

WORK PASSION AND EMPLOYEES' CREATIVITY: THE NIGERIAN EXPERIENCE

B. M. Nwibere

University of Port Harcourt

barrysaro@yahoo.com

ABSTRACT

This study investigates the relationship between work passion and employee creativity. The sample comprised 245 randomly selected academic staff members (including both teaching and non-teaching personnel) from five purposively selected Federal Government-owned universities in the Niger Delta Region of Nigeria. A quasi-experimental research design was employed, with data collected through a cross-sectional survey, which was considered the most appropriate method for research in administrative sciences. The Kendall Coefficient of Concordance, analysed using the Statistical Package for Social Sciences (SPSS) version 25, was utilised for data analysis. The findings reveal a positive and statistically significant relationship between work passion and employee creativity within Nigerian universities. Specifically, employees' harmonious passion for work was found to have a positive and significant influence on various measures of employees' creativity, including expertise, creative thinking skills, and intrinsic task motivation. In contrast, employees' obsessive passion for work demonstrated a positive, albeit weak, significant influence on these measures of employees' creativity. Based on these findings, the study concludes that employees' harmonious passion significantly enhances their creativity within the Nigerian university system. In contrast, obsessive passion appears to be relatively weak in enhancing creativity within the Federal Government-owned universities in the Niger Delta Region of Nigeria. In light of these results, university management should actively promote work passion among employees, which can foster creativity within the institution. The study also discusses additional theoretical and managerial implications for effectively managing employees' work passion and enhancing creativity in Nigerian universities.

Keywords: Employees' Creativity, Federal Government-owned Universities, Harmonious Passion, Niger Delta Region, Nigeria, Obsessive passion, Work Passion.

1.0 INTRODUCTION

Employee attitudes toward job involvement, satisfaction, and commitment to the organisation have emerged as critical areas of inquiry for researchers and managers, given their significant influence on various work-related behaviours and outcomes. This is particularly pertinent as employee attitudes often manifest as tendencies to respond positively or negatively to their jobs, the organisation, and the individuals within it. Furthermore, attitudes tend to cluster and categorise themselves; when individuals develop a favourable attitude toward one aspect of their job based on unique experiences, they are likely to exhibit positive reactions toward other related aspects. Consequently, employees actively engaged in their work are more likely to experience job satisfaction and, as a result, exhibit more significant commitment to their organisation. In contrast, those who are dissatisfied may experience decreased engagement, which can lead to diminished commitment to both their employer and the organisation.

The prevailing argument suggests that employees who exhibit passion for their work and the organisation are more likely to be productive, satisfied, and less inclined to leave than their disengaged and indifferent counterparts. Evidently, the level of job involvement, and by extension, employee productivity, is directly proportional to their level of passion. Employee work passion (EWP) is conceptualized as an individual's persistent, emotionally positive, meaning-based state of well-being, which arises from continuous cognitive and affective evaluations of various job and organisational situations, ultimately leading to consistent, constructive work intentions and behaviours (Zigarmi et al., 2011). Pati (2012) articulated that work passion embodies an individual's sense of purpose and alignment with the organisation's mission, originating from an implicit connection with self-awareness. The manifestation of employee work passion yields numerous benefits for the organisation, including enhanced commitment, citizenship behaviour, job satisfaction, increased profitability and growth, and reduced labour turnover. Passionate employees tend to be focused, engaged, and committed to delivering their optimal performance, thereby

providing exceptional value to customers, whether internal or external. Passion contributes more significantly to value creation than any other human capability. The primary aim of any organisation is to deliver value to customers by providing quality products and services. Therefore, it can be argued that the greater the passion employees exhibit, the higher the value the organisation can deliver—a value that competitors may struggle to replicate. The Key Results Leadership Training Institute asserts that having passionate and loyal employees is as advantageous to an organisation as having passionate and loyal customers; such employees are more likely to remain with the organisation, exert more significant effort, demonstrate increased creativity, and engage in behaviours that go beyond typical expectations, ultimately fostering the creation of winning teams (www.keyresultstraining.com).

It is essential to distinguish between an engaged employee and a passionate one. Engaged employees are typically conscientious about their work, meeting expectations and adhering to established policies and procedures. In contrast, passionate employees transcend the confines of the rulebook, undertaking whatever actions are necessary to delight customers. These emotionally committed individuals possess a deep-seated passion for their work and organisation (Meskelis and Whittington2020; Topino et al., 2021; Liao et al., 2021; Mappamiring and Putra2021; Mazzetti et al., 2020; Eissa, 2020; van et al.2020). Although research consistently indicates a direct correlation between employee engagement and heightened performance, engagement serves as merely the foundational element; passionate employees propel the organisation to elevated levels of achievement. Therefore, enterprise managers must cultivate a work environment wherein employees feel engaged and passionate about their organisation and roles (Sungmala & Verawat, 2021; Supriyanto et al.2021; Alferaih2021)

Creativity yields innovative and valuable ideas across various domains. Consequently, organisations strive to recruit individuals who can fully engage their cognitive faculties—those empowered to consistently draw upon diverse mental resources. A product or idea must diverge from previous iterations to be acknowledged as creative. However, many scholars in the field of creativity maintain that uniqueness is not a requisite for a creative concept. Instead, to be considered creative, a product or idea must also align with relevant objectives and be accurate, valuable, or meaningful. This distinction underscores the

differentiation between creativity and innovation (Gold, 2021; Glăveanu & Beghetto, 2021; Hallam & Ingold, 2021; Glăveanu, 2020; Puccio et al.2020). As Amabile succinctly articulated, “Innovation is the successful implementation of creative ideas within an organisation.” Therefore, it is reasonable to assert that while creativity is a foundational element for innovation, it represents a necessary yet insufficient condition. Successful innovation is contingent upon additional factors and can emerge from creative concepts developed internally and external influences (e.g., technology transfer).

Given the critical role of work passion and employee creativity in enabling organisations to remain competitive and achieve their objectives, extensive empirical research has been conducted to theorize and propose various methodologies and models to enhance these constructs within an organisational context. Some researchers have conceptualized them as antecedents to other organisational variables, while others have examined them as outcomes of such variables. For example, Appu and Sia (2017) utilised a sample of information technology (IT) professionals from various companies in Kerala State to investigate the antecedent role of self-efficacy in workplace creativity, discovering a significant predictive relationship. However, their study also indicated that harmonious passion negatively moderates the association between self-efficacy and workplace creativity.

In another study, Clercq and Pereira (2019) analysed a sample of employees from a banking organisation in Mozambique to explore the relationship between employees’ knowledge-sharing efforts and creative behaviours. They focused on how this relationship could be enhanced by three resources operating at the individual (passion for work), job (time sufficiency), and organisational (procedural justice) levels. Their findings revealed that the effectiveness of knowledge-sharing efforts in fostering creative behaviour is amplified when employees exhibit a passion for their work, have adequate time to fulfil their responsibilities, and perceive organisational decision-making as equitable. From the preceding discussion, it is evident that organisational creativity is imperative for companies to adapt to rapid changes. Employees' creative contributions are recognised as essential for achieving sustainable innovation. Consequently, managers are encouraged to actively nurture employees' passion for their work responsibilities to optimise organisational performance.

To date, investigating the antecedents and outcomes of specific types of passion has been a central focus of workplace passion research for nearly two decades.

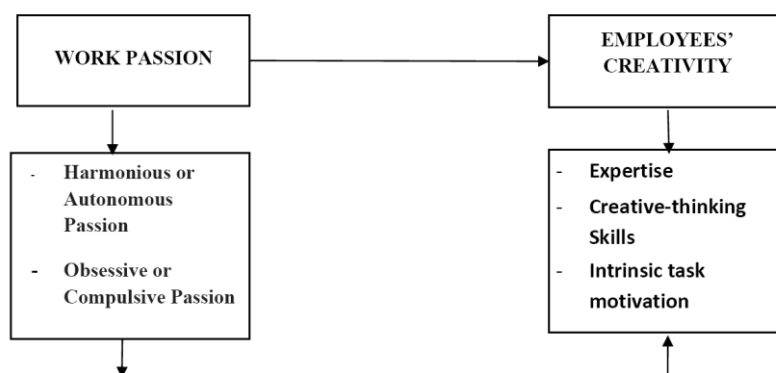
Despite the increasing interest in work-related passion, the mechanisms by which work passion translates into creative effort remain relatively underexplored. This study seeks to integrate the Dualistic Model of Passion with cognitive theories of creativity, proposing a dual hypothesis to address this gap in the passion research literature. Although considerable research has examined the connections between passion and performance, there is a paucity of knowledge regarding translating work passion into creative efforts. This study aims to elucidate the mechanisms by which work passion fosters employee creativity by integrating these two theoretical frameworks.

Existing literature in management and organisational behaviour suggests that work passion and employee creativity are not comprehensively defined or understood constructs. While some relationships between these concepts and various individual and organisational outcomes have been identified, the underlying mechanisms remain insufficiently explored. Moreover, no known study specifically examines the relationship between work passion and employee creativity.

To address the identified gaps in the existing literature, this study will investigate the relationship between work passion and employee creativity within Nigerian universities. The primary research question guiding this study is: What is the nature of the relationship between work passion and employee creativity in Federal Government-owned universities located in the Niger Delta Region of Nigeria?

Conceptual Framework

Figure 1 below presents the conceptual framework guiding this study.



Source: Conceptualized by the Researcher

Figure. 1.1: Conceptual Framework for Analysing the Relationship between Work Passion and Employees' Creativity as well as the Moderating Role of Corporate Culture

The dimensions of work passion encompass harmonious (or autonomous) passion and obsessive (or compulsive) passion, as delineated in earlier studies by Orgambidez, Borrego, and Gonçalves (2014) and Vallerand (2003). Conversely, the measures of employee creativity employed in this study include expertise (or domain-relevant skills), creative-thinking skills, and intrinsic task motivation, drawing upon Amabile's foundational research (1997).

2.0 REVIEW OF RELATED LITERATURE

2.1 EMPLOYEES' WORK PASSION

The concept of work passion has garnered significant scholarly interest in the fields of organizational behaviour and management (McAllister, 2017). Passion is defined as a strong inclination toward an activity that individuals value, consider important, and to which they dedicate substantial time and energy. For an activity to truly reflect passion, it must hold considerable significance in individuals' lives, provide enjoyment, and be engaged with regularly (Vallerand et al., 2003, p. 757). Work passion is characterized as an individual's enduring, emotionally positive, and meaning-based state of well-being, which arises from continuous cognitive and emotional assessments of their job and organizational settings. This state of well-being is associated with sustained positive work intentions and behaviours (Zigarmi et al., 2011). Employees who exhibit passion are typically focused, engaged, and committed to performing at their best across all aspects of their work, thereby delivering exceptional value to both internal and external stakeholders. Ultimately, passion serves as a crucial driver of value creation, surpassing all other human capabilities.

Additionally, work passion can be understood as a deep commitment to one's professional responsibilities in which individuals invest time, effort, and both personal and organisational resources (Orgambidez et al., 2014; Vallerand, 2003). Evidently, individuals do not develop passion without foundation; instead, they cultivate a passion for endeavours that provide emotional satisfaction and are perceived as meaningful, worthwhile, or rewarding. When individuals join an organisation to fulfil specific needs, it can be argued that meeting these fundamental human requirements may ignite passion. This idea is central to "The Passion Pyramid," which outlines five human needs that foster passion, the critical leadership skills required to address each need, and the resulting benefits for the organisation. The Employee Passion Survey is

fundamentally based on the Passion Pyramid; thus, understanding these five levels will enhance the report's interpretation. It is important to note that work passion is distinct from the more traditional concept of job satisfaction. Therefore, an individual may feel content with their overall job while lacking passion. Work passion consists of three essential components: an affective-emotional element, a cognitive element, and a motivational element. The affective-emotional component reflects a positive emotional state associated with one's work; the cognitive component involves an individual's identification with their job; and the motivational component encompasses a willingness to exert effort in the role. As a motivational factor, work passion can stimulate creative behaviour by enhancing concentration and increasing the energy available for task completion. (Fossa et al., 2020; Jeon & Choi, 2020). Additionally, individuals who are passionate about their work are more likely to set ambitious personal goals and exhibit greater initiative in pursuing them. Following this logic, higher goal levels established by passionate individuals typically result in greater effort invested, which in turn enhances their creativity. Passionate individuals are believed to be more intrinsically motivated, meaning they engage in activities for their inherent satisfaction rather than for external rewards. Intrinsic motivation has long been linked to creativity. An early review by Russ (1993) highlighted substantial correlational evidence indicating a positive relationship between intrinsic motivation and creativity; however, at that time, the causal link was primarily supported by experimental studies. Nevertheless, it is widely accepted that intrinsic motivation fosters creativity. Therefore, if passion enhances intrinsic motivation, it can be inferred that this leads to increased levels of creativity.

Finally, Vallerand et al. (2003) outline a third pathway through which passion can elevate creativity levels by promoting innovative thinking, defined as the cognitive process that produces novel and improved solutions to problems. Passionate individuals exhibit a heightened focus on achievement, and when a task is personally significant, they are likely to use the most effective and efficient strategies to accomplish it. Furthermore, it would be inconsistent with their passion to settle for simplistic solutions. Vallerand et al. (2003:757) identified two distinct forms of passion: obsessive and harmonious. These forms differ in how an individual's core self or identity integrates the passionate activity. Harmonious passion (HP) involves an autonomous internalization of

the activity, wherein individuals willingly recognize its significance without being influenced by external pressures. This internalization cultivates a motivation that encourages voluntary engagement in the activity, allowing individuals to act with a sense of agency and personal endorsement. They are not coerced; rather, they consciously choose to participate. In harmonious passion, the activity plays an important but non-dominant role in one's identity, coexisting peacefully with other life aspects. Thus, harmonious work passion is described as the joy derived from pursuing challenging and uplifting goals (Pollack et al., 2020; Hizarci-Payne and Ozgen, 2020; Nawaz et al., 2021; Smilor, 1997) and is characterized by a sustained positive internal state stemming from favourable cognitive and emotional evaluations of work (Zigarmi et al., 2011).

In contrast, obsessive passion (OP) arises from a controlled internalization of the activity into one's identity. This internalization is shaped by intrapersonal and interpersonal pressures such as social acceptance, self-esteem, and the erratic excitement linked to engagement. While individuals may find enjoyment in the activity, they feel compelled to participate due to these internal contingencies, which govern their actions and make abstaining difficult. This form of passion can dominate an individual's behaviour, leading to uncontrollable engagement that occupies a disproportionately large space in their identity and creates conflicts with other life domains. Consequently, obsessive passion stems from a pressured and uncontrolled internalization of work into one's identity, often compelling individuals to engage compulsively and detracting from important areas such as leisure and family responsibilities (Orgambidez, et al. 2014; Vallerand, 2003). The distinction between these two dimensions of work passion lies in the understanding that harmonious passion emerges from the autonomous integration of work into an individual's identity. This fosters a genuine desire to voluntarily engage in work-related activities, as the individual recognizes the importance of work to their sense of self without the need for constant reflection. This suggests that harmonious work passion arises when employees feel free to engage in their work, aligning their attitudes and behaviours with various aspects of their lives (Vallerand et al., 2003). It develops as an intrinsic motivation directed toward an activity the individual finds meaningful, allowing them to pursue it in accordance with their values and beliefs (Vallerand et al., 2003). Harmonious passion leads to positive outcomes such as sustained effort and high

performance, along with a lower cognitive cost due to the voluntary nature of the activity (Vallerand et al., 2003).

In contrast, obsessive passion is characterised by an individual's compulsion to work, which complicates their ability to detach from work-related concerns (Orgambídez, 2014; Vallerand, 2003). This form of work passion emerges when an individual's thoughts and emotions are dominated by the activity, creating an inescapable internal pressure to engage in work. As a result, this dynamic can lead to internal conflict, where work overshadows other valued aspects of life, contributing to increased work-related stress and various health and psychological issues (Vallerand et al., 2003).

Numerous studies demonstrate that harmonious passion positively affects work motivation, psychological well-being, and task significance (Vallerand, 2019). It nurtures positive emotions in the workplace, enhances concentration, improves immersion in tasks, and boosts overall mental states, ultimately leading to higher intrinsic job satisfaction (Vallerand, 2019; Lavigne, et al., 2014; McAllister, 2017). Harmonious passion is defined as a positive internalisation of work, marked by a genuine affection for one's job, which benefits individuals and organisations. Employees who cultivate a healthy, autonomous passion for their work are more likely to possess personal resources that enhance their task performance. Additionally, harmonious passion has been shown to correlate with burnout and its associated effects inversely. For example, Vallerand and Houliort (2019) found that harmonious passion can alleviate the impact of emotional exhaustion on psychological discomfort in the workplace. Lavigne et al. (2014) observed that higher levels of passion were linked to an improved perception of resources for coping with job-related tasks and demands. Similarly, Trépanier et al. (2014) established that harmonious passion enhances the positive effects of personal resources on engagement while reducing the impact of job demands on burnout.

In a study involving 748 front-line employees from service organizations in southern Spain (mean age = 35.51; standard deviation = 10.06; 52% women), Benitez et al. (2023) found that harmonious passion moderates the negative relationship between physical fatigue and intrinsic job satisfaction. Notably, employees exhibiting high levels of harmonious passion reported greater job satisfaction, even in the face of significant physical fatigue. This indicates that these service employees were able to maintain job satisfaction despite

experiencing physical fatigue. The study suggests that its findings extend the Job Demands-Resources (JD-R) theory by recognizing harmonious passion as a motivational resource that mitigates burnout among service employees. Consequently, fostering the autonomous internalization of work—potentially through job enrichment—is essential for cultivating harmonious passion and enhancing intrinsic job satisfaction.

In a separate study of IT professionals from various companies in Kerala State, Appu and Sia (2017) discovered that self-efficacy positively influences employees' creative performance. They also found that harmonious passion negatively moderates the relationship between self-efficacy and workplace creativity. Recently, Smith et al. (2022) contributed to future research by proposing new subscales and sample items for operationalising the concept of work passion and its dimensions, detailed in the appendix of this paper. Dey, Thakur, and Srinivas (2015) also examined a sample of 400 employees from seven manufacturing and engineering companies in Jamshedpur, India, focusing on the connection between harmonious passion and creativity within supervisory support. Their findings revealed a positive correlation between harmonious passion and employee creativity, with work engagement as a partial mediator in a supportive environment.

2.2 EMPLOYEES' CREATIVITY

According to the Componential Theory of Individual Creativity, conventional wisdom posits that creative individual predominantly manifest creativity. For several decades, researchers in the field of creativity adhered to this perspective, focusing primarily on individual differences (Amabile, 1997, p. 42). Although this individual-centred approach provided valuable insights into exceptionally creative individuals' backgrounds, personality traits, and working styles (Baron, 1955, 1968), more was needed to comprehensively understand the phenomenon. In response to these limitations, Amabile (1997, p. 42) put forth the Componential Theory of Creativity, which contends that all individuals possessing typical cognitive abilities can engage in at least moderately creative work within specific domains. This theory underscores the significant influence of the social environment—particularly in the workplace—on the frequency and level of creative behaviours exhibited.

The Componential Theory identifies three essential components for fostering individual or small team creativity: expertise, creative-thinking skills, and intrinsic task motivation (Amabile, 1983b; 1997). According to this framework, creativity thrives when individuals' skills align with their deepest intrinsic interests and passions. Furthermore, the frequency of creative output increases as the levels of all three components rise. This alignment is called the "creativity intersection" (Amabile, 1997, p. 42).

Expertise: As defined by Amabile (1997, p. 42), Expertise constitutes the foundation of all creative endeavours. It can be conceptualised as a network of cognitive pathways that an individual traverses to address specific problems or complete tasks—effectively representing the problem solver's repertoire of potential explorations (Newell & Simon, 1972, p. 82). The expertise component of creativity encompasses factual knowledge, technical skills, and specialised talents pertinent to a particular domain of work.

Creative-Thinking Skills: This component contributes "that extra element" to creative performance, commonly referred to as creativity-relevant skills (Amabile, 1983) and creativity-relevant processes (Amabile, 1996). When individuals have an incentive to engage in an activity, their performance may be classified as "technically proficient," "adequate," or "acceptable," provided they possess the requisite expertise. However, even individuals with exceptional expertise may find it easier to produce creative output with creative thinking skills. These skills encompass a cognitive style that fosters novel perspectives on problems, applying techniques or "heuristics" for exploring innovative cognitive pathways, and a working style that encourages sustained and vigorous engagement with tasks (Amabile, 1997, p. 43). Moreover, creative thinking skills are influenced by personality traits such as independence, self-discipline, risk-taking, tolerance for ambiguity, perseverance in the face of frustration, and a relative disregard for social approval (Baron, 1955; in Amabile, 1997). Creativity skills can be augmented through learning and practising techniques that enhance cognitive flexibility and intellectual independence (Amabile, 1997, p. 43).

Intrinsic Task Motivation: Amabile (1997) defines intrinsic motivation as the tendency to engage in activities for their inherent interest, enjoyment, satisfaction, or personal challenge. Numerous studies indicate that individuals exhibit peak creativity when primarily motivated by intrinsic factors rather than external influences such as evaluations, oversight, competition, directives from superiors, or promised rewards (Amabile, 1983; 1996; 1997). Importantly, this principle of intrinsic motivation applies in scientific and business contexts, where financial success often correlates with a genuine passion for the work (Amabile, 1997, p. 39).

According to Amabile (1997), an individual's capabilities within a specific domain are influenced by two skill components, while the task motivation component propels the individual's pursuits. Motivation can be categorised as either intrinsic or extrinsic. Intrinsic motivation arises from a genuine interest in the work, curiosity, enjoyment, or a personal sense of challenge. Conversely, extrinsic motivation is driven by external goals, such as obtaining rewards, meeting deadlines, or achieving success in competition. While individuals frequently experience a blend of intrinsic and extrinsic motivations, one type typically predominates in the context of a particular task. Research indicates that primary intrinsic motivation fosters creativity more effectively than primary extrinsic motivation (Amabile, 1997, p. 44).

Amabile (1997, p. 44) posits that task motivation delineates the distinction between an engineer's potential achievements and the actual accomplishments realised. The former is influenced by the engineer's expertise and creative thinking skills, while the latter is contingent upon the level of task motivation applied in their creative performance. Notably, elevated levels of intrinsic motivation can sometimes compensate for deficiencies in expertise or creative thinking abilities. An intrinsically motivated individual is more likely to draw upon skills from alternative domains or to invest considerable effort into acquiring the requisite skills.

While developing expertise and creative thinking skills can be shaped by an individual's social environment, motivation is likely to exert the most significant influence. Individuals often commence with a baseline level of intrinsic motivation ignited by their enjoyment of the task. However, empirical evidence indicates that even brief modifications in the work environment can fundamentally alter a person's motivational orientation towards a task, affecting

their creativity (Amabile, 1997). Amabile's (1988) componential theory of creativity underscores that intrinsic motivation, as opposed to extrinsic motivation, serves as a critical mechanism through which social context can shape individual creative output.

Although early experimental studies provided robust evidence supporting the positive effects of intrinsic motivation on creativity (Amabile, 1996), subsequent investigations into the mediating role of intrinsic motivation between contextual factors and employee creativity have produced inconsistent findings. For instance, Shin and Zhou (2003) identified a partial mediating effect of intrinsic motivation in the relationship between transformational leadership behaviours and employee creativity. In contrast, Shalley and Perry-Smith (2001) reported no mediating effect concerning expected evaluations by leaders and employee creativity.

Creativity is a multifaceted phenomenon catalysed by an organisational context that promotes innovative thinking and actions alongside personal characteristics that enhance the development of novel ideas and processes (Shalley et al., 2004). Moreover, harmonious passion has been theorised and empirically validated as a crucial motivational mechanism that reflects the degree of autonomy in one's motivation, thereby influencing its quality (Vallerand et al., 2003; Vallerand & Miquelon, 2007). Numerous studies have demonstrated a correlation between harmonious passion and positive mood (e.g., Philippe et al., 2010; Vallerand et al., 2003), suggesting that harmonious passion may serve as a more fundamental psychological mechanism underpinning creativity than positive mood itself. Traditionally, passion has been considered intrinsic to individuals' creative processes (e.g., Goldberg, 1986). Scholars have also suggested that creativity is enhanced when individuals cultivate a passion for their activities (e.g., Amabile and Fisher, 2009). We align with these perspectives and propose two primary reasons for the positive relationship between harmonious passion and creativity. One potential explanation is the positive effects, excitement, and energy associated with harmonious passion (Amiot et al., 2006; Mageau & Vallerand, 2007; Rousseau & Vallerand, 2008).

3.0 RESEARCH METHODS

Operational Measures of Variables: The independent variable in this study is employee work passion. The dimensions of work passion encompass harmonious (or autonomous) passion and obsessive (or compulsive) passion, as delineated in earlier studies by Orgambídez (2014) and Vallerand et al., 2003, p. 757). Harmonious passion and obsessive passion at work were measured using the passion scale developed by Vallerand et al. (2003:760) and adapted by Orgambídez et al. (2014) and Smith et al. (2022:60). The Passion Scale consisted of 21 items that reflect the definition of the two dimensions of work passion. Nine items were used to operationalise harmonious passion, while obsessive passion had 12 items. Respondents were asked to think about an activity “that was very dear to their heart.” They were then asked to list this activity and complete the items while referring to it. Sample items are indicated in the appendix of this paper. All the dimensions of work passion were measured on a 5-point Likert-type scale. The response mode ranges from 1 to 5, where 1 = strongly disagree, 2 = agree, 3 = not sure/neutral, 4 = agree, and 5 = strongly agree. Many earlier studies, such as interpersonal relationships, digital gaming, and psychological adjustment (e.g., Amiot et al., 2006), have confirmed this measure's reliability and validity. In this study, Cronbach's alpha for the harmonious passion scale is 0.92, and 0.91 for obsessive passion.

Conversely, the measures of employee creativity employed in this study include expertise (or domain-relevant skills), creative-thinking skills, and intrinsic task motivation, drawing upon the Componential Theory of Individual Creativity developed by Amabile (1988, 1996, 1997:42). All the components of creativity were measured on a 5-point Likert-type scale. The response mode ranges from 1 to 5, where 1 = strongly disagree, 2 = agree, 3 = neutral; 4 = agree, and 5 = strongly agree. Sample items are also indicated in the appendix of this paper.

4.0 RESEARCH RESULTS

The analysis commenced by examining the relationship between work passion and employee creativity. The findings indicated a strong, positive, statistically significant relationship between work passion and employee creativity. Based on this finding, the study concludes that work passion enhances or promotes employee creativity within Nigerian universities. Additionally, the relationship

between the dimensions of work passion and the various measures of employee creativity was scrutinised.

The formulated research hypotheses were analysed, and inferences were drawn in this section. The administered questionnaires were retrieved, and the responses from the participants were collated. A positive Kendall tau_b value signifies a direct relationship, while a negative value signifies an inverse relationship. A direct relationship implies that an increase in one variable corresponds to an increase in the other. Conversely, an inverse relationship indicates that an increase in one variable corresponds to a decrease in the other. The Kendall tau_b values range from -1 to +1, with the strength of each relationship determined by the correlation value indicated by the Kendall tau_b coefficient. A value of $\pm 0.00-0.19$ implies a very weak correlation; $\pm 0.20-0.39$ indicates a weak correlation; $\pm 0.40-0.59$ suggests a moderate correlation; $\pm 0.60-0.79$ signifies a strong correlation; and $\pm 0.80-0.99$ denotes a very strong correlation. The decision criteria for each bivariate relationship, at a confidence interval of 95% or a significance level of 5%, depend on the probability value. A p-value of less than 0.05 indicates the rejection of the null hypothesis, while a p-value greater than 0.05 indicates the acceptance of the null hypothesis.

Table 4.1: Correlation Matrix for Harmonious Passion and the Measures of Employees' Creativity

			Correlations			
			Harmonious	Expertise	Creative-Thinking Skills	Intrinsic Task Motivation
Kendall's tau_b	Harmonious Passion	Correlation Coefficient	1.000	.725**	.756**	.697**
		Sig. (2-tailed)	.	.000	.000	.000
		N	245	245	245	245
	Expertise	Correlation Coefficient	.725**	1.000	.617**	.639**
		Sig. (2-tailed)	.000	.	.000	.000
		N	245	245	245	245
	Creative TS	Correlation Coefficient	.756**	.617**	1.000	.630**
		Sig. (2-tailed)	.000	.000	.	.000
		N	245	245	245	245
	Intrinsic TM	Correlation Coefficient	.697**	.639**	.630**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	245	245	245	245

**. Correlation is significant at the 0.01 level (2-tailed).

The table above gives the statistical representation of the relationships between the hypothesised variables.

As shown in Table 4.1, harmonious passion was revealed to have a positive and significant correlation with the measures of employees' creativity in the Federal Government-owned universities in the Niger Delta Region of Nigeria: expertise ($\beta = 0.725$, $p < 0.05$); creative-thinking skills ($\beta = 0.756$, $p < 0.05$) and intrinsic task motivation ($\beta = 0.697$, $p < 0.05$). The positive correlation implies a direct relationship between the variables. The probability value of all three hypotheses was 0.000, which happens to be less than 0.05; therefore, null hypotheses one, two, and three (H_{01} , H_{02} and H_{03}) above which state that "there is no significant relationship between harmonious passion and the measures of employees' creativity (expertise, creative-thinking skills, and intrinsic task motivation, respectively) in the Federal Government-owned universities in the Niger Delta Region of Nigeria" is rejected. Since it is a two-way test, rejecting a null hypothesis implies the acceptance of the alternate form. On this premise, the alternate forms of the various hypotheses which state that "there is a significantly positive correlation between harmonious passion and the measures of employees' creativity (expertise, creative-thinking skills, and intrinsic task motivation, respectively) in the Federal Government-owned universities in the Niger Delta Region of Nigeria" is accepted.

Table 4.2: Correlation Matrix for Obsessive Passion and the Measures of Employees' Creativity

			Correlations			
			Obsessive Passion	Expertise	Creative Thinking Skills	Intrinsic Task Motivation
Kendall's tau_b	Obsessive Passion	Correlation Coefficient	1.000	.385**	.422**	.367**
		Sig. (2-tailed)	.	.000	.000	.000
		N	245	245	245	245
	Expertise	Correlation Coefficient	.385**	1.000	.617**	.639**
		Sig. (2-tailed)	.000	.	.000	.000
		N	245	245	245	245
	Creative TS	Correlation Coefficient	.422**	.617**	1.000	.630**
		Sig. (2-tailed)	.000	.000	.	.000
		N	245	245	245	245
	Intrinsic TM	Correlation Coefficient	.367**	.639**	.630**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	245	245	245	245

** . Correlation is significant at the 0.01 level (2-tailed).

The Table above gives the statistical representation of the relationships that exist between the variables as hypothesised.

As shown in Table 4.2, obsessive passion was revealed to have a significantly positive but weak correlation with the measures of employees' creativity in the Federal Government-owned universities in the Niger Delta Region of Nigeria: expertise ($\beta = 0.385$, $p < 0.05$); creative-thinking skills ($\beta = 0.422$, $p < 0.05$) and intrinsic task motivation ($\beta = 0.367$, $p < 0.05$). The positive correlation implies a direct relationship between the variables. The probability value of all three hypotheses was 0.000, which happens to be less than 0.05; therefore, null hypotheses four, five, and six (H_{04} , H_{05} and H_{06}) above which state that "there is no significant relationship between obsessive passion and the measures of employees' creativity (expertise, creative-thinking skills, and intrinsic task motivation, respectively) in the Federal Government-owned universities in the Niger Delta Region of Nigeria" is rejected. Since it is a two-way test, rejecting a null hypothesis implies the acceptance of the alternate form. On this premise, the alternate forms of the various hypotheses which state that "there is a significantly positive correlation between obsessive passion and the measures of employees' creativity (expertise, creative-thinking skills, and intrinsic task motivation, respectively) in the Federal Government-owned universities in the Niger Delta Region of Nigeria" is accepted.

5.0 DISCUSSION OF FINDINGS, CONCLUSIONS, AND RECOMMENDATION

Work passion and employee creativity are vital resources for sustainable development, making investigating their correlation and underlying mechanisms essential. Work passion is a potent motivator, driving individuals to achieve their goals and excel in the workplace. However, leaders must understand the differences between obsessive and harmonious passion to cultivate a positive work environment that fosters creativity, and by extension motivation and performance.

Based on the above, this study explored the relationship between work passion and employee creativity in Federal Government-owned universities in the Niger Delta region of Nigeria, revealing a positive and significant correlation between the two variables. The findings suggest that creativity directly correlates with the work passion exhibited by employees. The study also examined how

different/specific dimensions of work passion relate to various measures of creativity. Results demonstrated a positive and significant relationship between harmonious passion and critical measures of employee creativity, such as expertise, creative thinking skills, and intrinsic task motivation, specifically in Federal Government-owned universities in the Niger Delta region of Nigeria. Based on these findings, the study concludes that harmonious passion significantly catalyses employee creativity in these institutions.

This relationship arises because harmonious passion becomes integral to the creative process, stemming from an individual's autonomous integration of work into their identity, which fosters a genuine desire to engage in work voluntarily. Employees recognise their work's significance without constant thought. Harmonious passion surfaces when individuals freely choose valuable activities backed by physical and social factors. Employees with this passion immerse deeply, effectively manage challenges, and enjoy their work. This synergy not only improves attitudes and behaviours but also creates a positive work atmosphere, driving work effort, satisfaction, performance, and interpersonal relationships. In contrast, obsessive passion can lead to burnout, while harmonious passion correlates with well-being and intrinsic motivation, enhancing autonomy and creativity. Those with harmonious passion showcase competence, integrate their jobs into their identities, defy norms, and innovate (Wang et al., 2021). Research indicates they often reach/experience flow, a state of deep concentration and enjoyment linked to heightened creativity and risk-taking vital for innovative ideas (Zito et al., 2022; Pollack et al., 2020; Yadav & Dhar, 2021). They seek knowledge and skills, reinforcing adaptability and creativity, which are essential for organisational growth. Studies show that such employees are more collaborative, enabling significant breakthroughs. Their passion influences emotional experiences in creativity, evolving through innate abilities and a pursuit of excellence. Evidence ties harmonious passion to innovative cognitive styles, propelling creative thought and new ideas, particularly in supportive settings. It boosts intrinsic motivation, inspires exploration, and fosters innovation, yielding novel concepts. Employees who are intrinsically motivated and willing to take risks are more likely to think outside the box and come up with unconventional solutions to problems. This ability to think outside the box or think beyond the confines of conventional paradigms and generate unconventional or unorthodox solutions is a crucial aspect of

creativity and can lead to ground breaking innovations within the university systems. Harmonious passion is vital for a positive mood that supports creativity. It enhances expertise, creative thinking, and task motivation, aligning with Amabile's theory on the role of intrinsic motivation in creativity within social contexts.

Conversely, the study found a positive but weak relationship between obsessive passion and measures of employee creativity (expertise, creative thinking skills, and intrinsic task motivation) in Federal Government-owned universities in the Niger Delta region of Nigeria. Thus, the study concludes that while obsessive passion influences employee creativity, expertise, creative thinking skills, and intrinsic task motivation, its role is weaker when compared to the role of harmonious passion in the same regard. This finding suggests that obsessive passion, which is a form of work passion that arises from a compulsive and uncontrollable internalisation of work into one's identity—drives employees to have a compulsive drive to engage in the activity, often at the expense of leisure and family time is less likely to foster creativity and its dimensions as in the case of harmonious passion.

This finding may be explained by the fact that, as the research consistently demonstrates, individuals with high levels of obsessive passion are more prone to burnout and lower job satisfaction, suggesting that the negative effects—such as burnout—can hinder workplace creativity. Moreover, employees with high obsessive passion may struggle to maintain positive interpersonal relationships and collaborate less effectively with colleagues, further obstructing creativity. These challenges can create a difficult work environment, limiting employees' ability to express and explore creative ideas. Consequently, organisations may miss valuable insights and innovative solutions critical to their success and competitiveness.

Overall, the findings of this study reaffirm the dualistic model of passion, categorising it into harmonious or obsessive types (Vallerand et al., 2003). The results underscore that harmonious passion consistently correlates with positive outcomes compared to obsessive passion within the Nigerian context. Positive emotions enhance harmonious passions, while negative emotions reinforce obsessive passions. Both emotional states and passion orientations significantly influence performance, leading to either positive or negative outcomes (Vallerand et al., 2008). These dualistic passions delineate two pathways: one

leading to goal mastery, deliberate practice, and successful performance, and the other resulting in goal avoidance, inefficient practices, and poor performance (Vallerand et al., 2008).

Based on the results and conclusions discussed, the following recommendations are proposed:

- i. Recognising that employees' creative efforts are essential for achieving sustainable innovation, the management of Nigerian universities should foster a culture that values passion and creativity as this will actively inspire their employees' passion for work to boost creativity and overall organisational performance.
- ii. Management in Nigerian universities must consistently promote harmonious passion among employees to spark creativity within the university system. Harmonious passion can thrive in a work environment where employees find their tasks enjoyable, meaningful, and aligned with their identities, leading to increased creativity and innovation.
- iii. Given the critical role of harmonious passion in driving employee creativity, Nigerian universities should revise their recruitment and selection practices and create work environments that support employees' harmonious passion. Prioritising candidates who seek engaging and challenging activities, demonstrate initiative in problem-solving, and exhibit a strong orientation toward autonomy is likely to result in a workforce that develops a harmonious passion for their work, thereby enhancing creativity.
- iv. Organisations that create a supportive work environment can significantly enhance employee creativity, resulting in innovative solutions and better overall performance. This can be accomplished by fostering work engagement and supportive supervision, providing professional development opportunities, emphasising flexible work designs and practices that empower employees, encouraging them to take ownership and pride in their work while fostering a sense of autonomy, encouraging open communication, and recognising employee contributions. In this way, organisations stimulate creativity while developing a more passionate, engaged and motivated workforce, thereby nurturing an atmosphere where innovative ideas can flourish.
- v. Cultivating harmonious passion among university employees can lead to a positive work environment that enhances creativity and performance. To

achieve this, university management can implement several strategies: providing employees and teams with the necessary autonomy to fulfil their responsibilities; offering meaningful work to instil a sense of purpose; recognising and rewarding achievements to cultivate ownership and pride; facilitating collaboration and mutual support to encourage learning and idea sharing; organising training programs focused on team building, the benefits of open communication, and related topics; and promoting a corporate culture rooted in trust and respect. Collectively, these strategies can inspire harmonious workplace passion among both management and staff.

- vi. It is essential to recognise that failing to devote adequate energy, time, and relevant resources and neglecting to develop strategies, policies, processes, and procedures that encourage creativity in the academic setting would be imprudent. This is especially critical in a university environment, where creativity is vital for fulfilling the core mandates of teaching, research, and learning. One can only imagine the heightened levels of creativity that intrinsically motivated individuals could achieve if the environment also fostered extrinsic motivation for creativity.
- vii. According to Csíkszentmihályi's theory of autotelic creativity (Csíkszentmihályi, 1997), intrinsic motivation can be so compelling that the act of creativity itself is a reward. This presents a challenge when it comes to providing appropriate incentives, as rewards and compensation may undermine creative motivation if they are perceived as controlling. This is often seen in cases of obsessive passion for work. In contrast, when rewards are viewed as recognition of one's competence—typical of harmonious passion—they can enhance motivation. Creative efforts may feel burdensome if the reward structure pressures individuals to produce, which is characteristic of obsessive passion. Just as inspiration cannot be forced, creativity cannot be demanded on command. However, when compensation is viewed as a well-deserved acknowledgement of creative contributions, reflecting harmonious passion, it becomes an appealing incentive (Amabile, 2012) and an intuitive reward for creativity.

Research indicates that financial rewards and recognition are not the only forms of compensation; social recognition for creativity can also serve as a significant motivator (Insoll & Mäkiyörö, 2018). Employees are more likely to develop creative solutions when they expect positive feedback for their efforts (Ford,

1996). This encouragement can take simple forms, such as a high-five, a pat on the back, or supportive words from management. Studies show that for some employees, the very act of being creative can be rewarding. This phenomenon, known as autotelic creativity, occurs when the intrinsic motivation for creativity is so strong that simply having the opportunity to be creative is a reward in itself (Csíkszentmihályi, 1997).

SUGGESTIONS FOR FURTHER RESEARCH

The results offer novel insights into the relationship between work passion and employee creativity. Specifically, this study advances the contextualised role of work passion as an antecedent of employee creativity. Hence, the results contribute to the broadening of the domain and add to the existing stock of knowledge in this area of organisational behaviour and management. This study opens avenues for future research to deepen the understanding of these concepts and examine their connections to individual and organisational outcomes. The findings empirically reaffirm, within the Nigerian context, that harmonious passion is more consistently associated with positive outcomes than its obsessive counterpart. Future studies could investigate the antecedents of harmonious passion in the Nigerian context. Additionally, exploring the relationship between these concepts across different sectors may reveal whether the findings vary by industry within the Nigerian context. Investigating variables that may moderate the relationship between work passion and creativity would also be worthwhile. It is hoped that this study on the correlation between work passion and employee creativity provides valuable insights and directions for subsequent research in the field of organisational behaviour and management.

APPENDIX

WORK PASSION SCALE						
	Items	Strongly disagree =1	Disagree =2	Not sure/ Neutral=3	Agree =4	Strongly agree=5
	Harmonious Passion					
1	My work allows me to live a variety of experiences					
2	The new things that I discover within the confines of my work allow me to appreciate it even more					
3	My line of work reflects the qualities I like about myself					
4	My work is in harmony with the other activities in my life					

5	My work is a passion, that I still manage to control					
6	My work allows me to live memorable experiences					
7	I am completely taken with my work					
8	My work is well integrated in my life					
9	My work is in harmony with other things that are part of me					
Obsessive Passion						
10	I cannot live without my work					
11	The urge is so strong, I can't help myself from doing my work					
12	I have difficulty imagining my life without my work					
13	I am emotionally dependent on my work					
14	I have a tough time controlling my need to do my work					
15	I have almost an obsessive feeling for my work					
16	My mood depends on my being able to do my work					
17	I have difficulties controlling my urge to work					
18	Work is the only thing that really turns me on					
19	If I could, I would only work					
20	I have the impression that my work controls me					
21	Work is so exciting that I sometimes lose control over it					

Source: Smith, R.W.; Min, H.; Ng, M.A.; and Haynes, N.; and Clark, M. A. (2022) "A Content Validation of Work Passion: Was the Passion Ever There?" Journal of Business and Psychology, Vol. 38, No. 1, (March). PP.1-67. DOI:10.1007/s10869-022-09807-1

Note. Items Number 1-9 represent harmonious passion items; while items number 10-21 represent obsessive passion items.

Table 1: Sample items for Employees' Creativity Scale

S/N	Items		Strongly disagree =1	Disagree =2	Not sure/ neither agree nor disagree=3	Agree =4	Strongly agree=5
1	Expertise or Domain-Relevant Skills and Knowledge. Adapted from Sawyer (1992)	I am very clear as to the processes involved in the execution of my duties.					
2		I am very certain about the procedures I need to use in executing various aspects of my job.					
3	Creative-Thinking Skills and Processes	I am confident in my ability to generate new ideas concerning the					

	Adapted from Tierney (1997).	work I do and in the overall best interest of the organisation.					
4		I have confidence in my ability to do the right things in my work and to bring in new ideas.					
5	Intrinsic Task Motivation Adapted from Eisenberger and Rhoades (2001).	I find my present job to be interesting and enjoyable.					
6		My present job is rather unpleasant and boring. I wish I could be given another job.					

REFERENCES

1. Alferaih, A. (2021). How does emotional intelligence improve employee satisfaction and performance with mediating effect of employee engagement? Perspective from Saudi Arabian private companies. *International Journal of Advanced and Applied Sciences*, 8(8). PP. 79-93. DOI:10.21833/ijaas.2021.08.011. [semanticscholar.org](https://www.semanticscholar.org)
2. Amabile, T. M, Mueller, J. S., Simpson, W. B., Hadley, C. N., Kramer, S. J., & Fleming, L. (2002). Time Pressure and Creativity in Organizations: A Longitudinal Field Study. Harvard Business School Working Paper
3. Amabile, T. M. (1983). The Social Psychology of Creativity: A Componential Conceptualization. *Journal of Personality and Social Psychology*, 45 (2), 357- 376.
4. Amabile, T. M. (1997). Motivating Creativity in Organizations: On Doing What You Love and Loving What You Do. *California Management Review*, 40 (1), 39-58.
5. Amabile, T. M. (2012). Componential Theory of Creativity. Harvard Business School Working Paper.
6. Amabile, T. M., and Fisher, C. M. (2009). Stimulate Creativity by fuelling Passion. In E. A. Locke (Ed.), *Basic Principles of Organisational Behaviour: A handbook* (2nd ed.). Oxford, England: Blackwell. PP. 331–341
7. Amiot, C. E., Vallerand, R. J., and Blanchard, C. (2006). Passion and psychological adjustment: A test of the person-environment fit hypothesis. *Personality and Social Psychology Bulletin*, 32, 220 –229. doi: 10.1177/0146167205280250

8. Appu, A.V. & S. K. Sia, (2017). "Creativity at workplace: role of self-efficacy and harmonious passion." *International Journal of Human Resources Development and Management*, Inderscience Enterprises Ltd, Vol. 17, No. 3-4 (October). PP. 205–219. <https://doi.org/10.1504/IJHRDM.2017.087112>
9. Clercq, D. D. and Pereira, R. (2019) "Knowledge-sharing efforts and employee creative behavior: the invigorating roles of passion for work, time sufficiency and procedural justice." *Journal of Knowledge Management*, Volume 24, Issue 5 (June).
10. Csíkszentmihályi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York: Basic Books.
11. Csíkszentmihályi, M. (2006). *A Systems Perspective on Creativity*. In: J. Henry, ed. *Creative Management and Development*. 3rd edition. London: SAGE Publications Ltd. pp. 3-17.
12. Csíkszentmihályi, M. (2009). *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper Collins.
13. Dey, T.; Thakur, M.; and Srinivas, E.S. (2015) "Passionately Curious: How passion affects creativity in the context of supervisory support." *International Journal of Innovation, Creativity and Change*. Volume 2, Issue 2, (November). www.ijicc.net
14. Eissa, G. (2020). Individual initiative and burnout as antecedents of employee expediency and the moderating role of conscientiousness. *Journal of Business Research* Vol. 110, (March). PP. 202-212
15. Ford, C. M. (1996). A Theory of Individual Creative Action in Multiple Social Domains. *Academy of Management Review*, 21 (4), 1112-1142.
16. Fossa, P., Pérez, R. M., & Marcotti, C. M. (2020). The Relationship Between the Inner Speech and Emotions: Revisiting the Study of Passions in Psychology. *Human Arenas*. 3. [10.1007/s42087-019-00079-5](https://doi.org/10.1007/s42087-019-00079-5).
17. Glăveanu, V. P. & Beghetto, R. A. (2020) Creative Experience: A Non-Standard Definition of Creativity. *Creativity Research Journal*. Vol. 33, No. 7 (October). PP. 1-6. [10.1080/10400419.2020.1827606](https://doi.org/10.1080/10400419.2020.1827606).
18. Glăveanu, V. P. (2020). A Sociocultural Theory of Creativity: Bridging the Social, the Material, and the Psychological. *Review of General Psychology*. Vol. 24, No. 4 (December). PP. 335-354. [10.1177/1089268020961763](https://doi.org/10.1177/1089268020961763).

19. Gold, R. (2007). *The plenitude: Creativity, innovation, and making stuff*. The MIT Press
20. Goldberg, C. (1986). The interpersonal aim of creative endeavour. *Journal of Creative Behavior*, Vol. 20. PP. 35–48. <http://dx.doi.org/10.1002/j.2162-6057.1986.tb00415.x>
21. Hallam, E. & Ingold, T. (2021). *Creativity and cultural improvisation*. Routledge, London. eBook ISBN9781003135531
22. Hizarci-Payne, A. K., & Ozgen, O. (2020). The target of entrepreneurial passion under the role of passion types and culture: a conceptual framework. In *The Entrepreneurial Behaviour: Unveiling the cognitive and emotional aspect of entrepreneurship*. Emerald Publishing Limited. PP. 91-112.
23. Insoll, L., and Mäkiyö, J. (2018). *Creativity in Business Incubators: A Qualitative Study of the Influencers of Startup Employee Creativity in Incubators*. Degree Project. Umeå: Umeå University.
24. Jeon, K. S. & Choi, B. K. (2020). A multidimensional analysis of spiritual leadership, affective commitment and employees' creativity in South Korea. *Leadership & Organization Development Journal*. ahead-of-print. 10.1108/LODJ-08-2019-0352.
25. Lavigne G.L., Forest J., Fernet C., Crevier-Braud L. (2014) "Passion at work and workers' evaluations of job demands and resources: A longitudinal study: Passion and perceptions of demands and resources." *Journal of Applied Social Psychology*, Vol.44. PP. 255–265. doi: 10.1111/jasp.12209.
26. Liao, G. Y., Cheng, T. C. E., Shiau, W. L., & Teng, C. I. (2021). Impact of online gamers' conscientiousness on team function engagement and loyalty. *Decision Support Systems*, Vol. 142, No. 2, (December). DOI:10.1016/j.dss.2020.113468
27. Mageau, G., and Vallerand, R. J. (2007). The moderating effect of passion on the relation between activity engagement and positive affect. *Motivation and Emotion*, 31, 312–321. doi:10.1007/s11031-007-9071-z
28. Mappamiring, M., & Putra, A. H. P. K. (2021). Understanding career optimism on employee engagement: broaden-built and organisational theory perspective. *The Journal of Asian Finance, Economics and Business*, Vol. 8, No. 2. DOI:10.13106/jafeb.2021.Vol. 8, No. 2.0605. koreascience.kr
29. Mazzetti, G., Guglielmi, D., & Schaufeli, W. B. (2020). Same involvement, different reasons: How personality factors and organisations contribute to

- heavy work investment. *International journal of environmental research and public health*, 17(22). <https://doi.org/10.3390/ijerph17228550>. mdpi.com
30. McAllister, C.P., Harris J.N., Hochwarter W.A., Perrewe P.L., Ferris G.R. (2017) "Got Resources? A Multi-Sample Constructive Replication of Perceived Resource Availability's Role in Work Passion–Job Outcomes Relationships." *Journal of Business Psychology*. Vol. 32:147–164. doi: 10.1007/s10869-016-9441-1.
31. Meskelis, S., & Whittington, J. L. (2020). Driving employee engagement: how personality trait and leadership style impact the process. *Journal of Business & Industrial Marketing*, 35(10), 1457-1473. DOI:10.1108/JBIM-11-2019-0477
32. Nawaz, M., Javed, S., Shah, S. M. H., Mustafa, M., & Namatullah, A. (2021). Conceptualising supplier work passion in light of the Zigarmi's framework. *Management Science and Business Decisions*, 1(1). PP. 44-51. thescienceinsight.com
33. Newell, A. & Simon, B. (1972) *Human Problem Solving*. Prentice Hall, Eagle Cliff, NJ.
34. Orgambidez, A.; Alés, Yolanda Borrego & Gonçalves, Gabriela (2014) "Passionate workers: A Spanish adaptation of the Passion Scale." *Eur. J. Work. Organ. Psy.* Vol. 30:43–48. doi: 10.1016/j.rpto.2014.06.005.
35. Pati, S. P. (2012). Development of a measure of employee engagement. *The Indian Journal of Industrial Relations*, 48, 94-104.
36. Philippe, F. L., Vallerand, R. J., Houliort, N., Lavigne, G., and Donahue, E. G. (2010). Passion for an activity and quality of interpersonal relationships: The mediating role of emotions. *Journal of Personality and Social Psychology*, 98, 917–932.
37. Pollack, J. M., Ho, V. T., O'Boyle, E. H., & Kirkman, B. L. (2020). Passion at work: A meta-analysis of individual work outcomes. *Journal of Organizational Behavior*, 41(4). PP. 311-331. richmond.edu
38. Puccio, G. J., Burnett, C., Acar, S., Yudess, J. A., Holinger, M., & Cabra, J. F. (2020). Creative problem-solving in small groups: The effects of creativity training on idea generation, solution creativity, and leadership effectiveness. *The Journal of Creative Behavior*, 54(2), 453-471. academia.edu

39. Rousseau, F. L., and Vallerand, R. J. (2008). An examination of the relationship between passion and subjective well-being in older adults. *HARMONIOUS PASSION 15 International Journal of Aging and Human Development*, 66, 195–211. doi:10.2190/AG.66.3.b
40. Russ, S.W. (1993) *Affect and Creativity: The Role of Affect and Play in the Creative Process*. Routledge, New York. DOI <https://doi.org/10.4324/9780203772621>. eBook ISBN 9780203772621
41. Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, Vol. 30. PP. 933–958. Doi:10.1016/j.jm.2004.06.007
42. Shalley, C. & Perry-Smith, J. (2001) Effects of Social-Psychological Factors on Creative Performance: The Role of Informational and Controlling Expected Evaluation and Modelling Experience. *Organisational Behaviour and Human Decision Processes*. Vol. 84, No. 1. PP. 1-22. DOI:10.1006/obhd.2000.2918
43. Shin, S., & Zhou, J. (2003). Transformational Leadership, Conservation, and Creativity: Evidence from Korea. *Academy of Management Journal*, Vol. 46. PP. 703-714. <https://doi.org/10.5465/30040662>
44. Skinner, E. A. & Raine, K. E. (2022) Unlocking the positive synergy between engagement and motivation. *Handbook of research on student engagement*. PP. 25–56. 10.1007/978-3-031-07853-8_2.
45. Smilor, R.W. (1997) *Entrepreneurship: Reflections on a Subversive Activity*. *Journal of Business Venturing*, Vol. 12. PP. 341–346.
46. Smith, R.W.; Min, H.; Ng, M.A.; Haynes, N.; and Clark, M. A. (2022) “A Content Validation of Work Passion: Was the Passion Ever There?” *Journal of Business and Psychology*, Vol. 38, No. 1, (March). PP.1–67. DOI:10.1007/s10869-022-09807-1
47. Sungmala, N., & Verawat, A. (2021). The impact of employee engagement on employee performance: A case study of multinational corporations in Thailand. *The Journal of Asian Finance, Economics and Business*, Vol. 8, NO. 5. PP. 1091-1097. koreascience.kr

48. Supriyanto, A. S., Ekowati, V. M., & Pujianto, Z. T. (2021, April). Employee Engagement: A Quantitative Review and Its Relationship with Job Satisfaction and Employee Performance. In International Conference on Engineering, Technology and Social Science (ICONETOS 2020). Atlantis Press. PP. 268-273. DOI:10.2991/assehr.k.210421.038. atlantis-press.com
49. Topino, E., Di Fabio, A., Palazzeschi, L., & Gori, A. (2021). Personality traits, workers' age, and job satisfaction: The moderated effect of conscientiousness. 16(7). PloS one. doi: 10.1371/journal.pone.0252275. plos.org
50. Trépanier S.-G., Fernet C., Austin S., Forest J., Vallerand R.J. (2014) "Linking job demands and resources to burnout and work engagement: Does passion underlie these differential relationships?" *Motiv Emot.* Vol. 38. PP. 353–366. Doi: 10.1007/s11031-013-9384-z.
51. Vallerand R.J., Blanchard C., Mageua G.A., Koestner R., Léonard M., Marsolais J. Les passions de l'âme: (2003) "On Obsessive and Harmonious Passion." *J. Pers. Soc. Psychol.* Vol. 85:756–767. doi: 10.1037/0022-3514.85.4.756.
52. Vallerand R.J., Houlfort N. (2019) *Passion for Work: Theory, Research, and Applications*. Oxford University Press; New York, NY, USA.
53. Vallerand, R. J., and Miquelon, P. (2007). Passion for sport in athletes. In S. Jowett and D. Lavallée (Eds.), *Social psychology in sport* (pp. 249 –263). Champaign, IL: Human Kinetics.
54. Vallerand, R. J., Houlfort, N., & Forest, J. (2014). Passion for work: Determinants and outcomes. In M. Gagné (Ed.), *The Oxford Handbook of Work Engagement, Motivation, and Self-determination Theory*. Oxford, UK: Oxford University Press. PP. 85–105.
55. Van Tuin, L., Schaufeli, W. B., Van den Broeck, A., & van Rhenen, W. (2020). A corporate purpose as an antecedent to employee motivation and work engagement. *Frontiers in Psychology*, Vol. 11. DOI:10.3389/fpsyg.2020.572343. frontiersin.org
56. Wang, D.; Quang, Z.; and Quyang, L (2021) "One glories, all glory: role of inclusiveness behaviour in creativity." *Current Psychology*, Vol. 41, PP. 8449–8460.
57. Yadav, A. & Dhar, R. L. (2021). Linking frontline hotel employees' job crafting to service recovery performance: The roles of harmonious passion,

promotion focus, hotel work experience, and gender. Journal of Hospitality and Tourism Management.

58. Zigarmi, D.; Dobie Houson, David Wi t t, and J im Diehl (2011) Employee Work Passion: Connecting the Dots. "Perspectives" The Ken Blanchard Companies. www.kenlanchard.com

59. Zito, M., Emanuel, F., Bertola, L., Russo, V., & Colombo, L. (2022). Passion and flow at work for the reduction of exhaustion at work in nursing staff. SAGE Open, 12(2), 21582440221095009. sagepub.com