Organizational Commitment, this study sheds further light on the relative effects and interrelations of the three Job Autonomy dimensions, and answers the question of which dimension plays a more significant role on Organizational Commitment (Lin & Ping, 2016).

Second, the researcher focus on Engagement due to its pivotal role in explaining Organizational commitment (e.g. (Saks,2006; Field & Buitendach,2011; Ariani,2013; Shao,2017), especially in the Ethiopian context where reciprocity values are strongly endorsed (Kosa,2018) and that Organizational commitment is relationship-based that

Vol. 5 Issue 3, March - 2021, Pages: 27-46

signifies a strong personal bond towards the organization (Meyer & Allen, 1991; Raymond & Mjoli, 2013).

Third, in addition to developing a nuanced explanation for how Job Autonomy affects employees' Organizational Commitment, the researcher also explores the boundary conditions under which the effects of Job Autonomy can be either strengthened or weakened. Employees may form different expectations of their Job as their tenure increases. Hence, organizational tenure may serve as a moderating factor affecting how employees perceive and react to different dimensions of Job Autonomy.

Finally, this paper contributes to the literature by presenting a study of Job Autonomy and Organizational Commitment that focuses on turbulent times. Hence, this study tries to measure the strength of aforementioned relationship in the context of Turbulent times. Further, the researcher choice of commercial banks extends the generalizability of the research by giving a real time analysis on the context of the most rigid working environment.

Last but not least, in the light of the fierce competition for talented employees, the financial sector is typically associated with high levels of employee mobility and turnover. Given employees' turnover poses a potential threat to the risk of losing invaluable and tacit knowledge (Ku, Liau, & Hsing, 2005; Yang & Jiang, 2007; Quratulain, 2018), how commercial banks develop effective Job Autonomy to strengthen their employees' engagement, and in turn, organizational commitment should warrant more attention.

In particular, the paper addresses the following questions:

- To what extent Method, scheduling, and criteria autonomy and employee engagement influence affective, continuance and normative commitment?
- To what extent organizational tenure and turbulent times influence the aforementioned relationships?

Data collected from a sample of 317 respondents working in Ethiopian commercial banks, were used to test the model and answer the research questions.

The remainder of the paper is organized as follows: In Section 2, previous studies related to this research are reviewed. In addition, the theoretical framework underlying our proposed model is presented, and the hypotheses are derived in Section 2. The research methodology and data analysis results are presented and discussed in Section 3. Finally, the conclusion, limitations, implications, recommendations and suggestions for future research are given in Section 4.

## 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Any risk perceived by employees in the organization will affect their trust in the organization. This phenomenon can be explained using the SET. The organization invests in

employees who then return something to the organization (Ismail, 2016).

According to (Luo, 2015), social exchange is defined as "voluntary actions of individuals that are motivated by the returns they are expected to bring and typically in fact bring from others." SET is based on the premise that all relationships are fundamentally social, predicted on trust and reciprocity (Lee & Wei, 2017).

The theory suggests that it is not possible to ensure an appropriate return/reciprocation from the other party, social exchange relies on trust – trust that the interaction will ignite the other party to discharge their obligation, such that each will reciprocate each other (Kim & Beehr, 2018).

Several studies show that employee-based social exchange relationships are predictive of employees' positive work attitudes and behavior like commitment, job satisfaction and organizational citizenship (Bufquin, 2017; Kalfa, 2018; Para-González, 2019; Hidalgo-Peñate, 2020). Job autonomy, Employee engagement and Organizational commitment can hence be linked through the framework of social exchange.

# 2.1 Job autonomy, Employee engagement and Organizational commitment

Job autonomy has been positively associated with employee engagement (Saks, 2006; Shantz, 2013; Yong, 2013; Malinowska, 2018). Based on a study conducted by (Yong,2013), the allowance of autonomy at work serves as an impetus to employees who may develop a sense of return by showing higher levels of engagement in their jobs. When the organization fails to foster these job characteristics or provide resources to perform tasks, employees are more likely to withdraw and disengage themselves from their roles (Shao, 2017).

The SET is brought to attention in order to explain the different levels of engagement found in workplaces. It can be deduced that the amount of cognitive, emotional, and physical resources that employees are prepared to allot in the performance of their work roles are contingent on the economic and socioemotional resources received from the organization (Kalfa, 2018).

Considering that job autonomy shares a positive relationship with engagement and it serves as an antecedent of commitment, there is a possibility that the effect of employees' perceived job autonomy on commitment is dependent on their engagement levels (Mohanty & Pradhan, 2019). This has brought the present study to examine the interactive nature of autonomy and engagement.

Communication of feedback between superiors and subordinates is regarded by MacLeod and (Clarke ,2009) to be an enabler of employee engagement. (Jackson, 2014) found that increased feedback from superiors in high-autonomy tasks significantly contributed to employees' performance while increased feedback in low-autonomy tasks had little effect on performance.

Opportunities to provide feedback to superiors also serve as an avenue for employees to enact and express their autonomy, allowing them to participate in active discussions with their superiors in designing their work method, schedule, and criteria (Huang, 2015). Hence, job autonomy has to come with opportunities for employees to receive and provide feedback about job-related matters in order for them to be engaged and committed to the organization.

The association of employee engagement with organizational commitment has been studied in past researches in that employee engagement has been found as a significant predictor of organizational commitment (Saks, 2006; Field & Buitendach, 2011; Ariani, 2013; Shao, 2017). As employee engagement has been linked to employees' involvement in their jobs (Yong,2013), past studies have shown that job involvement shared a significant relationship with organizational commitment (Ologbo & Sofian, 2012; Raymond & Mjoli, 2013).

Based on the above discussion, the following hypotheses are proposed:

- H1. Method, Scheduling and Criteria autonomy positively influence Employee Engagement.
- H2. Employee Engagement positively influence Organizational Commitment.

# 2.2 Job autonomy, Organizational Commitment and mediating role of employee engagement

In recent years, with the new economy and information age booming, human resource with knowledge, technology and skills has been adding value to the organization (Bustinza, 2019). Professional and technical staff is costlier to replace and their quitting will result in loss of substantial technical knowledge. organizational commitment is important for organizations because it is a predictor of turnover intentions (Adresi & Darun, 2017).

As of (Iverson and Rimol ,2015) discussion, Social exchange theory suggests employees engage in reciprocal exchanges that increase the potential for deriving desirable benefits and outcomes from this exchange or interaction.

Throughout the decade, more organizational studies have found job autonomy to be significantly and positively correlated to organizational commitment (Dude, 2012; Karim, 2010; Naqvi,2011; Park & Searcy, 2011; Rosario Núñez, 2020) than those studies, which discovered a weak relationship between the two variables (Gergersen & Black, 1996; Jong, Mueller, & Price, 1997).

The concept is therefore straightforward; when employees perceive themselves as having discretionary power in performing their organizational roles, they are more likely to remain in their current organizations because of enhanced ownership in work (Zhang, 2017) and the increased motivation to master new tasks (Malinowska, 2018). However, this research plan to examine this relationship in

the context of turbulent times and a different setting, Ethiopia.

From the theoretical perspective, employee engagement functions on the basis of the social exchange theory (SET) in which obligations are generated through a series of interactions between parties who are in a state of mutual dependence and comply with specific rules of exchange (Ocampo, 2018). He postulated that engaged employees are likely to share a more trusting and high-quality relationships with their employer, therefore they are more likely report positive attitudes and intentions toward the organization (Rosario Núñez, 2020). Based on the mechanism underlying the SET, it becomes clear that employees who are engaged by their employer in their jobs would more likely reciprocate by being committed to the organization.

Based on the above discussion, the following hypotheses are proposed:

H3: Job autonomy positively influence Organizational Commitment.

H4. Method, Scheduling and Criteria autonomy positively influence Organizational Commitment, through employee engagement.

# 2.3 Organizational Tenure as a moderator

Organizational tenure is an employee's length of employment in an organization (McCormick & Donohue, 2019). According to socialization research (Rahman, 2018), attitudes towards jobs vary at different career stages. The criteria that employees use to assess and develop their career and work roles and how they understand the organizational environment change over time. Employees have different needs expected to be satisfied by their organization (Aryee, 1994; English, Morrison, & Chalon, 2010; de la Torre-Ruiz, 2019).

During the early employment stage, new employees are more concerned with how they can fit in, adapt to and be socially accepted in the work environment; but towards the later stage of employment, employees are more concerned about preserving their gains (Bell-Ellis, 2015; Chang, 2015; Quratulain, 2018). Because tenure connects to different needs at different stages, it is reasonable to predict that employees will form different work expectations of their organizations (Shahjehan, 2019).

Due to uncertainty of the new environment, short-tenured employees are more motivated to acquire resources (Hidalgo-Peñate, 2020). Making sense of their new environment and gaining acceptance and support from organizations are important to help them in their adjustment (Para-González, 2019). Perceived approval from colleagues to social involvement can be a valuable source of social support.

Employees with longer tenure should align their interests more with the organizational values and goals through the process of socialization and are therefore more likely to have a value system consistent with their organization (Colquitt, 2019).

Jon autonomy able to translate the demands of the business environment into actions, such as creating changes, risk taking and support for continuous learning (Lee & Wei, 2017; Yang & Islam, 2020). Shorter tenured employees may find this type of autonomy motivating. They are more likely to see these as opportunities rather than threats because changes provide them opportunities to learn and gain exposure to new experiences. Those who are relatively new in the organization know less about the organization's values and norms, and are less committed to the organization's prior practices, they should favor autonomy (Yang & Islam, 2020).

In contrast, employees with longer tenure are more accustomed to the organizational practices and norms (Noe, Hollenbeck, Gerhart, & Wright, 2016). Change that implies a departure from the past may be less acceptable. Change also requires new learning and may potentially affect long-tenured employees' vested interests which they have accumulated over the years of employment. Therefore, it is considered as less favorable by employees with longer tenure (Lee & Wei, 2017).

On the other hand, long-tenured employees should be more committed to an organizational mission. Because organizational tenure is a measure of time spent in the organization, long-tenured employees who have longer exposure to organizational values, goals and objectives should be more likely to be internalized and embedded in the effect of Job autonomy and develop Organizational Commitment (Noe, Hollenbeck, Gerhart, Wright, 2016b). It is also likely can be the results of the prior efforts and commitment of long-tenured employees. Hence, as members gain tenure in an organization, they are likely to create broadly defined Organizational Commitment when compared to employees with shorter tenure (Chung & Jeon, 2020).

As employees become more tenured in an organization, it becomes more difficult for them to leave the organization due to their investments that may reap benefits in forms of compensation, positive feelings, and improved relationships with colleagues (Ghavifekr & Adewale, 2019). Also, they gain more experience and security in performing their roles with their established skills and capacities, resulting in higher levels of engagement in their jobs (Liu, 2020). Because past literatures have provided evidence that organizational tenure can directly affect commitment, the effects of tenure would be controlled in the present study in order to attain a clearer depiction of the predictive strengths of autonomy on commitment.

# 2.4 Turbulent times as a moderator

Turbulence can come about as a result of both external and internal factors. Some are cases of force majeure, such as natural disasters, acts of war or terrorism, while others are more commonplace, such as activity in the international commodity or financial markets, or changes in the geopolitical landscape, for example (Jordaan, 2019).

Internal factors leading to turbulence are mostly due to significant changes in company strategy, resulting from a deteriorating performance or internal seismic shifts as a result of leadership succession or cases of serious deception (Bolisani & Bratianu, 2018). Very often companies experience turbulence both internally and from the external environment.

As per (Eppler, 2020) today's organizations (in both the public and private sectors) operate in an increasingly volatile, uncertain, complex and ambiguous environment (the VUCA world). Yet in times of turbulence, the situation quickly deteriorates and becomes explosive, full of conflict, insecurity and unpredictability, and people involved can become polarized and unreasonable (Prouska, 2016). This leads to irrational demands that make no sense from a logical perspective, and leaders have to face strong and relentless opposition that could escalate conflict to the next level.

In such situations, the survival of the organization (or country) depends on its ability to rapidly respond to challenges and whether its leadership is a responsive and reliable point of stability for employees and other stakeholders (Jordaan, 2019).

In the VUCA world, stress and anxiety grow exponentially. To enable people to cope with this, a leader should give them autonomy and control about decisions relating to themselves (Bolisani & Bratianu, 2018). In a highrisk, high-stake and highly insecure environment, the focus shifts to what is really important. The role the leader plays should be one of stability, he/she should be aware of what is going on, how the situation is developing on the ground and be ready to intervene only in case of problems (Kriger & Zhovtobryukh, 2016).

A vast array of research has been done on the topic of ambidextrous organizational structures that combine the exploitation of existing capabilities and the exploration of new business opportunities (new customers, markets, products, potential disruptions) (Jelassi, 2017). By nature, this type of organization is much better at coping with different challenges, particularly in times of turbulence.

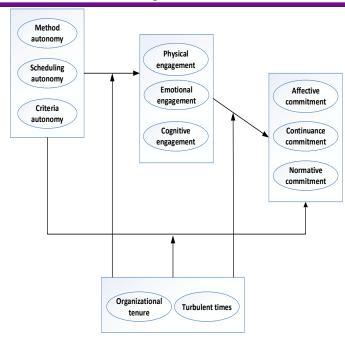


Fig. 1. The conceptual model.

In order to shift from fighting for survival to playing to win, the company needed to focus on a number of key priorities (Eppler, 2020). The first was to focus on the top, building diverse teams for truly novel perspectives, emphasizing the importance of inspiring and motivating people, and developing internal capabilities. It chose to empower its employees (Pathfinders/Path builders), rather than external consultants, to address key business challenges, to implement the strategy shift and become change agents throughout the organization (Jordaan, 2019).

Based on the above discussion, the following hypotheses are proposed:

H5. Turbulent times and organizational commitment moderate the relationships in H1 to H4.

The aforementioned discussion can be summarized in the conceptual model depicted in Fig. 1.

# 3. RESEARCH METHODOLOGY AND DATA ANALYSIS

## 3.1 SURVEY AND DATA COLLECTION

This study employs correlational design to examine the relationships between Job autonomy and organizational commitment. It also explores the mediation role of employee engagement on aforementioned relationship. In addition, this study aims to examine the influence of organizational tenure and turbulent times on these relationships.

To examine the conceptual model and test these relationships, a survey instrument was designed, and measurement scales were developed. The draft questionnaire was constructed and content validity of the scale was

checked and improved with the help of four academics and two experts from the industry. A revised version questionnaire was finalized and then used to test the proposed hypotheses. The measurement scales in the used questionnaire consisted of items representing respondents' attitudes and opinions about Job autonomy regarding turbulent times, the related factors as well as organizational commitment, employee engagement and their organizational tenure. All items measuring these variables and the scales are discussed below.

To conduct the study, the target population was identified. It consisted of managers and customer service managers, at branch level, working in Ethiopian commercial banks. These managers were knowledgeable about the adopted HR practices, managerial factors as well as the performance of the organization. The sample is determined by using Yamane's (1967) formula which is adopted by (AlAmeri, 2017) and make a comparison with Glenn (1992) published tables which are recommended by Singh, Ajay S; et. Al (2014). 362 questionnaires were distributed with a cover letter that ensured the anonymity of answers and that included a brief explanation of the research. Stressing assurance of anonymity in the cover letter of the questionnaire aimed at minimizing the social desirability bias arising in survey research (Roxas and Lindsay, 2012). Out of the returned questionnaires, 317 were found usable, yielding a response rate of 87.6%.

Non-response bias was checked by contacting 13 non-respondents and asked about the reasons for not participating in the study. Lack of knowledge of the various constructs and items in the questionnaire was identified as the main reason.

# 3.2 Control variables

A number of demographic factors that have often been examined in organizational commitment research (e.g., Randall 1993; Gregersen and Black 1992; Luthans, Black, and Taylor 1987) were included as control variables in this study. The demographic variables of gender, age, education and positional tenure have been found to be related to organizational commitment. For example, a review by Madison (2012) noted that significant relationships have been identified between commitment and both age and education (see Brimeyer, Perrucci, & Wadsworth, 2010; Glisson & Durick, 1998) while positive associations have been established between tenure and commitment (Meyer, 2002). In addition, the meta-analysis conducted by Mathieu and Zajac (1990) found that women were significantly more committed to their organization, compared to their male counterparts. The aim of this expanded list is to be able to reduce the bias in our results, which may potentially emanate from these confounding variables.

Table 1

Job autonomy					
Constructs		Items	Loadin	AVE	CR
			gs		
Method autonomy (MA)	MA1	I am allowed to decide how to go about	0.946	0.892	0.961
		getting my job done (the methods to use).			
	MA2	I am able to choose the way to go about my	0.938		
		job (the procedures to utilize).			
	MA3	I am free to choose the method(s) to use in	0.949		
		carrying out my work.			
Scheduling autonomy (SA)	SA1	I have control over the	0.972	0.92	0.972
		scheduling of my work.			
	SA2	I have some control over the sequencing of	0.948		
		my work activities (when I do what).			
	SA3	My job is such that I can decide when to do	0.958		
		particular work activities.			
Criteria autonomy (CA)	CA1	My job allows me to modify the normal	0.956	0.912	0.969
• • •		way we are evaluated so that I can			
		emphasize some aspects of my job and play			
		down others.			
	CA2	I am able to modify what my job objectives	0.972		
		are (what I am supposed to accomplish).			
	CA3	I have some control over what I am	0.936		
		supposed to accomplish (what my			
		supervisor sees as my job objectives).			

### 3.3 Measures

All of the constructs were measured with multiple-scale items. In all, forty-four question items, excluding items that asked about demographics, were used and covered all variables discussed in the model.

Job autonomy is measured using the Breaugh's Work Autonomy Scale (Breaugh James A, 1999) which was adapted by (Lin & Ping, 2016) with 9 items on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The scale measured job autonomy in three facets; work method (e.g. I am allowed to decide how to go about getting my job done, the methods to use), work schedule (e.g. I have control over the scheduling of my work), and work criteria (e.g. I am able to modify what my job objectives are, what I am supposed to accomplish). The scale was selected due to its strong reliability and validity (Lin & Ping, 2016) as well as its ability to measure comprehensive aspects of job autonomy.

Organizational Commitment was measured with 11 items on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) drawn from (Mahmood, 2019). It has three facets; Affective Commitment (e.g. I do not feel like part of the family at the organization), Continuance Commitment (e.g. Leaving this organization would require considerable personal sacrifice that makes me to continue to work) and Normative Commitment (e.g. I feel that I would receive a lot of benefits from this company).

Employee engagement was measured using the Job Engagement Scale (Lin & Ping, 2016) with 18 items on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The scale was selected due to its strong reliability and its ability to measure all the three components of engagement, namely the physical (e.g. I work with intensity on my job), emotional (e.g. I am enthusiastic in my job), and cognitive aspects (e.g. At work, my mind is focused on my job), through easily understandable items.

To test the moderating roles of organizational tenure on the influences of Job Autonomy on Organizational Commitment, this study used a multi-group approach based on a test suggested by (Jöreskog and Sörbom,1993). Following the process of (Jang, Kim, and Lee,2015) work to verify the moderating effect, the samples were divide into two groups (i.e., high and low) based on the respondents' mean scores on years of work experience (mean=5.34).

Turbulent times defined as the time of uncertainty and unpredictability in an industrial environment, which included market and technological turbulence (Jaworski and Kohli, 1993). Market turbulence is the rate of change in the composition of clients and their preferences (Jaworski and Kohli, 1993), while technological turbulence reflects the extent to which the technology in an industry is in a state of flux (Wang, 2020). The questions for Turbulent times were adapted from (Jaworski and Kohli, 1993) and

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Vol. 5 Issue 3, March - 2021, Pages: 27-46

Table 2	
Employee	engagement

Constructs		Items	AVE	CR	
Physical engagement (PE)	PE1	I work with intensity on my job.	0.936	0.919	0.986
	PE2	I exert my full effort to my job.	0.968		
	PE3	I devote a lot of energy to my job.	0.967		
	PE4	I try my hardest to perform well on my job.	0.954		
	PE5	I strive as hard as I can to complete my job.	0.973		
	PE6	I exert a lot of energy on my job.	0.954		
Emotional engagement (EME)	EME1	I am enthusiastic in my job.	0.911	0.877	0.977
	EME2	I feel energetic at my job.	0.933		
	EME3	I am interested in my job.	0.957		
	EME4	I am proud of my job.	0.955		
EME4 I am pro		I feel positive about my job.	0.921		
	EME6	I am excited about my job.	0.943		
Cognitive engagement (CE)	CE1	At work, my mind is focused on my job.	0.925	0.89	0.98
	CE2	At work, I pay a lot of attention to my job.	0.96		
	CE3	At work, I focus a great deal of attention on my job.	0.974		
	CE4	At work, I am absorbed by my job.	0.899		
	CE5	At work, I concentrate on my job.	0.939		
	CE6	At work, I devote a lot of attention to my job.	0.962		

(Wang,2020), which are consistent with market and technological turbulence.

Note that the items of the subscales listed in Tables 1-4 along with the results of the construct loadings and reliability indicate that the scale and its subscale items have high loadings (> 0.5), and high reliability (CR > 0.7).

# 3.4 Data analysis

The relationships in Fig. 1 were analyzed using partial least squares structural equation modeling (PLS-SEM) using the Smart PLS 3 software. PLS-SEM method was used instead of the traditional covariance based technique and that is due to the fact that CB-SEM requires a large sample size (Kline, 2012). The partial least squares (PLS) approach to SEM (PLS-SEM) is a suitable, favorable method or instrument used for estimating a complex, hierarchical model representing the credibility and the methodology of soft modeling assumptions (Fosso Wamba, 2015; Papadopoulos et al., 2017). This explains the tendency of using PLS-SEM for complex models in the area of business analytics quality (Fosso Wamba, 2015; Papadopoulos, 2017).

The first step in applying the PLS-SEM method is the outer model validation and the second step is the inner model path calculation. Validating the outer model consists of determining the convergent and discriminant validity as well

as the reliability of the constructs (Wetzels, 2009). Once the model is validated, the inner model is fitted by calculating the path coefficients. The significance of the results is demonstrated through bootstrapping.

To examine the moderating effects, cluster analysis was employed to partition the respondents involved in the study according to their organizational tenure and turbulent times. This technique clusters the respondents into groups based on certain criteria (DeSarbo, 1992; Kamakura and Wedel, 2000). Since these latent variables are measured by several indicators, the cluster analysis technique is one of the best grouping method. Once the clusters of respondents were identified, a multi-group analysis was employed to determine the changes in the significance of the path coefficients among the various groups.

# 3.5 Outer model analysis

The unstandardized dataset using reflective scheme for all of the latent variables was employed to examine the model through PLS-SEM using SmartPLS3 software on. This was assessed through factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). Table 1-4 shows that all item loadings exceeded the recommended value of 0.6 (Chin, Peterson, & Brown, 2008). Composite reliability values, which depict the degree to which the construct indicators indicate the latent construct,

Table 3	
Organizational	commitment

Constructs		Items	Loadings	AVE	CR
Affective commitment (AC)	AC1	I do not feel like part of the family	0.829	0.812	0.928
		at the organization.			
	AC2	I feel happy to spend my career	0.911		
		with this organization.			
	AC3	This organization has a strong deal	0.959		
		of personal meaning for me.			
Continuance commitment (CC)	CC1	Leaving this organization would	0.897	0.82	0.948
		require considerable personal			
		sacrifice that makes me to continue			
		to work.			
	CC2	Staying with this organization is a	0.94		
		matter of necessity as much as			
		desire.			
	CC3	My life would be disrupted if I	0.93		
	GG4	leave this organization.	0.050		
	CC4	If I leave this job, I can easily find	0.852		
N	NGI	a job as good as this one.	0.020	0.050	0.06
Normative commitment (NC)	NC1	I feel that I would receive a lot of	0.938	0.858	0.96
	1100	benefits from this company.	0.004		
	NC2	I have always obtained everything	0.894		
	NICO	valuable from this organization.	0.024		
	NC3	I would be always loyal to the	0.934		
	NICIA	company I belong to.	0.020		
	NC4	People in the company	0.938		
		expect me to be loyal.			

exceeded the recommended value of 0.7 while average variance extracted, which reflects the overall amount of variance in the indicators accounted for by the latent construct, exceeded the recommended value of 0.5 (Hair et al., 2013).

Discriminant validity was demonstrated by showing that the average shared variance of any construct and its indicators is greater than any of the shared variance with other constructs (Fornell and Larcker, 1981). Table 5 lists below demonstrated this fact since the values on the diagonal are greater than any value in their corresponding rows and columns.

# Table 4 Turbulent times

# 3.6 Inner model analysis

The next step of the analysis examined the inner model. First, the tested model R2 results demonstrated that an acceptable part of the variance of the constructs can be explained by the model (R2 =0.914, 0.881, 0.783, 0.841, 0.916 and 0.751 for AC, CC, CE, EE, NC and PE constructs, respectively). These results were in agreement with the criteria suggested by Chin (1998); as such, the validity of the model is considered satisfactory (Chin, 1998).

Constructs		Items	Loadings	AVE	CR
Turbulent times (TT)	TT1	potential customers' have a tendency to look for and demand a firm's technology or products.	0.941	0.839	0.969
	TT2	customers' preferences changing quite a bit over time.	0.916		
	TT3	There is confirmation from the firm concerning customers' needs.	0.884		
	TT4	The technology used in product development was changing rapidly.	0.929		
	TT5	The technology in this industry was changing rapidly.	0.92		
	TT6	The technology in this industry was changing rapidly	0.904		

Table 5

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Vol. 5 Issue 3, March - 2021, Pages: 27-46

Discrimin	ant validity o	f the constru	ıcts.			H1i. C	Criteria	Autonomy	positively	influence	Cognitive
	AC	CA	CC	CE	EE	M	ΙA	NC	PE	SA	AVE
AC	0.901										0.812
CA	0.872	0.955									0.912
CC	0.893	0.902	0.905								0.82
CE	0.900	0.872	0.875	0.944							0.89
EE	0.887	0.89	0.887	0.912	0.937						0.877
MA	0.885	0.911	0.893	0.854	0.9	0.9	944				0.892
NC	0.900	0.917	0.885	0.893	0.883	0.	.883	0.926			0.858
PE	0.89	0.861	0.873	0.925	0.876	0.	.821	0.916	0.959		0.919
SA	0.900	0.900	0.904	0.831	0.871	0.	.933	0.906	0.829	0.959	0.92

In the second step of the PLS-SEM method, the path coefficients were estimated. Assessing the structural model, the path coefficients among the drivers of Job autonomy, Organizational commitment and Employee engagement were computed. The results of both the inner model path coefficients and the outer loadings are depicted in Fig. 2 below. The bootstrapping method with 2000 iterations of resampling was used to examine these path coefficients (Davison and Hinkley, 1997). The results of the bootstrapping method are summarized in Table 6 below.

The path coefficients and the direct effect results of Table 6 below are used to examine H1, H2, and H3. First, H1 is examined by considering each of its sub-hypotheses:

H1a. Method Autonomy positively influence Physical engagement.

H1b. Scheduling Autonomy positively influence Physical engagement.

H1c. Criteria Autonomy positively influence Physical engagement.

H1d. Method Autonomy positively influence Emotional engagement.

H1e. Scheduling Autonomy positively influence Emotional engagement.

H1f. Criteria Autonomy positively influence Emotional engagement.

H1g. Method Autonomy positively influence Cognitive engagement.

H1h. Scheduling Autonomy positively influence Cognitive engagement.

engagement.

The results indicate that Method Autonomy had positive significant direct effects on Emotional engagement and Cognitive engagement (path coeffs. = 0.601 and 0.457), but not on Physical engagement, thereby supporting H1d and H1g and leaving H1a unsupported. While, Scheduling Autonomy was found not having a significant positive influence on all employee engagement drivers. These results unsupported H1b, H1e and H1h. The results showed that the last Job autonomy driver, Criteria Autonomy, had a positive significant influence on Physical engagement (path coeff. = 0.617), Emotional engagement (path coeff. = 0.45) and Cognitive engagement (path coeff. = 0.599). These results supported H1c, H1f and H1i.

Next, H2 is examined through each of its nine sub-hypotheses:

H2a. Physical engagement positively influences Affective commitment.

H2b. Emotional engagement positively influences Affective commitment.

H2c. Cognitive engagement positively influences Affective commitment.

H2d. Physical engagement positively influences Continuance commitment.

H2e. Emotional engagement positively influences Continuance commitment.

H2f. Cognitive engagement positively influences Continuance commitment.

H2g. Physical engagement positively influences Normative commitment.

H2h. Emotional engagement positively influences Normative commitment.

H2i. Cognitive engagement positively influences Normative commitment.

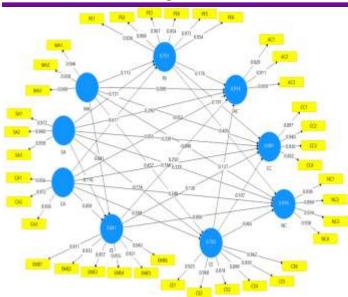


Fig. 2. Results of proposed model

The results showed that the first Employee engagement driver, Physical engagement, had a positive significant influence on Affective commitment (path coeff. = 0.176), Continuance commitment (path coeff. = 0.191) and Normative commitment (path coeff. = 0.405). These results supported H2a, H2d and H2g.The results indicate that Emotional engagement had a positive significant direct effect on the Affective commitment (path coeff. = 0.25), but no significant effect on neither Continuance commitment nor Normative commitment. These results support H2b, but leave H2e and H2h unsupported. As for Cognitive engagement, no direct significant impact on Organizational commitment was found. These results leave H2c, H2f and H2i unsupported.

The last step of the direct effect analysis was to consider H3 stating that Job autonomy positively influence organizational commitment. Hence, the following subhypotheses of H3 are considered:

H3a. Method Autonomy positively influence Affective commitment.

H3b. Scheduling Autonomy positively influence Affective commitment.

H3c. Criteria Autonomy positively influence Affective commitment.

H3d. Method Autonomy positively influence Continuance commitment.

H3e. Scheduling Autonomy positively influence Continuance commitment.

H3f. Criteria Autonomy positively influence Continuance commitment.

H3g. Method Autonomy positively influence Normative commitment.

H3h. Scheduling Autonomy positively influence Normative commitment.

H3i. Criteria Autonomy positively influence Normative commitment.

As for Method Autonomy, no direct significant impact on Organizational commitment was found. These results leave H3a, H3d and H3g unsupported. The results showed that Scheduling Autonomy had a positive significant influence on Affective commitment (path coeff. = 0.29), Continuance commitment (path coeff. = 0.339) and Normative commitment (path coeff. = 0.328). These results supported H3b, H3e and H3h.The results indicate that Criteria Autonomy had a positive significant direct effect on the Normative commitment (path coeff. = 0.248), but no significant effect on neither Affective commitment nor Continuance commitment. These results support H3i, but leave H3c and H3f unsupported.

The next step in the outer model analysis is to consider the indirect effects identified in H4. This hypothesis is examined through the following sub-hypothesis:

H4a. Method Autonomy positively influences Affective, Continuance and Normative commitment through Employee engagement.

H4b. Scheduling Autonomy positively influences Affective, Continuance and Normative commitment through Employee engagement.

H4c. Criteria Autonomy positively influences Affective, Continuance and Normative commitment through Employee engagement.

The path analysis results support the indirect effects of Method Autonomy on Affective, Continuance and Normative commitment through Employee engagement (path coeffs. = 0.374, 0.364 and 0.372). Method Autonomy Table 6

Path coefficients estimates

Vol. 5 Issue 3, March - 2021, Pages: 27-46

Direct effect	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
CA -> AC	0.055	0.069	0.0	74 0.744	0.457
CA -> CC	0.168	0.182	0.1	1.621	0.106
CA -> CE	0.599	0.591	0.0	6.186	$0  \Box  \Box$
$CA \rightarrow EE$	0.45	0.444	0.0	32 5.457	$0\square\square$
CA -> NC	0.248	0.247	0.0	58 3.633	$0\square\square$
CA -> PE	0.617	0.619	0.0	6.989	$0\square\square$
CE -> AC	0.137	0.134	0.0	31 1.682	0.093
CE -> CC	0.107	0.107	0.0	1.143	0.254
CE -> NC	0.065	0.064	0.0	0.703	0.482
$EE \rightarrow AC$	0.25	0.248	0.0	2.592	$0\square\square$
EE -> CC	0.13	0.125	0.1	)2 1.275	0.203
EE -> NC	0.006	-0.013	0.1	0.055	0.956
$MA \rightarrow AC$	0.099	0.107	0.1	0.978	0.329
MA -> CC	0.052	0.061	0.1	0.48	0.631
MA -> CE	0.457	0.481	0.1	21 3.784	$0  \Box  \Box$
$MA \rightarrow EE$	0.601	0.609	0.1	5.144	$0\square\square$
$MA \rightarrow NC$	-0.048	-0.057	0.1	0.43	0.667
$MA \rightarrow PE$	0.115	0.132	0.	0.82	0.413
$PE \rightarrow AC$	0.176	0.175	0.0	57 2.621	$0.009\square\square$
PE -> CC	0.191	0.191	0.0	35 2.244	0.025□
PE -> NC	0.405	0.424	0.0	38 4.608	$0\square\square$
SA -> AC	0.29	0.274	0.0	3.246	$0.001\square\square$
SA -> CC	0.339	0.321	0.1	3.037	$0.003\square\square$
SA -> CE	-0.156	-0.171	0.1	07 1.457	0.146
SA -> EE	-0.116	-0.117	0.1	1.001	0.317
SA -> NC	0.328	0.338	0.1	3.085	$0.002\square\square$
SA -> PE	0.151	0.133	0.1	25 1.214	0.225

<sup>☐</sup> Significant at a 0.05 level.

showed the highest indirect effect on Affective commitment. Similarly, significant indirect effects of Criteria Autonomy on Affective, Continuance and Normative commitment through Employee engagement were found (path coeffs. = 0.535, 0.52 and 0.532). The highest indirect effect of Criteria Autonomy was once again found to be on Affective commitment. These results support H4a and H4c and are further discussed in the Discussion Section. Finally, the path analysis results indicate that Scheduling Autonomy had no such effects through Employee engagement were detected (Table 7).

The last step in the path coefficients analysis was to examine H5. First, respondents in the sample were grouped according to their organizational tenure and level of turbulent times. Then, multi group analysis was employed to test for differences in the significance of the path coefficients among groups. The K-means clustering method is used to group the companies. First, the number of clusters is specified, and cluster seeds were randomly chosen using SPSS 26. Subsequently, each observation was assigned to one cluster based on similarity. By varying the numbers of clusters tested, the results of the K-means procedure for turbulent times indicated a two cluster solution which is valid and statistically significant (p < 0.001; see Table 8 below).

Table 7 Indirect effects.

# 3.7 Cluster analysis

 $<sup>\</sup>square$  Significant at a 0.01 level.

Vol. 5 Issue 3, March - 2021, Pages: 27-46

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
SA -> EE -> CC	-0.034	-0.039	0.079	0.431	0.666
$CA \rightarrow EE \rightarrow NC$	0.532	0.532	0.065	8.213	$0\square\square$
$SA \rightarrow EE \rightarrow AC$	-0.035	-0.04	0.081	0.431	0.666
$MA \rightarrow EE \rightarrow CC$	0.364	0.369	0.081	4.477	$0\square\square$
$CA \rightarrow EE \rightarrow CC$	0.52	0.52	0.062	8.376	$0\square\square$
$SA \rightarrow EE \rightarrow NC$	-0.035	-0.039	0.081	0.432	0.666
$MA \rightarrow EE \rightarrow NC$	0.372	0.377	0.082	4.547	$0\square\square$
$CA \rightarrow EE \rightarrow AC$	0.535	0.535	0.063	8.448	$0\square\square$
$MA \rightarrow EE \rightarrow AC$	0.374	0.379	0.084	4.467	$0\square\square$

 $\square$  Significant at a 0.01 level.

The ANOVA tests revealed that all items contributed to differentiating the two clusters (p < 0.001). The first cluster (55 observations) appeared to have lower mean scores on turbulent times items. It is labeled "Low turbulent times." The second cluster (262 observations) was found to have the highest mean scores on turbulent times; this cluster was labeled "High turbulent times." Organizational tenure resulted in two groups, "High organizational tenure" with 240 observations and "Low organizational tenure" with 77 observations.

# 3.8 Multi-group analysis

The final step was to compare the results from the model among the groups identified in the cluster analysis. Multi-group t-test analysis was employed in Smart PLS 3.1. The significance of the path coefficients and the confidence intervals were generated using bootstrap sampling techniques. Based on the above clustering, a multi-group analysis was conducted to determine whether the significance of the relationships in the above model (Fig. 2) differ among respondents with low and high turbulent times. The multi-group analysis is summarized in Tables 9 and 10 below.

The direct effect results of Table 9 showed that the two groups exhibit differences in the significance of all Job autonomy items (Method, criteria and scheduling) on Normative commitment, physical engagement on all organizational commitment constructs (Affective normative and continuance), emotional engagement on affective commitment, and scheduling autonomy on continuance commitment and cognitive engagement. In all cases, the influence was significant for high turbulent times and non-significant for low turbulent times. These results provide evidence to support H5. Also, the path coefficients analysis revealed that, there was a significant effect for both high and

low turbulent times on some variables. Criteria autonomy on all employee engagement constructs (physical, emotional and cognitive) and Method autonomy on emotional engagement.

The indirect effect results of Table 10 revealed that the two group exhibit differences in the significance of the effect of criteria autonomy on Normative commitment as well as Continuance commitment and Affective commitment through physical engagement, and criteria autonomy on Affective commitment through emotional engagement. In all cases, the influence was significant for high turbulent times and non-significant for low turbulent times. These results provide further evidence to support H5.

Next, the above clustering of respondents based on organizational tenure was used to conduct the multi-group analysis. The results are listed in Tables 11 and 12 below. The direct effect results of Table 11 indicated that differences among the two groups were found in the significance of the direct effect of Criteria autonomy on continuance commitment, Method autonomy and scheduling autonomy on Normative commitment, physical engagement on all organizational commitment constructs (Affective normative and continuance), scheduling autonomy on cognitive engagement and emotional engagement, emotional engagement on affective commitment ,method autonomy on emotional engagement and cognitive engagement. This suggests that higher organizational tenure is required to see Job autonomy effects on organizational commitment.

On the other hand, the path coefficients analysis revealed that, there was a significant effect for both high and low organizational tenure on some variables. Criteria autonomy on all employee engagement constructs (physical, emotional and cognitive) and Method autonomy on emotional engagement. Also, the path coefficients analysis revealed that, there was a significant effect for low organizational tenure; scheduling autonomy on affective and Table 8

Cluster analysis.

Vol. 5 Issue 3, March - 2021, Pages: 27-46

	Final cl	uster ce	enters	ANOVA					
		1	2	Mean Square	df	Mean Square	df	F	Sig.
	n=55	n	=262	Turbulent times					
TT1		3	5	176.406	1	0.443	315	398.069	0
TT2		3	4	159.2	1	0.498	315	319.823	0
TT3		2	4	142.302	1	0.551	315	258.063	0
TT4		2	5	190.073	1	0.4	315	475.457	0
TT5		3	4	149.904	1	0.527	315	284.291	0
TT6		2	4	140.392	1	0.557	315	251.829	0
	n=240	n	=77	Organizational tenure					
OT				217.817	1	0.312	315	698.824	0.000

Table 9 Multi-group analysis for Turbulent times (direct effects).

of criteria autonomy on Normative commitment as well as Continuance commitment and Affective commitment

	High turbulent		Low turbulent	times				
TT Direct	Path Coefficients	STDEV	t-Value	p-Value	Path Coefficients	STDEV	t-Value	p-Value
CA -> AC	0.034	0.094	0.365	0.715	0.042	0.27	0.156	0.876
$CA \rightarrow CC$	0.15	0.12	1.246	0.213	-0.364	0.301	1.207	0.228
$CA \rightarrow CE$	0.83	0.1	8.289	0	0.663	0.161	4.115	0
$CA \rightarrow EE$	0.569	0.09	6.323	0	0.315	0.145	2.164	0.031
$CA \rightarrow NC$	0.505	0.087	5.782	0	0.637	0.232	2.749	0.06
$CA \rightarrow PE$	0.805	0.105	7.687	0	0.751	0.138	5.435	0
$EE \rightarrow AC$	0.318	0.097	3.272	0.001	0.234	0.269	0.868	0.386
$MA \rightarrow AC$	0.07	0.104	0.676	0.499	0.286	0.365	0.783	0.434
$MA \rightarrow CC$	0.132	0.097	1.358	0.175	0.606	0.419	1.446	0.148
$MA \rightarrow CE$	0.278	0.148	1.88	0.06	-0.047	0.248	0.191	0.849
$MA \rightarrow EE$	0.459	0.125	3.683	0	0.674	0.297	2.268	0.023
$MA \rightarrow NC$	-0.271	0.104	2.617	0.009	0.093	0.254	0.366	0.714
$MA \rightarrow PE$	-0.081	0.158	0.51	0.61	-0.425	0.382	1.113	0.266
$PE \rightarrow AC$	0.239	0.07	3.397	0.001	0.305	0.298	1.024	0.306
PE -> CC	0.376	0.08	4.716	0	0.477	0.325	1.465	0.143
$PE \rightarrow NC$	0.293	0.085	3.43	0.001	-0.113	0.255	0.442	0.659
$SA \rightarrow AC$	0.345	0.092	3.769	0	0.168	0.252	0.667	0.505
SA -> CC	0.329	0.119	2.77	0.006	0.258	0.362	0.712	0.477
SA -> CE	-0.309	0.121	2.553	0.011	0.331	0.221	1.499	0.134
$SA \rightarrow EE$	-0.155	0.127	1.218	0.223	-0.061	0.253	0.242	0.809
SA -> NC	0.443	0.084	5.267	0	0.373	0.207	1.797	0.073
SA -> PE	0.059	0.162	0.366	0.714	0.497	0.273	1.821	0.069

continuance commitment. This indicates that employees with a few years of service demand a freedom on deciding their own working schedule than those who are working for a number of years.

The indirect effect results of Table 12 revealed that the two group exhibit differences in the significance of the effect

through physical engagement, criteria autonomy and method autonomy on Affective commitment through emotional engagement. In all cases, the influence was significant for high organizational tenure and non-significant for low organizational tenure except the effect of criteria autonomy on Normative commitment through physical engagement. Hence, employees with high organizational tenure demands some control over what they supposed to accomplish.

Table 10 Multi-group analysis for Turbulent times (indirect effects).

<del>-</del>	High turbulent	times	•		Low turbulent	times	•	
TT Indirect	Path Coefficients	STDEV	t-Value	p-Value	Path Coefficients	STDEV	t-Value	p-Value
MA -> PE -> CC	-0.03	0.062	0.49	0.625	-0.203	0.322	0.629	0.529
$SA \rightarrow EE \rightarrow AC$	-0.049	0.042	1.182	0.237	-0.014	0.089	0.16	0.873
$SA \rightarrow PE \rightarrow AC$	0.014	0.043	0.334	0.738	0.152	0.205	0.741	0.459
$SA \rightarrow PE \rightarrow CC$	0.022	0.063	0.354	0.723	0.237	0.254	0.933	0.351
$CA \rightarrow PE \rightarrow NC$	0.236	0.075	3.163	0.002	-0.085	0.197	0.429	0.668
$MA \rightarrow PE \rightarrow NC$	-0.024	0.049	0.478	0.633	0.048	0.129	0.373	0.709
$CA \rightarrow PE \rightarrow CC$	0.303	0.073	4.123	0	0.358	0.297	1.206	0.228
$SA \rightarrow PE \rightarrow NC$	0.017	0.051	0.34	0.734	-0.056	0.123	0.457	0.648
$CA \rightarrow EE \rightarrow AC$	0.181	0.061	2.98	0.003	0.074	0.097	0.756	0.449
$MA \rightarrow EE \rightarrow AC$	0.146	0.055	2.678	0.007	0.158	0.213	0.74	0.459
$CA \rightarrow PE \rightarrow AC$	0.192	0.065	2.973	0.003	0.229	0.26	0.881	0.378
$MA \rightarrow PE \rightarrow AC$	-0.019	0.043	0.453	0.651	-0.13	0.248	0.522	0.602

### 4. DISCUSSION

# 4.1 Theoretical contributions

Based on the extant literature, Human resource management has supported the inspiration that persuading workers engagement, commitment and involvement can engender significant and fruitful effect for the organization. However, it is important to understand employee engagement, employee involvement and employee commitment and examine how does it manipulate on employee attitude (Albrecht, 2010; Battistelli, 2013). Hence, when employees believe that their organization is concerned about them and cares about their well-being, they are likely to respond by attempting to fulfill their obligations to the organization by becoming more engaged. This leads to a favorable outcome; organizational commitment. Understanding the drivers of organizational commitment is essential as indicated by several recent studies. The benefits of adopting Job autonomy have been examined in the literature. (Somers,2009) study proposed that commitment processes are very complex as it involves the human psyche and emotions. The relative levels of commitment for each employee affect how the psychological state of commitment is experienced. For example, when AC and NC are high, the potentially negative effects of CC are eased out because employees do not feel stuck in their organizations, but feel invested in them. In case of employee retention, potential negative effects of CC seem to be mitigated when AC and NC are also high (J. Lee & Wei, 2017).

This study determines the importance of the drivers of Job autonomy and employee engagement and their influence on

affective, continuance and normative commitment. Several drivers have been identified in the literature which include method, scheduling and criteria autonomy and physical, emotional and cognitive engagement (Meyer and Allen, 1984; 1997; Ghosh & Swamy, 2014; Silva, 2015). In addition, the role of organizational tenure, and turbulent times were examined as they play an important role in changing employees attitude, achieve organizational commitment, and enhance performance. A holistic model that depicts and examines the relationships among Job autonomy, its drivers, as well as factors that create employee engagement and influence organizational commitment was developed and tested empirically. Using data collected from a sample of 317 Ethiopian commercial banks, the proposed relationships were tested

The two research questions considered in this paper were addressed through the analysis of the collected data. The first question examined was that of determining the extent to which Method, scheduling and criteria autonomy influence employee engagement, and organizational commitment. The results confirmed that Method Autonomy and Criteria Autonomy influence employee engagement, but not Scheduling Autonomy. In line with the results of (Mahmood, 2019) and (Mylona & Mihail, 2019), Method Autonomy and Criteria Autonomy were found to directly affect Emotional engagement and Cognitive engagement. While Criteria Autonomy Influence Physical engagement as well. Scheduling Autonomy was found not to have a positive direct influence on all employee engagement drivers.

The results showed that the first Employee engagement driver, Physical engagement, had a positive significant influence on Affective commitment, Continuance commitment and Normative commitment. The results indicate that Emotional engagement had a positive significant

direct effect on the Affective commitment, but no significant effect on neither Continuance commitment nor Normative

engagement explains the discrepancies between our results and those of Andrew (2012).

Table 11

Multi-group analysis for organizational tenure (direct effects).

	High organiz		Low organizational tenure					
Direct OT	Path Coefficients	STDEV	t-Value	p-Value	Path Coefficients	STDEV	t-Value	p-Value
CA -> AC	0.272	0.211	1.286	0.199	-0.03	0.1	0.297	0.767
CA -> CC	0.508	0.201	2.524	0.012	-0.026	0.133	0.194	0.846
CA -> CE	0.93	0.152	6.105	0	0.5	0.134	3.723	0
$CA \rightarrow EE$	0.74	0.138	5.376	0	0.562	0.108	5.218	0
$CA \rightarrow NC$	0.26	0.153	1.702	0.089	0.249	0.075	3.306	0.001
$CA \rightarrow PE$	1.032	0.17	6.089	0	0.609	0.156	3.894	0
$EE \rightarrow AC$	0.204	0.094	2.16	0.031	0.226	0.144	1.578	0.115
$MA \rightarrow AC$	0.095	0.117	0.809	0.419	0.274	0.172	1.588	0.112
$MA \rightarrow CC$	-0.035	0.109	0.324	0.746	0.519	0.167	3.104	0.002
$MA \rightarrow CE$	0.239	0.111	2.143	0.032	0.496	0.256	1.937	0.053
$MA \rightarrow EE$	0.562	0.115	4.893	0	0.276	0.288	0.957	0.339
$MA \rightarrow NC$	-0.217	0.108	2.011	0.044	0.299	0.26	1.151	0.25
$MA \rightarrow PE$	-0.149	0.132	1.129	0.259	0.229	0.382	0.601	0.548
$PE \rightarrow AC$	0.437	0.112	3.903	0	0.118	0.069	1.708	0.088
PE -> CC	0.548	0.116	4.729	0	0.101	0.069	1.449	0.147
$PE \rightarrow NC$	0.381	0.146	2.61	0.009	0.508	0.071	7.128	0
$SA \rightarrow AC$	0.015	0.129	0.119	0.905	0.412	0.14	2.94	0.003
SA -> CC	-0.123	0.15	0.819	0.413	0.389	0.17	2.287	0.022
SA -> CE	-0.376	0.15	2.505	0.012	-0.089	0.21	0.424	0.672
SA -> EE	-0.538	0.139	3.882	0	0.12	0.23	0.521	0.602
SA -> NC	0.505	0.112	4.524	0	-0.043	0.206	0.209	0.834
SA -> PE	-0.2	0.2	0.999	0.318	0.04	0.29	0.137	0.891

commitment. As for Cognitive engagement, no direct significant impact on Organizational commitment was found. These findings are marginally consistent with those of (Cohen, 2007; Bell-Ellis, 2015; Silva, 2015; Ismail, 2016; J. Lee & Wei, 2017). Finally, the results of the direct effects indicated that Scheduling and Criteria Autonomy has a significant effect on Normative commitment, but not in other drivers, thereby supporting the results of (Shahjehan, 2019). However, Scheduling Autonomy was found to have a direct influence on Affective and Continuance commitment as well.

Andrew (2012) found that job autonomy impact organizational commitment through employee engagement. Our results confirmed the indirect effects of the drivers of job autonomy on organizational commitment. But, this works out only for method and criteria autonomy. Scheduling Autonomy had no such effects through Employee engagement were detected. The influence of Scheduling Autonomy on organizational commitment through employee

The second question examined was that of determining the extent to which Organizational tenure and turbulent times influence the relationships between job autonomy, employee engagement and organizational commitment. To investigate the role of Organizational tenure and turbulent times play to assure organizational commitment resulting from the adoption of job autonomy, multi-group analysis was employed. The results indicate that differences in the significance of several of the direct and indirect relationships examined in this study were exhibited among the groups of respondents with low and high Organizational tenure and turbulent times. Most differences revealed that the relationships are stronger for respondents with higher tenure and high turbulent times. For instance, the direct effect of all Job autonomy items (Method, criteria and scheduling) on Normative commitment, physical engagement on all organizational commitment constructs (Affective normative and continuance), emotional engagement on affective

commitment, and scheduling autonomy on continuance commitment and cognitive engagement. In all cases, the influence was significant for high turbulent times and non-significant for low turbulent times. Also, was a significant effect for both high and low turbulent times on some

Table 12 Multi-group analysis for organizational tenure (indirect effects).

emotional and cognitive) and Method autonomy on emotional engagement. Also, there was a significant effect for low organizational tenure; scheduling autonomy on affective and continuance commitment. This indicates that employees with a few years of service demand a freedom on deciding their own working schedule than those who are working for a number of years. These results are in agreement with the conclusion of (Sturman, 2003; Feldman, 2010; Beus,

	High organiz	zational tenu	ure		Low organizational tenure			
Indirect OT	Path Coefficients	STDEV	t-Value	p-Value	Path Coefficients	STDEV	t-Value	p-Value
MA -> PE -> CC	-0.081	0.078	1.042	0.298	0.023	0.053	0.438	0.662
$SA \rightarrow EE \rightarrow AC$	-0.11	0.06	1.835	0.067	0.027	0.085	0.319	0.75
$SA \rightarrow PE \rightarrow AC$	-0.087	0.085	1.025	0.305	0.005	0.038	0.124	0.901
SA -> PE -> CC	-0.11	0.125	0.875	0.382	0.004	0.034	0.118	0.906
CA -> PE -> NC	0.393	0.169	2.325	0.02	0.309	0.087	3.562	0
$MA \rightarrow PE \rightarrow NC$	-0.057	0.062	0.909	0.363	0.116	0.224	0.52	0.603
CA -> PE -> CC	0.565	0.15	3.779	0	0.061	0.043	1.421	0.155
$SA \rightarrow PE \rightarrow NC$	-0.076	0.083	0.922	0.357	0.02	0.161	0.125	0.9
$CA \rightarrow EE \rightarrow AC$	0.151	0.075	2.016	0.044	0.127	0.093	1.363	0.173
$MA \rightarrow EE \rightarrow AC$	0.114	0.056	2.027	0.043	0.063	0.082	0.758	0.448
$CA \rightarrow PE \rightarrow AC$	0.451	0.118	3.832	0	0.072	0.046	1.568	0.117
$MA \rightarrow PE \rightarrow AC$	-0.065	0.064	1.014	0.311	0.027	0.056	0.485	0.628

variables. Criteria autonomy on all employee engagement constructs (physical, emotional and cognitive) and Method autonomy on emotional engagement. The indirect effect results of criteria autonomy on Normative commitment as well as Continuance commitment and Affective commitment through physical engagement, and criteria autonomy on Affective commitment through emotional engagement; in all cases, the influence was significant for high turbulent times and non-significant for low turbulent times. This supports the assertion that a leader should give employees autonomy and control about decisions relating to themselves to enable them to cope with dynamic environment (Bolisani & Bratianu, 2018).

There was a direct effect of Criteria autonomy on continuance commitment, Method autonomy and scheduling autonomy on Normative commitment, physical engagement on all organizational commitment constructs (Affective normative and continuance), scheduling autonomy on cognitive engagement and emotional engagement, emotional engagement on affective commitment, method autonomy on emotional engagement and cognitive engagement. This suggests that higher organizational tenure is required to see Job autonomy effects on organizational commitment. On the other hand, there was a significant effect for both high and low organizational tenure on some variables. Criteria autonomy on all employee engagement constructs (physical,

2010) that the rate of acquiring more tenure-related resources tends to be greater in employees who are in early, rather than advanced, stages of organizational membership.

The indirect effect results revealed the significance differences in the effect of criteria autonomy on Normative commitment as well as Continuance commitment and Affective commitment through physical engagement, criteria autonomy and method autonomy on Affective commitment through emotional engagement. In all cases, the influence was significant for high organizational tenure and non-significant for low organizational tenure except the effect of criteria autonomy on Normative commitment through physical engagement. Hence, employees with high organizational tenure demands some control over what they supposed to accomplish.

# 4.2 Managerial implications

The findings of this study suggest that creating job autonomy and assuring employee engagement, may help companies gain organizational commitment and enhance their performance. The adoption and implementation of such activities is driven by method, criteria and scheduling autonomy. The successful implementation of these practices

require to consider the level of turbulent environment, and organizational tenure. These requirements not only help in overcoming human resource management challenges, but also in achieving a proper balance of higher performance and gaining competitive advantage.

This study suggests several implications for managers and decision makers. First, the derivers of job autonomy and the factors required for their successful implementation are identified. Recognizing and understanding these derivers and factors will help decision makers devise strategies and policies to successfully adopt practices and overcome the human resource challenges. Moreover, this understanding can help managers successfully promote practices in their companies, and increase their commitment. Finally, this study identifies the effects of turbulent times and organizational tenure on engagement and commitment. Hence, the study adds knowledge to the successful implementation and benefits of job autonomy practices.

# 4.3 Limitations and future scope of research

By presenting and examining the model linking multiple constructs, this paper is one of the first works to deal with such a complex framework. Through the painstaking analysis of the model, we were able to determine the influence of method, scheduling and criteria autonomy, as well as turbulent times and organizational tenure on employee engagement, and organizational commitment.

Although this study has certain limitations, they offer prospects and directions for future research. First, this study is quantitative in nature which could have benefited from a qualitative examination that reinforces the development of the proposed model. Moreover, cross examination of the results with experts and managers would have enriched the implications. The target population used in this study, Ethiopian commercial Banks, stands as another limitation. The results may have been influenced by aspects specific to the culture of the country under consideration. Also, it is limited under one sector and industry. In addition, the conceptual model did not consider the full scope of components of job design (Skill variety, task identity, task significance and job feedback), Other human resource management practices as a mediating variable, and the social aspects of employee engagement and commitment.

For future research, we suggest a combination of qualitative and quantitative study to further investigate the proposed model. Also, a cross cultural comparative analysis of the model can be conducted to examine differences in the relationships by selecting a sample of firms in counties with diverse cultures as well as firms from different sectors and industries. Finally, the proposed model can be extended to incorporate other components of job design and human resource management practices, as well as the social aspects of employee engagement and commitment.

## 4. REFERENCES

- [1] Anttila, E. (2014). Components of Organizational Commitment: A case study consisting line managers from Finnish industrial company (Issue October) [University of Tampere]. https://tampub.uta.fi/bitstream/handle/10024/96724/GR ADU-1424344150.pdf?sequence=1
- [2] Armutlulu, I. H., & Noyan, F. (2011). A multilevel model of organizational commitment. Procedia Social and Behavioral Sciences, 30, 2139–2143. https://doi.org/10.1016/j.sbspro.2011.10.415
- [3] Bell-Ellis, R. S., Jones, L., Longstreth, M., & Neal, J. (2015). Spirit at work in faculty and staff organizational commitment. Journal of Management, Spirituality and Religion, 12(2), 156–177. https://doi.org/10.1080/14766086.2014.992355
- [4] Beus, J. M., Bergman, M. E., & Payne, S. C. (2010). The influence of organizational tenure on safety climate strength: A first look. Accident Analysis and Prevention, 42(5), 1431–1437. https://doi.org/10.1016/j.aap.2009.06.002
- [5] Bolisani, E., & Bratianu, C. (2018). Knowledge and Strategy Formulation in a Turbulent World. In Emergent Knowledge Strategies, Knowledge Management and Organizational Learning (Vol. 4, pp. 117–145). Springer International Publishing. https://doi.org/10.1007/978-3-319-60657-6\_6
- [6] Bufquin, D., DiPietro, R., Park, J. Y., & Partlow, C. (2017). Effects of Social Perceptions and Organizational Commitment on Restaurant Performance. Journal of Hospitality Marketing and Management, 26(7), 752–769. https://doi.org/10.1080/19368623.2017.1293580
- [7] Chang, K., Nguyen, B., Cheng, K. T., Kuo, C. C., & Lee, I. (2016). HR practice, organisational commitment & citizenship behaviour: A study of primary school teachers in Taiwan. Employee Relations, 38(6), 907–926. https://doi.org/10.1108/ER-12-2015-0218
- [8] Chang, W. J., Liao, S. H., Lee, Y. J., & Lo, W. P. (2015). Organizational commitment, knowledge sharing and organizational citizenship behaviour: The case of the Taiwanese semiconductor industry. Knowledge Management Research and Practice, 13(3), 299–310. https://doi.org/10.1057/kmrp.2013.51
- [9] Colquitt, J. A., Lepine, J. A., & Wesson, M. J. (2019). Organizational Behavior: Improving Performance and Commitment in the Workplace (Sixth). McGraw-Hill Education. https://doi.org/10.1002/pdh.22
- [10] Creswell, J. W. (2009). Research Design. In Muqamas (Third). SAGE Publications. Inc. All. https://doi.org/10.2307/1523157
- [11] de la Torre-Ruiz, J. M., Vidal-Salazar, M. D., & Cordón-Pozo, E. (2019). Employees are satisfied with their benefits, but so what? The consequences of benefit satisfaction on employees' organizational commitment

- and turnover intentions. International Journal of Human Resource Management, 30(13), 2097–2120. https://doi.org/10.1080/09585192.2017.1314315
- [12] Eppler, M. J. (2020). Management in the COVID Era: Tools for Turbulent Times with the VUCA Approach. sketching at work.
- [13] Ghosh, S., & Swamy, D. R. (2014). A Literature Review on Organizational Commitment A Comprehensive Summary. Journal of Engineering Research and Applications Www.Ijera.Com, 4(1), 2248–962204.
- [14] Hidalgo-Peñate, A., Nieves, J., & Padrón-Robaina, V. (2020). The influence of employees' knowledge, organisational commitment, and culture on the innovativeness of vocational educational. Knowledge Management Research and Practice, 00(00), 1–12. https://doi.org/10.1080/14778238.2020.1774431
- [15] Holly Buttner, E., & Lowe, K. B. (2017). The relationship between perceived pay equity, productivity, and organizational commitment for US professionals of color. Equality, Diversity and Inclusion: An International Journal, 36(1), 73–89. https://doi.org/10.1108/EDI-02-2016-0016
- [16] Ismail, H. N. (2016). Training and organizational commitment: Exploring the moderating role of goal orientation in the lebanese context. Human Resource Development International, 19(2), 152–177. https://doi.org/10.1080/13678868.2015.1118220
- [17] Jelassi, T. (2017). Leading in Turbulent times: what does VUCA mean? IMD Corporate Learning.
- [18] Jordaan, B. (2019). Leading organisations in turbulent times: Towards a different mental model. Contributions to Management Science, 59–75. https://doi.org/10.1007/978-3-319-98884-9\_4
- [19] Kalfa, M. (2018). The effect of Europe Union common assessment framework on organisational commitment with role of job satisfaction. Total Quality Management and Business Excellence, 29(5–6), 704–726. https://doi.org/10.1080/14783363.2016.1233053
- [20] Kamoche, K., Chizema, A., Mellahi, K., & Newenham, A. (2012). New directions in the management of human resources in Africa. The International Journal of Human Resource Management, 5192. https://doi.org/10.1080/09585192.2012.671504
- [21] Kim, M., & Beehr, T. A. (2018). Empowering leadership: leading people to be present through affective organizational commitment? International Journal of Human Resource Management, 0(0), 1–25. https://doi.org/10.1080/09585192.2018.1424017
- [22] Kriger, M., & Zhovtobryukh, Y. (2016). Strategic leadership for turbulent times. In Strategic Leadership for Turbulent Times (pp. 1–164). https://doi.org/10.1057/978-1-137-40380-3

- [23] Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. In Journal of Marketing Research. https://doi.org/10.1509/jmr.15.0044
- [24] Lee, J., Chiang, F. F. T., van Esch, E., & Cai, Z. (2018). Why and when organizational culture fosters affective commitment among knowledge workers: the mediating role of perceived psychological contract fulfilment and moderating role of organizational tenure. International Journal of Human Resource Management, 29(6), 1178–1207. https://doi.org/10.1080/09585192.2016.1194870
- [25] Lee, J., & Wei, F. (2017). The moderating effect of leadership on perceived organizational justice and affective commitment: a study in China. International Journal of Human Resource Management, 28(5), 679–702. https://doi.org/10.1080/09585192.2015.1109533
- [26] Lin, P. T. J., & Ping, L. C. N. (2016). Perceived Job Autonomy and Employee Engagement as Predictors of Organizational Commitment. Undergraduate Journal of Psychology, 29(1), 1–16.
- [27] Liu, Y., Loi, R., & Ngo, H. yue. (2020). Linking organizational social exchange to intention to leave: Does normative commitment matter? International Journal of Human Resource Management, 31(13), 1663–1683. https://doi.org/10.1080/09585192.2017.1423097
- [28] Luo, L., Mao, C., Shen, L., & Li, Z. (2015). Enhancement of Organizational Commitment through Propensity to Trust. Engineering, Construction and Architectural Management, 22(6), 622–643. https://doi.org/10.1108/ECAM-04-2014-0048
- [29] Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). Employee Engagement: Tools for Analysis, Practice, and Competitive Advantage. A John Wiley & Sons, Ltd., Publication.
- [30] Mahmood, A., Akhtar, M. N., Talat, U., Shuai, C., & Hyatt, J. C. (2019). Specific HR practices and employee commitment: the mediating role of job satisfaction. Employee Relations, 41(3), 420–435. https://doi.org/10.1108/ER-03-2018-0074
- [31] Malinowska, D., Tokarz, A., & Wardzichowska, A. (2018). Job autonomy in relation to work engagement and workaholism: Mediation of autonomous and controlled work motivation. International Journal of Occupational Medicine and Environmental Health, 31(4), 445–458. https://doi.org/10.13075/ijomeh.1896.01197
- [32] McCormick, L., & Donohue, R. (2019). Antecedents of affective and normative commitment of organisational volunteers. International Journal of Human Resource Management, 30(18), 2581–2604. https://doi.org/10.1080/09585192.2016.1166388
- [33] Mylona, E., & Mihail, D. (2019). Exploring Public Employees' Motivation to Learn and Develop in Turbulent Times. The Role of Perceived Support and Organizational Commitment. International Journal of

- Public Administration, 00(00), 1–10. https://doi.org/10.1080/01900692.2019.1669174
- [34] Neuman, W. L. (2014). Social Research Methods: Qualitative and Quantitative Approaches. In Teaching Sociology (Seventh Ed, Vol. 30, Issue 3). Pearson Education Limited. https://doi.org/10.2307/3211488
- [35] Oudeyer, P.-Y., Oudeyer, P.-Y., Kaplan, F., & Kaplan, F. (2008). How can we define intrinsic motivation?
- [36] Oyewobi, L. O., Oke, A. E., Adeneye, T. D., & Jimoh, R. A. (2019). Influence of organizational commitment on work-life balance and organizational performance of female construction professionals. Engineering, Construction and Architectural Management, 26(10), 2243–2263. https://doi.org/10.1108/ECAM-07-2018-0277
- [37] Para-González, L., Jiménez-Jiménez, D., & Martínez-Lorente, Á. R. (2019). Do SHRM and HPWS shape employees' affective commitment and empowerment? Evidence-Based HRM, 7(3), 300–324. https://doi.org/10.1108/EBHRM-01-2019-0004
- [38] Presbitero, A., Newman, A., Le, H., Jiang, Z., & Zheng, C. (2019). Organizational commitment in the context of multinational corporations: a critical review and directions for future research. International Journal of
- [43] Roberto, S. C. Y. (2020). Transitional Leadership in a WUCA environment. Transitional Leadership in a WUCA Environment. http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf
- [44] Rosario Núñez, A., Marquez, E., Zayas, M., & López, E. (2020). Relationship between organizational citizenship and commitment in Puerto Rico banks. International Journal of Sociology and Social Policy, 40(7–8), 643–658. https://doi.org/10.1108/IJSSP-02-2020-0028
- [45] Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600–619. https://doi.org/10.1108/02683940610690169
- [46] Saridakis, G., Lai, Y., Muñoz Torres, R. I., & Gourlay, S. (2020). Exploring the relationship between job satisfaction and organizational commitment: an instrumental variable approach. International Journal of Human Resource Management, 31(13), 1739–1769. https://doi.org/10.1080/09585192.2017.1423100
- [47] Shao, B., Cardona, P., Ng, I., & Trau, R. N. C. (2017). Are prosocially motivated employees more committed to their organization? The roles of supervisors' prosocial motivation and perceived corporate social responsibility. Asia Pacific Journal of Management, 34(4), 951–974. https://doi.org/10.1007/s10490-017-9512-5
- [48] Silva, R. C. da, Dutra, J. S., Veloso, E. F. R., Fischer, A. L., & Trevisan, L. N. (2015). Generational perceptions and their influences on organizational

- Human Resource Management, 30(1), 188–218. https://doi.org/10.1080/09585192.2018.1511614
- [39] Prouska, R., Psychogios, A. G., & Rexhepi, Y. (2016). Rewarding employees in turbulent economies for improved organisational performance: Exploring SMEs in the South-Eastern European region. Personnel Review, 45(6), 1259–1280. https://doi.org/10.1108/PR-02-2015-0024
- [40] Quratulain, S., Khan, A. K., Crawshaw, J. R., Arain, G. A., & Hameed, I. (2018). A study of employee affective organizational commitment and retention in Pakistan: the roles of psychological contract breach and norms of reciprocity. International Journal of Human Resource Management, 29(17), 2552–2579. https://doi.org/10.1080/09585192.2016.1254099
- [41] Rahman, S., Islam, M. Z., Ahad Abdullah, A. D., & Sumardi, W. A. (2018). Empirical investigation of the relationship between organizational factors and organizational commitment in service organizations. Journal of Strategy and Management, 11(3), 418–431. https://doi.org/10.1108/JSMA-01-2018-0007
- [42] Rich, B. L., Lepine, J. A., & Carwford, E. R. (2010). Job engagement: antecedents and effects on Job performance. Academy of Management Journal, 53(3), 617–635.
  - commitment. Management Research, 13(1), 5–30. https://doi.org/10.1108/MRJIAM-12-2013-0537
- [49] Steffens, N. K., Shemla, M., Wegge, J., & Diestel, S. (2014). Organizational Tenure and Employee Performance: A Multilevel Analysis. Sage Journal, 39(6), 664–690. https://doi.org/10.1177/1059601114553512
- [50] Sungu, L. J., Weng, Q., Hu, E., Kitule, J. A., & Fang, Q. (2020). How Does Organizational Commitment Relate to Job Performance? A Conservation of Resource Perspective. Human Performance, 33(1), 52–69. https://doi.org/10.1080/08959285.2019.1699562
- [51] van de Brake, H. J., Walter, F., Rink, F. A., Essens, P. J. M. D., & van der Vegt, G. S. (2020). Benefits and Disadvantages of Individuals' Multiple Team Membership: The Moderating Role of Organizational Tenure. Journal of Management Studies, 57(8), 1502–1530. https://doi.org/10.1111/joms.12539
- [52] Wulf, T., & Meißner, P. (2010). Business planning in turbulent times new methods for applying scenarios. Zeitschrift Für Betriebswirtschaft, 80(3), 329–331. https://doi.org/10.1007/s11573-009-0341-y
- [53] Xiu, L., Dauner, K. N., & McIntosh, C. R. (2019). The impact of organizational support for employees' health on organizational commitment, intent to remain and job performance. Evidence-Based HRM, 7(3), 281–299. https://doi.org/10.1108/EBHRM-10-2018-0062
- [54] Yu, Q., Yen, D. A., Barnes, B. R., & Huang, Y. A. (2019). Enhancing firm performance through internal

- market orientation and employee organizational commitment. International Journal of Human Resource Management, 30(6), 964–987. https://doi.org/10.1080/09585192.2017.1380059
- [55] Zhang, W., Jex, S. M., Peng, Y., & Wang, D. (2017). Exploring the Effects of Job Autonomy on Engagement and Creativity: The Moderating Role of Performance
- Pressure and Learning Goal Orientation. Journal of Business and Psychology, 32(3), 235–251. https://doi.org/10.1007/s10869-016-9453-x
- [56] Zook, C., & Allen, J. (2010). Maneuvering through Organizational Crisis. In Profit from the Core a return to growth in turbulent times. Boston: Harvard Business Press.