# Linking perceived organisational support and employee creativity: examining the roles of work engagement, intrinsic motivation, and extrinsic rewards

العلاقة بين الدعم التنظيمي المدرك و إبداع الموظف: دراسة أدوار الإرتباط بالعمل و الدافع الداخلي والمكافآت الخارجية

**by**

**HAZEM J. ALDABBAS**

**A thesis submitted in fulfilment**

**of the requirements for the degree of**

**DOCTOR OF PHILOSOPHY IN BUSINESS MANAGEMENT**

**at**

**The British University in Dubai**

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**Thesis Supervisor**

**Dr. Abdelmounaim Lahrech, Prof. Husam Al-Malkawi**

**Approved for award:**

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Name                                                   Name

Designation                                        Designation

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# Abstract

The aim of the research is to examine the moderating roles of intrinsic motivation and extrinsic rewards in the relationship between perceived organisation support and employee creativity as mediated by work engagement. The study implemented the PROCESS macro (Hayes 2018) to test the hypotheses, including the multiple moderated mediation model (intrinsic motivation, extrinsic rewards and work engagement). The survey was completed by 372 respondents employed in the United Arab Emirates in three different industries (banks, information technology, hospitals). The main findings are that perceived organisational support indirectly influences employee creativity through work engagement. Moreover, the effect of perceived organisation support on work engagement is moderated by intrinsic motivation. Further, the effect of work engagement on employee creativity is moderated by extrinsic rewards. These model effects are stronger for employees with high intrinsic motivation and extrinsic rewards. Interestingly, the relationship between perceived organisational support and employee creativity moderated by intrinsic motivation and extrinsic rewards is simultaneously mediated by work engagement. The study recommends firstly that organisation managers can encourage direct managers to support their employees. Second, develop programs to motive employees, to let them feel that they are important and dynamic. Finally, organisations provide employees with the requisite job resources (e.g. support, care, rewards, feedback). to strengthen employee creativity in organisations operating in the UAE, and possibly elsewhere.

Keywords. Perceived organizational support, work engagement, intrinsic motivation, extrinsic rewards for creativity, employee creativity, social exchange theory.

**الملخص**

الهدف من هذه الدراسة هو تطوير نموذج شامل من خلال دراسة تأثير إدراك الموظف على الإبداع وكما تهدف إلى اختبار الإطار المفاهيمي الذي يربط بين الدعم التنظيمي المدرك وإبداع الموظف من خلال نموذج وساطة مركبة متعددة (الدافع الداخلي والمكافآت الخارجية والمشاركة في العمل).

تم إجراء الاستبيان على 372 موظف يعملون في دولة الإمارات العربية المتحدة في ثلاث صناعات مختلفة (الخدمات المصرفية و تكنولوجيا المعلومات والمستشفيات). خلصت الدراسة الى أن النتائج الرئيسية هي : المشاركة في العمل تساهم كدور الوسيط بين دعم المنظمة المدرك وإبداع الموظف. علاوة على ذلك ، فإن تأثير الدعم التنظيمي المدرك على الإرتباط في العمل يتم تحسينه وزيادته من خلال الدوافع الذاتية ، بالأضافة الى أن العلاقة بين الإرتباط في العمل و إبداع الموظف يتم تقويتها من خلال المكافآت الخارجية ، حيث تبين أن كلاً هذين النموذجين أقوى بالنسبة للموظفين في حالة ارتفاع الدوافع الذاتية والمكافآت الخارجية. ومن المثير للاهتمام أن تأثير العلاقة بين الدعم التنظيمي المدرك وإبداع الموظف يخضع لمجموعة وسائط مركبه وهي الإرتباط في العمل والدافع الداخلي والمكافآت الخارجية في وقت واحد.

توصي الدراسة أولاً بأن مدراء المؤسسات يمكنهم تشجيع موظفيهم  في العديد من الجوانب مثل خلق ثقافة الدعم المؤسسي وتقديم توجيهات منتظمة حول أهمية دعم الموظفين. ثانيًا ، ان يقوم المدير المباشر او دائرة الموارد البشرية بتطوير برامج لتحفيز الموظفين ، لجعلهم يشعرون بأنهم مهمون ليس فقط للمؤسسة ولكن أيضًا أنهم ديناميكيون وقادرين على تحقيق اهداف المؤسسة .  أخيرًا ، لتعزيز إبداع الموظفين في المؤسسات العاملة في دولة الإمارات العربية المتحدة ، وربما في أي مكان آخر ، هناك توصية بأن تزود المؤسسات الموظفين بالموارد الوظيفية المطلوبة (مثل الدعم والرعاية والمكافآت والتغذية الراجعة).

الكلمات الدالة. الدعم التنظيمي المدرك ، المشاركة في العمل ، الدافع الداخلي ، المكافآت الخارجية للإبداع ، إبداع الموظف ، نظرية التبادل الاجتماعي.

# Dedication

This doctoral thesis is dedicated to my father's soul, 'May Allah Bless Him'.

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First and foremost, I thank God for bringing me to this stage. My sincere gratitude to my supervisors, Dr. Abdelmounaim Lahrech for his unwavering support, for which I am grateful, and Prof. Husam Al-Malkawi for his helpful suggestions during my PhD journey.

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# List of abbreviations

AVE      Average Variance Extracted

CET      Cognitive Evaluation Theory

CFA      Confirmatory Factor Analysis

CI      Confidence Interval

CMV      Common Method Variance

CR      Composite Reliability

EC      Employee Creativity

EFA      Exploratory Factor Analysis

HR      Human Resources

ERFC      Extrinsic Rewards for Creativity or Extrinsic Rewards

IM      Intrinsic Motivation

IT      Information Technology

IWB      Innovative Work Behaviour

JD-R      Job Demands-Resources

KMO      Kaiser-Meyer-Olkin

LLCI      Lower Limit Confidence Interval

LMX      Leader-Member Exchange

MMM      Multiple Moderated Mediation or Moderated Moderated-Mediation

NIS      National Innovation Strategy

OLS      Ordinary Least Square

OST      Organisational Support Theory

PCA      Principle Component Analysis

PLS      Partial Least Squares

POB        Positive Organisational Behaviour

POS        Perceived Organisational Support

PSS        Perceived Supervisor Support

R&D        Research and Development

RMR        Root Mean Square Residual

RMSEA The Root Mean Square Error of Approximation

SDT        Self-Determination Theory

SE        Standard Error

SEM        Structural Equation Modelling

SET        Social Exchange Theory

SPSS        Statistical Package for the Social Sciences

SRMR        The Standardized Root Mean Square

UAE        United Arab Emirates

ULCI        Upper Limit Confidence Interval

USA        United States of America

VIF        Variance Inflation Factor

WE        Work Engagement

# Chapter 1: Introduction

This chapter provides an overview of the study. It begins by describing the research's background, problem statement, research questions, gaps in the literature, aim and objectives, including the rationale for studying the relationship between perceived organisational support and employee creativity through work engagement, intrinsic motivation and extrinsic rewards for creativity (hereafter referred to as 'extrinsic rewards').

The chapter continues by outlining the research context, which focuses on professional employees in the service sector, specifically, three industries in the United Arab Emirates (UAE)—banks, information technology (IT), and hospitals—as well as the factors that led to this choice. A brief description of the research methodology as well as the sampling and data collection methods is provided. The chapter also discusses how this thesis contributes to the body of academic knowledge and closes by outlining the structure of the thesis.

## 1.1. Background of the study

"Creativity, as has been said, consists largely of rearranging what we know in order to find out what we do not know. Hence, to think creatively, we must be able to look afresh at what we normally take for granted".

*(George Kneller 1965, 38)*

Industrial organisational psychologists, behaviourists, and business management researchers and practitioners interested in creativity can help their organisation grow and become sustainable. The psychological study of creativity is crucial to human development (Hennessey

& Amabile 2010). Over the past 30 years, research on creativity and fundamental motivational processes has been published in elite journals, creating knowledge for academics and practitioners at a growing rate (Liu et al. 2016). Exploring 1,400 documents for the period 1990–2015, Williams et al. (2016) found that 36% of the documents reflect three dominant concentrations of creativity research: innovation in the workplace, the role of personality and intelligence in divergent thinking, and creative performance with a focus on idea generation. Therefore, employee creativity is considered one of the crucial components of organisational effectiveness and success (Shafi et al. 2020; Tse, To & Chiu 2018). Moreover, researchers' consideration of creativity and innovation has increased dramatically over the past 28 years (Amabile & Pratt 2016). As a result, creativity is broadly known as an important 21st-century survival skill (Puccio 2017). It is also evident from the arguments that creativity is now considered a crucial component for an organisation's success, sustainability and innovativeness.

Creativity and innovation in work settings have become progressively more crucial bases of organisational performance, accomplishment and existence (Anderson, Potočnik & Zhou 2014). Moreover, creativity and innovation in workplaces have been considered key factors for attaining a sustained competitive advantage, specifically in the new global economy (Politis 2005). Therefore, creativity permits organisations to continually create innovative products and make them competitive in the market (Kim & Kim 2020). Afsar, Masood and Umrani (2019) stated that the more individuals are engaged in crafting tasks, the more they will trust that they can come up with creative and novel ideas. Abukhait, Bani-Melhem and Zeffane (2019) suggested that, when employees trust that they are empowered by the right tools and knowledge, then they are in a position to participate by generating creative ideas that lead to innovative behaviours and the improved well-being of their organisations. Although research

on creativity is abundant, the models that identify factors that influence this relationship are limited (Malik & Butt 2017). As a result, scholars are paying close attention to the topic of individual creativity (Wang, Bu & Cai 2021). This interest in creativity has a long history, beginning with scholars who sought to understand creativity at an individual level and to determine some adjectives that can be used to describe a creative person. For instance, Gough (1979) uses five adjectives to describe personality creativity: inspired, insightful, smart, unique and practical.

Generating new ideas and translating them into innovation is essential to maintaining a competitive advantage (Acar, Tarakci & van Knippenberg 2019). It is evident from the literature that employee creativity is crucial for individual innovation; this is reflected in the findings of a metanalytic review that concluded that leadership styles are understood by studying individual creativity and innovation (Lee et al. 2020). However, the review found that the majority of studies in the sample were linked with individual creativity (n=222, 66%) rather than individual innovation (n=114, 34%), which proves that employee creativity has received more attention from scholars and practitioners who study these concepts at the individual level. In addition, there is an argument that innovation may not happen without idea generation; this is the reason behind studies of individual creativity that concern idea generation and development. However, creativity and innovation are important for organisations to sustain a competitive advantage. Govindarajan (2010) stated that 'companies tend to focus far more attention on improving the front end of the innovation process, the creativity.' Further, Thomas Edison, the greatest innovator of all time, put it well: 'Innovation is 1% inspiration and 99% perspiration' (Govindarajan 2010).

To achieve the employee creativity in the UAE organisations, the study proposes important antecedents such as: work engagement is an affective-motivational and work-related state of an employee's satisfaction (Schaufeli & Bakker 2004). In line with changes in the workplace, work engagement can offer the required motivation for employees to behave in ways that are needed for changes to be successfully executed (Heuvel et al. 2020). Consequently, work engagement has become a crucial concept in today's business environment, not only because of its three dimensions (vigour, dedication and absorption), but also for the power that the combination of these dimensions can have on influencing individual employees to achieve positive outcomes. Therefore, work engagement has emerged as one of the most crucial topics in management for both academics and practitioners (Saks 2021).

Effective organisation of creativity requires supporting a climate of creativity and enhancing employee's readiness to engage in creative activities. To enhance employee creativity requires intense valuing employee's contribution (e.g. POS). The influence of organisation support on employee's creativity is therefore likely to be mediated by employees' levels of work engagement. Perceived organisational support (POS) is affected by the different facets of an employee's treatment by a company; in essence, it shapes an employee's perception of the company's reasons for such treatment. Individual employees' perceptions create expectations for future treatment by their organisation; these can take different forms, such as future illnesses, work errors or mistakes, higher performance and the company's ability to pay a reasonable wage and make work enjoyable and exciting (Eisenberger et al. 1986). Therefore, POS contributes to individuals' commitment to their organisation and to their positive attitude and behaviour (Eisenberger, Shanock & Wen 2020). It is evident from the research that POS is built from social exchange theory (SET). One example of POS may be that employees now fear becoming ill with COVID-19; thus, a recent empirical study conducted in the United States

(US) found that employees with higher levels of POS showed lower levels of emotional exhaustion, regardless of whether their job insecurity level was low or high (Chen & Eyoun 2021).

Intrinsic and extrinsic types of motivation have been thoroughly studied; however, the social-contextual factors that promote one's sense of competence, autonomy and relatedness are more likely to be the basis for preserving one's intrinsic motivation and self-determination compared to extrinsic motivation (Ryan & Deci 2000). Thus, psychologists, human resources managers and sociologists have long emphasised the main role played by intrinsic motivation, but the fact remains that external incentive schemes may sometimes backfire, especially in the long run (Bénabou & Tirole 2003). There is a clear debate in the literature regarding whether or not extrinsic rewards diminish intrinsic motivation. Eisenberger and Cameron (1996) stated that there are consistent advantages to providing rewards that are either verbal or tangible; specifically, after receiving a reward, individuals expend more time on a task than before receiving the reward. Meanwhile, based on a meta-analytics study (Deci, Koestner & Ryan 1999), other schools of thought have noted that extrinsic rewards significantly undermine intrinsic motivation. A significant number of publications have shown that utilising extrinsic rewards to encourage someone could backfire and, specifically, such rewards may have a detrimental effect on employees' consistency and creativity (Sansone & Harackiewicz 2000). One of the interesting questions investigated in the present thesis is: Do extrinsic rewards diminish intrinsic motivation and creativity?

This study relies on many theories to assist the comprehensive understanding of the theoretical background. First, SET is considered central to this study and provides deeper insights based on a theoretical framework that is used to examine the research questions and hypotheses.

Cropanzano and Mitchell (2005) highlighted that SET is considered one of the prominent theoretical views in the social sciences relating to business management (Cropanzano et al. 2017). Social exchange relations encompass a sequence of connections and relationships that create unspecified obligations (Gruman & Saks 2011; Xanthopoulou et al. 2009). From this view of SET, social influence procedures are embedded in social interactions (Song & Gu 2020). Since POS is driven by organisational support theory (OST), it is able to create a social exchange process in which individuals feel obligated to assist the organisation in attaining its objectives and goals, and in which they suppose that enhanced performance on the organisation's behalf will lead to superior results (Kurtessis et al. 2017). Therefore, OST assumes that employees form a general perception concerning the extent to which the organisation values their contributions and cares about their well-being (e.g. POS; Kurtessis et al. 2017).

The third theory applied in this thesis is the job demands-resources (JD-R) model, which is considered popular among academics and practitioners because of its inclusive, broad, agile and communicative nature (Schaufeli 2017). Using this approach, Schaufeli (2017) framed burnout as a mediator between job demands and negative outcomes, and work engagement as a mediator between job resources and positive outcomes. This thesis identifies work engagement as best incorporated through the JD-R model because of its flexibility as a mechanism in the overall process (e.g. work engagement) between the antecedents (e.g. POS) and its consequences (e.g. employee engagement and creativity). As such, it provides the theoretical background for understanding the intermediation role. Moreover, the JD-R model has been used extensively in research on the predictors or antecedents of employee engagement (Saks 2021). Consequently, the model suggests that job resources should be considered as motivational mechanisms that contribute to stronger work engagement; they also may be

intrinsically motivational by encouraging employee development and learning, or extrinsically motivational by enabling individuals to accomplish their objectives (Nahrgang, Morgeson & Hofmann 2011).

The fourth theory applied here, self-determination theory (SDT), involves two concepts: intrinsic motivation and extrinsic rewards. It is crucial to discuss in this thesis the deep debate between intrinsic motivation and extrinsic rewards. Thus, the study explores when and how POS can affect employee creativity, as explained through SDT. However, SDT suggests that autonomous and controlled motivations vary in terms of both their fundamental regulatory mechanisms and their accompanying interactions; it also advocates that individual behaviour may be classified in terms of the degree to which it is autonomous vs controlled. Therefore, the theory concentrates on the effects of the degree to which people are able to fulfil their needs (e.g. competence, autonomy and relatedness) within social settings (Gagné & Deci 2005).

Fifth, the outcome explored in the entire thesis is employee creativity; thus, the researcher applies the componential model of creativity, which is accepted as one of the main theories of creativity for individuals and organisations, and it acts as a partial basis for many other theories and several empirical examinations. It was first articulated by Teresa Amabile in 1983 and has since undergone significant evolution (Amabile 2012). However, Amabile, Goldfarb and Brackfield (1990) stated that intrinsic motivation will be beneficial to creativity, and extrinsic motivation will be harmful; thus, intrinsic motivation will generate more creative work activities than will extrinsic motivation. The componential model of creativity is supported by a large body of research, both by Amabile and her colleagues as well as that of other scholars (Plucker, Beghetto & Dow 2004). It is evident from the literature that this model is concerned with workplace environments which can affect employee motivation and creativity. However,

researchers must continue to explain unsettled issues related to creativity (Malik, Choi & Butt 2019).

In summary, the main theory utilised in the thesis is SET, and the other four theories (OST, JD-R, SDT, and the componential model of creativity) have been deployed to strengthen the theoretical background and to offer an integrative model of the concepts and constructs explored here (POS, work engagement, intrinsic motivation, extrinsic rewards, and employee creativity). Although SET concerns exchange among groups, organisations and systems, it is not limited to individual transactions (Zafirovski 2005). However, the current study is mainly focused on individual exchange relations in employee–employer relationships, specifically, how individual employees perceive this relationship. Moreover, the four other theories are also focused on understanding employees at the individual level. The next section discusses the research problem.

## 1.2 Problem statement

The aim of a problem statement is to discover the unknown (Khalid, Hilman & Kumar 2012). The present study's problem statement is developed from two perspectives. First, this research argues that POS enhances employees' work engagement, which affects employee creativity and leads to beneficial outcomes for their organisations. The research problem investigates the relationship between POS and employee creativity. Informed by debates in the literature, OST and SET are applied because of their similarities and differences in explaining the hypothesised relationships in the model. Specifically, this research responds to the call for a more comprehensive model of the relationship between POS and employee creativity (Eisenberger, Shanock & Wen 2020; Zhang, Bu & Wee 2016). Considering the inconsistent results of

previous studies, some researchers have argued that the association between POS and employee creativity is widely debated (Zhang, Bu & Wee 2016). Two empirical studies—Zhang, Bu and Wee (2016) and Tang et al. (2017)—find a positive and significant association between POS and employee creativity, while other research finds no significant relationship between the variables (Akgunduz, Alkan & Gök 2018; Agarwal 2014a; Suifan, Abdallah & Al-Janini 2018; Zaitouni & Ouakouak 2018). As a result, a review of the literature reveals challenges in determining the relationship between POS and employee creativity.

The second perspective, involving intrinsic motivation and extrinsic rewards, has long been debated in the literature. SDT posits that the presence of extrinsic rewards will diminish intrinsic motivation, and many scholars have found that extrinsic rewards diminish intrinsic motivation and creativity (Amabile 2012; Deci, Koestner & Ryan 1999; Hennessey & Amabile 2010; Malek, Sarin & Haon 2020; Ryan & Deci 2020; Zhou & Shalley 2010). Meanwhile, others have stated that this is not necessarily the case (Chua and Ayoko 2019; Eisenberger & Cameron 1996; Yoon, Sung & Choi 2015). Yoon et al. (2015) find that extrinsic motivation relates positively and significantly to creativity, but that there is no association between intrinsic motivation and creativity. It is evident from previous work that how extrinsic rewards and intrinsic motivation relate to creativity has contradictory viewpoints (Hammond et al. 2011); this debate has been ongoing for more than 40 years (Cerasoli, Nicklin & Ford 2014). Subsequently, very few studies have rigorously examined how extrinsic motivation and intrinsic motivation, as extrinsic motivation is rarely measured (Kuvaas et al. 2017). Therefore, the effectiveness of reward systems and the use of rewards for enhancing creativity remains strongly debated (Malik & Butt 2017). However, this debate and gap in the literature motivated Amabile and Pratt (2016) to conclude that the most important question is: Under what circumstances, by what mechanisms, and at what point of the creative process are intrinsic and

extrinsic motives beneficial or counterproductive to creativity? Therefore, intrinsic motivation and extrinsic rewards are examined simultaneously in the current study, and these debates and schools of thought will be discussed thoroughly.

Altogether, a comprehensive model explaining these relations has not yet been published. While research explains how POS affects employees' commitment, productivity, satisfaction and turnover intention, less is known about how POS leads to employee creativity. Moreover, researchers understand how intrinsic motivation and extrinsic rewards separately affect employee creativity regardless of positive or negative results, but less is understood about how intrinsic motivation and extrinsic rewards simultaneously affect employee creativity. The research aims and objectives are discussed in the next section.

## 1.3 Research aims and objectives

Based on the research problem and questions of this study and the gaps in the literature, the research aims, and objectives are as follows.

The main *aim* of this study is to build a theoretical and empirical integrative approach by linking concepts of SET, OST, the JD-R model, SDT, and the componential model of creativity in one comprehensive model. This comprehensive model is formulated to understand *how* and *when* employees' perceptions of organisational support influence their creativity through work engagement, intrinsic motivation and extrinsic rewards. The present study explores the service sector, mainly within three industries (banks, IT, hospitals) in the UAE.

The study *objectives* are:

1. study the direct relationship between POS and employee creativity;

2. examine the relationship between POS and work engagement;

3. investigate the relationship between work engagement and employee creativity;

4. explore the indirect relationship between POS and employee creativity through work engagement;

5. examine the moderating role of intrinsic motivation in the relationship between POS and work engagement;

6. investigate the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity; and

7. explore the roles of intrinsic motivation and extrinsic rewards simultaneously in the relationship between POS and employee creativity through work engagement.

The next section discusses the formulation of the four research questions.

## 1.4 Research questions

In building the conceptual framework, the study applies the multiple moderated meditation MMM model. It utilises the mechanism of work engagement (mediator variable), the conditions boundary of intrinsic motivation (as a first-stage moderator) and extrinsic rewards (as a second-stage moderator) in exploring the association between POS (as an independent variable) and employee creativity (as a dependent variable; for further clarification, see Figure 3.1). Based on the study objectives, four questions have been formulated:

1. Does POS influence the level of employee creativity when mediated by work engagement?

2. Does intrinsic motivation moderate the relationship between POS and work engagement?

3. Do extrinsic rewards moderate the relationship between work engagement and employee creativity?

4. Do intrinsic motivation and extrinsic rewards simultaneously moderate the relationship between POS and employee creativity through work engagement?

The next section discusses the research gaps.


## 1.5 Research gaps

The first research question concerns the mediating role of work engagement on the relationship between POS and employee creativity. The study explores this question from four angles or assumptions. First, to examine the direct relationship between POS and employee creativity, Duan et al. (2020); Zhang, Bu and Wee (2016) noted that the relationship between POS and employee creativity remains in dispute and a gap in the literature. Since idea generation is part of employee creativity; Bäckström and Bengtsson (2019) posed a question for future research: 'How can organisations support individuals' innovative work behaviour (IWB) in the creation, development and execution of new ideas?'. Moreover, Young (2012) stated that no research has examined the association between POS and individual innovative behaviour. The aforementioned gap in the literature motives this study to explore the direct relationship between POS and employee creativity.

Second, to explore the relationship between POS and work engagement, although there is several researches explore the relationship between POS and work engagement (Chevalier et al. 2019; Gillet et al. 2013; Imran et al., 2020; Khodakarami & Dirani 2020; Meira & Hancer 2021; Musenze et al. 2021; Rich, Lepine & Crawford 2010; Saks 2006; Xanthopoulou et al. 2009). However, there is only limited research has examined the association between POS and work engagement (Eisenberger, Shanock & Wen 2020). Arokiasamy (2021) stated that no previous studies have found a relationship between POS as an (independent variable) and work engagement (mediating variable), and expatriate retention (dependent variable). While the current study considers the link between POS, work engagement and employee creativity is a gap in the literature. In meantime, organisation support theory has been seen as values employee contribution and cares about their well-being (Rhoades & Eisenberger 2002). The researcher believes that the two aspects of OST. More specifically, the first angle the organization cares about employee's wellbeing leads to work engagement "Previous research has not explicitly examined the relationship between organizational care and employee engagement" (Saks 2021, p. 5). Second angles, that once organisation values employees contributions; as such will relates positively to work engagement, when the employee feel that their organisation values their contribution that will motive them more to be engaged in the work activity. Thus, the two angles of OST has been investigated in the thesis proxied by POS in the thesis.

Third, several studies guide the present investigation of the relationship between work engagement and employee creativity. Although the research on creativity is abundant, the efforts to identify variables that impact this association are limited (Malik & Butt 2017). However, there are few studies on the relationship between work engagement and creativity (Chaudhary & Akhouri 2018; Ismail, Iqbal & Nasr 2019; Truong, Nguyen & Phan 2021). Final

assumption for the first question examines the mediating role of work engagement between POS and employee creativity. There is a call in the literature related to connection between POS and employee creativity needs to be more examined, including the possible mediating impact of psychological variables (Zhang, Bu & Wee 2016). Thus, the current study proses work engagement as one of psychological factors that may mediates the relationship between POS and employee creativity.

Next, the second research question is: Does intrinsic motivation moderate the relationship between POS and work engagement? This is addressed by Gillet et al. (2013) study, that further research is required to investigate how POS affects work engagement, particularly the role of motivation as an intermediating factor. Moreover, Eisenberger, Shanock and Wen (2020) stated that the role of POS in enhancing intrinsic motivation is a highly promising new direction for research. The current study explores the moderating role of intrinsic motivation in the relationship between POS and work engagement. As such the study will multiplicate POS and intrinsic motivation on work engagement. The notice in reviewing the literature that no study has been found examines the role of intrinsic motivation as a moderator in the relationship between POS and work engagement.

The third research question is: Do extrinsic rewards moderate the relationship between work engagement and employee creativity? The below work is used to guide the current study of this topic. Anderson, Potočnik and Zhou (2014, p. 1307) "echo Zhou and Shalley's call for more research on effects of rewards on creativity and innovative behavior". Moreover, there are scarce studies in the literature concerning the relationships between extrinsic motivators' effects on creativity and innovation (Fischer, Malycha & Schafmann 2019). Therefore, future research could investigate the role of expectations of rewards, especially for creative

performance in the POS–creativity relationship (Eisenberger, Shanock & Wen 2020). Furthermore, arguments about the effect of extrinsic rewards on creativity remain two-sided (Cai et al. 2020).

The fourth research question is: Do intrinsic motivation and extrinsic rewards simultaneously moderate the relationship between POS and employee creativity through work engagement? Kuvaas et al. (2017, p. 246) stated that, "there has been surprisingly little research about whether intrinsic and extrinsic motivations are substitutes or complements or about how they predict employee outcomes when operating in combination (Gagné & Forest 2008; Gerhart & Fang 2014)". Moreover, there is little research about the effect of extrinsic motivation compared to studying any of these motivational mechanisms (e.g. intrinsic motivation; Liu et al. 2016). Finally, few studies exist of the relationship between motivational orientations and creative processes (Tian, Wang & Rispens 2021). The current study has examines the motivational orientations (intrinsic motivation and extrinsic rewards) in the POS-creativity linkage.

These gaps and evidence in the literature give additional rationale and motivation for the current study. The aforementioned gaps in the literature indicate how scholars in these disciplines approach the concepts used in this study. The current work relies purely on the problem statement in building the theoretical and conceptual frameworks. The previous discrepancies or gaps are used as supporting measures for the research problem. Section 1.6 discusses the research context.

## 1.6 Research context

Through its Vision 2021, the UAE concentrates on sustaining a competitive economy through innovation projects and initiatives. Currently, it is ranked 34th worldwide and first regionally based on the Global Innovation Index 2020, and it has progressed by two positions compared with 2019 (UAE 2020). Further, the UAE has developed its own National Innovation Strategy (NIS) that focuses on three innovation champions (innovative individuals, innovative companies and institutions, and innovative government); however, innovative individuals are considered the main champions of the UAE. The NIS is focused on specific polices intended to enhance innovative individuals, such as developing national talent, promoting a national culture of innovation, introducing innovation-related curricula, sponsoring creative individuals, attracting the best global talent, and launching innovation competitions (NIS 2015). Based on previous advancements by UAE authorities in enhancing talent management, the UAE in 2020 is ranked 22 out of 132 countries in the Global Talent Competitiveness Index (GTCI 2020). Furthermore, the UAE launched many research institutions to boost creativity and innovation in the country, such as Masdar City, Science Park, Mohammed bin Rashid Solar Park, and others (UAE 2020).

From Vision 2021 and the NIS (2015), such policies are understood as requiring authorities in the UAE to focus on creativity and innovation. This was one of the main reasons behind selecting the UAE, one of the most advanced countries in the Arab world, as the context for this thesis. The literature indicates that there is clear gap in studies discussing employee creativity in the UAE; therefore, the current thesis will contribute to knowledge of this topic specifically in the UAE context. However, comparing results from one organisation to those from reference points outside of it is known as external benchmarking. To date, no external

benchmarks for the POS scale are available (Shanock et al. 2019). This research studies three industries in the UAE (banks, IT, hospitals). In this setting, the efficiency and effectiveness of government workforces are frequently compared to similar organisations in the private sector (Zeffane & Bani-Melhem 2017). Thus, the research context will give practitioners and policymakers in the UAE an opportunity to obtain benchmarks for the three industries in order to measure their POS, work engagement and employee creativity.

From socio-culture factors, Hofstede's (2001) cultural dimensions classify nations on the dimensions of power distance (acceptance of class inequality), masculinity (competitiveness, assertiveness), uncertainty avoidance (valuing order and tradition), and individualism (the extent to which individuals are expected to prioritize personal interests over group concerns). However, the UAE, with a score of 25 is considered a collectivistic society (Lambert et al. 2021). Thus, the UAE is a good example of value-based growth; the authorities were concerned about establishing a green and clean economy based on Islamic ideals (Ahmed & Rafiuddin 2018). Moreover, The UAE boasts an open door and welcoming policy for creativity and enterprising people, as well as a 10-year visa and residential facilities. In the midst of a chaotic globe, it is an oasis of calm, as well as economic and cultural creativity (Ahmed & Rafiuddin 2018).

The rationale behind selecting these three industries for the current study is mainly because they are part of the service sector, which is one of the major economic drivers in the UAE (Abukhait, Bani-Melhem & Zeffane 2019). Service sector includes more than 58% of the working population (Baguant, Zeffane & Melhem 2018). Further, it is used to generate insights and an enhanced understanding of the POS and employee creativity relationship. There is a need for more empirical studies that concentrate on employee engagement in the hospitality

sector (Slåtten & Mehmetoglu 2011). Moreover, there is a call to conduct more studies outside the US (Baran, Shanock and Miller 2012). Finally, conducting external benchmarking of POS, work engagement and employee creativity in these three industries in the UAE could be beneficial for academic researchers as well as practitioners who are behaviourists, psychologists and human resources managers. The research methodology is discussed in the next section.

## 1.7 Research methodology

The goal of the current study is to examine the roles of intrinsic motivation and extrinsic rewards in the relationship between POS and employee creativity through work engagement. The discussion of research methodology includes the research approaches, paradigms and research design, including the data collection procedures, sampling process, research measurements, strategies for data analysis, ethical considerations and research limitations. The three UAE industries (banks, IT, hospitals) explored here are suitable settings for research on employee creativity because the main roles of professional employees, such as software engineers, nurses and quality assurance professionals, rely on employee creativity tasks. Once senior managers from selected organisations agreed to participate, a survey link was distributed to the managers, who shared it with their employees. Participation in the survey was anonymous, confidential and voluntary. The constructs used in the study are based on a single dimension and measured at the individual level.

To test the hypotheses, the methods used in Hayes (2018b) were employed, specifically MMM Model 21. Since the conceptual framework of the current study has two moderators and one mediator, the researcher found that this was the best model to test the hypotheses. Hayes

developed different models that researchers can use to examine each moderator separately in each model (e.g. Model 7 and Model 14). However, this researcher believes that moderators along with the mediator have to be tested simultaneously, and a holistic approach must be used, since behaviour and attitudes cannot be separated from the individuals who practice and possess them. This requires a comprehensive model; thus, all hypotheses are tested in one integrative model that can give more realistic and reliable results that may be generalised in the UAE and emerging-markets contexts. The next section discusses the research contributions.

## 1.8 Research contributions

The current study makes many contributions. First, it extends the literature on SET to elucidate the integrative theoretical model. Specifically, it explains how SET integrates positively with other relevant theories (OST, JD-R, SDT and componential theory of creativity) in the proposed theoretical background. Moreover, SET has been used to explain the linkage between POS and employee creativity, since higher levels of POS may imply a greater commitment for employees to contribute to the company (Chernyak-Hai & Rabenu 2018). Moreover, SET is an inclusive theoretical framework capable of linking any reasonable trend of conclusions (Cropanzano et al. 2017).

Second, it offers new knowledge about how POS promotes creativity, the study contributes by filling several gaps in the literature. First, it furthers our understanding of how work engagement can serve as a mechanism between POS and employee creativity. There are many calls from scholars to investigate, theoretically and empirically, the relationship among POS and employee creativity (Bäckström and Bengtsson 2019; Duan et al. 2020), and the mediating role of psychological factors (e.g. work engagement) in the relationship between POS and

employee creativity (Zhang, Bu & Wee 2016). Therefore, the current study concentrates on employee creativity as one of the consequences of work engagement. Second, from a psychological perspective, employee creativity is a crucial consequence of POS; this is because POS has the power to provide a signal to employees to be more engaged in creative activities. Third, the thesis investigates the mediating role of work engagement since organisations aim to value and appreciate employees' work engagement in creative tasks, which results in enhancing employee creativity.

Third, the findings presented in the study contribute to the body of knowledge explaining when and under which boundary conditions the motivational factors (intrinsic motivation and extrinsic rewards) affect work engagement and employee creativity. First, this research extends the explanation of when intrinsic motivation can play a conditional role between POS and work engagement. Intrinsic motivation encourage employees are similarly to be more engaged in their work (Chua & Ayoko 2019). Second, it enhances our understanding of when extrinsic rewards can play a conditional role between work engagement and employee creativity. Revilla and Rodríguez-Prado (2018) stated that there is a benefit linked to companies that provide extrinsic rewards towards creativity at the individual level, because it affords motivation to professional employees to show domain-relevant skills via creative behaviour

Fourth, the work offers insight for the long debate in the literature about whether or not intrinsic motivation is diminished by extrinsic rewards. Extrinsic motivation is often contrasted with intrinsic motivation since extrinsic motivation concerns doing things for a reason rather than for their inherent fulfilment (Ryan & Deci 2020). The study adds to the body of knowledge that extrinsic rewards stimulate creativity, rather than undermine intrinsic motivation and employee creativity. Therefore, this study is one of few numbers of studies, if not the only one,

that investigates the relationship between intrinsic motivation and extrinsic rewards in the context of POS and employee innovation through work engagement in the UAE. Kuvaas et al. (2017) noted that there have been few studies that have looked at how extrinsic motivation and intrinsic motivation interact with one another.

Fifth, there have been few empirical investigations on which job resources are associated to work engagement (Lesener et al. 2020). The study extends our knowledge of how job (e.g. POS) and personal resources (e.g. motivation) can foster employees' engagement and creativity. Sixth, it contributes to organisational behaviour in general in numerous ways that have implications and recommendations for management and organisations (section 7.2). Finally, the findings add to the methodological literature that uses the MMM model. The theoretical, methodological and recommendation sections (6.2, 6.3 and 7.2, respectively) provide more details about these research contributions. The next section discusses the structure of the thesis.

## 1.9 Research structure

The research has been structured as seven chapters. Chapter 2 discusses literature review reviews the definition of the main concepts of the study (POS, work engagement, intrinsic motivation and extrinsic rewards). Employee creativity is discussed further in two sections, one that explores the comparison between creativity and innovation, and another that discusses employee creativity in the UAE context. Moreover, the chapter discusses the key theory of this research (SET) and the other relevant theories (OST, JD-R, SDT and the componential model of creativity), and how these are integrated to create the theoretical background presented in Figure 2.1. Chapter 3 explains the conceptual framework derived systematically from the theoretical background that integrates these concepts: POS, work engagement, intrinsic

motivation, extrinsic rewards and employee creativity. It also proposes and builds the conceptual framework (hypothesised model) presented in Figure 3.1. Chapter 4 comprises the research methodology and under which approaches this thesis can be examined, including the research design, research methods and techniques, and the data collection procedures. Moreover, this chapter discusses in detail the analysis and statistical tests that are crucial to ensuring validity and reliability, such as factor analysis, common method variance and confirmatory factor analysis. Chapter 5 presents the research results, including the hypotheses tests. Next, the thesis offers a general discussion (theoretical and methodological) of the contributions in Chapter 6. Research conclusions, recommendations, limitations, and future studies including proposed research agenda can be found in Chapter 7.

# Chapter 2: Theoretical background and literature review

This chapter is subdivided into seven sections. Section 1 discusses the definitions of the main concepts: perceived organisational support (POS), work engagement, intrinsic motivation, extrinsic rewards and employee creativity. Section 2 focuses on the social exchange theory as a central theory of the thesis, while section 3 of this chapter discusses organisational support theory, section 4, job demands-resources model, section 5, self-determination theory and componential theory of creativity in section 6. In section 7, is a summary of this chapter.

## 2.1 Main concept definitions

### 2.1.1 Perceived organisational support

POS is defined as "global beliefs about the extent to which the organization cares about their well-being and values their contributions" (Eisenberger et al. 1986, p. 501). In general, employees who have strong POS are more likely to have deep feelings of attachment and loyalty to the organisation (Eisenberger, Fasolo & Davis-LaMastro 1990). Rhoades and Eisenberger (2002) reviewed more than 70 studies specifying the antecedents of POS, such as fair organisational processes, supervisor support, desired rewards, job circumstances and consequences that enhanced affective commitment to the organisation, improved performance and decreased withdrawal intentions. Baran, Shanock and Miller (2012) found that studies since 2000 related to POS can be listed into four categories: individual well-being that influences positive mood and reduces stress, work relationships that POS studies explain that social exchange relationships are integral in OST, which is relevant to such relationships, cultural issues, and multilevel modelling. While Ahmed and Nawaz (2015) conducted 170

meta-analyses and considered the following concepts as antecedents of POS (justice, development opportunities, supervisor and co-worker support), POS also has a substantial effect on engagement, satisfaction, commitment, citizenship behaviour and turnover intention. Based on 558 meta-analytic studies, assessment defined a long list of antecedents and consequences of OST-POS, however, such as antecedents (leader-member exchange, transactional and transformational leadership, fairness, work characteristics), while consequences such as commitment, well-being, involvement, citizenship behaviour, for all antecedents and consequences (see Kurtessis et al. 2017). Based on the aforementioned meta-analysis studies, the number of researchers that placed POS as a construct in their studies is increasing. Over 1,200 researchers discuss the concept of POS (Caesens & Stinglhamber 2020).

Different aspects of individual care would affect the individual's perception of organisational support, which in turn would impact the individual's expectations regarding the reasons behind that care (Eisenberger et al. 1986). Thus, POS plays a key role in the employee-employer relationship and has important implications for enhancing employees' well-being and favourable orientation towards the organisation (Kurtessis et al. 2017). POS also satisfies socioemotional needs that lead to commitment towards the organisation, an increased desire to support the organisation prosper, and emotional well-being (Kurtessis et al. 2017). Particularly, when the organisation values employee contributions and fulfils employees' needs, this interests the organisation and enhances POS (Akgunduz, Alkan & Gök 2018). POS has a positive effect in the workplace, while some scholars claim that a high POS may be perceived by individual employees as a signal of incompetence, resulting in a decrease in individual employee performance and an increase in the strain for employees who feel obligated to such support (Caesens & Stinglhamber 2020). The argument that POS has its effect on employee self-esteem is that when employees feel they are valued and appreciated by their organisations,

this will enhance self-esteem, which increases their understanding of their capabilities to manage work stress (Xu & Yang 2021). Individuals who have the intention of exchanging thoughts should be more willing towards affective commitment and job demand on the treatment perceived by their organisations; thus, the individuals demonstrate a positive orientation in the relationship between POS and felt obligation (Eisenberger et al. 2001).

By reviewing the literature, it is crucial to differentiate between two terms commonly used in the literature: POS and perceived supervisor support (PSS). Even the scholars are using almost the same scale of POS with some changes in the words to fit the PSS. PSS refers to employees' perception that their supervisor values their contributions and cares about their well-being (Eisenberger et al. 2002; Kurtessis et al. 2017). Shanock and Eisenberger (2006) linked POS with PSS and found a positive relationship between the two constructs. Although support can be used to represent the organisation or different managerial levels, since OST holds that line managers, direct supervisors and peers are shown by subordinates as representatives of the firm (Shanock et al. 2019). Thus, the supervisor is acting as a representative of top management directions and organisation. Therefore, PSS is often assessed from the scale of POS, and scholars replace organisations with supervisors (Rhoades & Eisenberger 2002). However, PSS mediates the relationship between work-family enrichment and job satisfaction (Kalliath et al. 2020), as well as the relationship between transformational leadership and both performance and motivation (Chen & Wu 2020). It also mediates the relationship between performance appraisal and motivation to improve performance (Van Woerkom & Kroon 2020). Ng and Sorensen (2008) stated that PSS has to be antecedents for POS. Thus, employees' and supervisors' exchange associations can be improved by POS (Aselage & Eisenberger 2003).

A meta-analysis study found that PSS has more effect on job satisfaction, commitment and turnover intention than perceived co-worker support (Ng & Sorensen 2008). The logical justification is that supervisor support has to be seen more positively than the same level of co-worker support (Ng & Sorensen 2008). Meanwhile, supportive co-workers and feedback enhance the probability of being effective in accomplishing one's job objectives (Bakker 2011). In this line of literature, the researcher intends to highlight terminologies that are commonly used in the context of support perceptions; thus, PSS and co-worker support have been lightly highlighted to distinguish between these terms. Moreover, social support includes a sequence of social relations that create understanding and meaning for individuals to advance a new perception of their identity and social reality (Ng & Sorensen 2008). In summary, organisational support is seen by employees as a perception of their feelings of how their organisation appreciates their efforts, understands their needs, and values their contribution. Thus, an organisation or supervisor has to take care of their subordinates' needs to sustain and strengthen the positive relationship between the two parties, which will enhance felt obligation from individual employee resulted to be likely more involved in the work, loyal, committed from one side. Less absenteeism and decreased turnover intention from the other. All the aforementioned positive results will contribute positively towards achieving the organisation's objectives and goals. The next section discusses the concept of work engagement.

## 2.1.2 Work engagement

Nowadays, sustaining and enhancing work engagement are critical to numerous organisations (Knight, Patterson & Dawson 2017), eliciting a substantial number of work engagement-related studies over the past two decades (Lesener et al. 2020). Job engagement has been a key concept in industrial and occupational psychology, describing the emotional state that underpins high

levels of motivation at work (Bledow et al. 2011). However, Kahn (1990) defined work engagement as individuals employing and expressing themselves physically, cognitively and emotionally during role performances. Khan was considered the first scholar to theorise work engagement (Bakker 2011; Schaufeli 2012). Bakker (2004) defined work engagement as a positive, fulfilling and work-related state of mind characterised by vigour, dedication and absorption. *Vigour* is characterised by high levels of energy and mental resilience. *Dedication* refers to a sense of enthusiasm, significance, inspiration, pride and challenge. *Absorption* is categorised as being fully concentrated and happily occupied in one's work, whereby time passes quickly (Schaufeli & Bakker 2004; Schaufeli, Bakker & Salanova 2006). Simply put, work engagement explains how employees practice their work (Bakker, Albrecht and Leiter 2011). Meanwhile, work engagement is different from work performance, even though it can be linked to employee performance; however, work engagement is seen as a positive work-related state of mind rather than a performance level (Kulikowski & Sedlak 2020). Therefore, all work engagement definitions agree that engagement has an organisational objective and includes both psychological and behavioural aspects in the form of vigour, enthusiasm and concentrated efforts (Gruman & Saks 2011).

Work engagement, employee engagement and job engagement are used interchangeably in the literature, with a focus on work engagement. Based on a review of 37 studies, 29 used the term 'work engagement' in their research construct, rather than other terms (e.g. employee engagement, job engagement and role engagement) (Wood et al. 2020). Bakker (2011) summarised four reasons that engaged individuals to perform better than disengaged individuals. First, engaged individuals generally practice positive attitudes such as enthusiasm and joy, better health, the capability of producing in their job and personal resources, and engagement transfer to other employees. Employees who are more engaged are in a better

position to mobilise their job and personal resources, which foster future engagement (Bakker & Demerouti 2007). Moreover, employees who are engaged at work are more likely to understand, activate or build resources (Xanthopoulou et al. 2009). Thus, work engagement is caused by job resources (Bakker, Demerouti & Sanz-Vergel 2014). On the other hand, hard work may lead to tiredness, but employees engaged in their work would express this tiredness as a fun state because it is linked with productivity and accomplishment. Engaged employees also have psychological capital that assists them in managing their job environment successfully (Bakker, Albrecht & Leiter 2011). When individuals move from a state of negative affect to a state of high positive affect, they become more engaged at work (Bledow et al. 2011). Thus, employees who are engaged have an enthusiastic and effective attachment to their job; rather than being frustrating and stressed, they see their job as challenging (Schaufeli 2012). From the aforementioned arguments, it is evident that job and personal resources are considered antecedents for work engagement.

The literature categorises work engagement into seven important points: measurement, theoretical background (e.g. JD-R), antecedents and outcome, epidemiology, cultural issues, engagement related to time and the collective of work engagement (e.g. team engagement) (Schaufeli 2012). The evidence from the literature of consistency of publications in this domain and inform the researchers about trends and the directions for what they know up till now and what still needs to be explored through the theories and empirical studies. However, work engagement can be scored all the time at the same level; thus, some scholars measure it through daily engagement surveys. *Daily engagement* is defined as a daily level of vigour, dedication and absorption on a given day, which can change depending on daily demands, resources and positive behaviour (Bakker & Albrecht 2018). Work engagement has also been measured weekly (see Bakker et al. 2020). Work engagement is a crucial factor for business nowadays.

Thus, Attridge (2009) highlighted some interesting points related to work engagement: professional and skilled employees are more likely to be engaged in their work, while they tend to be more likely committed to their occupation than to their organisation. He also stated that work engagement scores decreased as the length of service increased; employees who have injuries at work or suffer from harassment can also lead to decreased engagement.

Based on 37 systematic literature review studies related to work engagement, find that work engagement is interpreted and conceptualised from two distinct angles; engagement and burnout are mutually reinforcing elements of a single dimension, rather than distinctly terms (Wood et al. 2020). There have been limited empirical studies related to which job resources are linked to work engagement (Lesener et al. 2020); thus, 55 longitudinal studies investigated the impact of various job resources on work engagement and found that organisational-level resources (e.g. task resources; autonomy) related strongly to work engagement rather than social support or leadership resources over time (Lesener et al. 2020). Thus, organisational-level resources refer to how a job is designed, organised and administered regarding employees' psychological factors that have more effect on work engagement. It is evident from the above definitions and arguments the intermediary and flexibility role of work engagement between different job resources, personal resources and contextual factors from one side and has a precise influence on either employee behaviour or organisation from the other. However, work engagement is a concept that signals positive attributes that have an impact on employee and organisational well-being. Although work engagement has been used in many empirical research, the researcher still believes that such a concept should be extended more since it is embedded with positive psychological factors (e.g. emotion and cognitive) where employees demonstrate more attachment and loyalty, resulting in individual employees performing extra roles that may lead to creativity. Next, discusses the concept of intrinsic motivation.

### 2.1.3 Intrinsic motivation

Individuals have an inherent ability to discover, learn and adapt to their environment, according to SDT. This desire to consciously interact with one's surroundings is present from the earliest stages of growth and is independent of external influences (Rigby et al. 1992). However, two important definitions are commonly used in the literature to define intrinsic motivation. Amabile et al. (1994) defined *intrinsic motivation* as the motivation to engage in work primarily for its own sake because the work itself is interesting, engaging or in some way satisfying. *Intrinsic motivation* is defined as the doing of an activity for its inherent satisfaction because it is intrinsically interesting or enjoyable rather than for some separate consequence (Ryan & Deci 2000). Intrinsic motivation has also been defined as doing the task for the enjoyment and fulfilment gained from learning, discovering or attempting to know something new (Pelletier et al. 1995). Because intrinsic motivation results in high-quality learning and creativity, it is especially important to detail the factors and forces that engender versus undermine it (Ryan & Deci 2000). Thus, individuals with strong intrinsic motivation have an innate need to pursue value and meaning in their work and pay attention to these signals (Tu & Lu 2016).

It is important to highlight that another term used in the motivational literature, which is intrinsic task motivation, refers to include positive appreciation experiences that people pertained to directly from a task (Thomas & Velthouse 1990). Malik, Choi and Butt (2019) suggested that deep curiosity, involvement and enjoyment come from intrinsic motivation. Thus, intrinsic motivation is considered an ideal term of the dynamic consolidative orientations in human nature supposed by SDT (Ryan & Deci 2020). Intrinsic motivation developed as a result of an individual's interests, which enable them to complete the given tasks on their own,

without interference (Siyal et al. 2021). Moreover, the last stage of intrinsic motivation, which reflects psychosocial maturity, is autonomous orientation compared with controlled and impersonal orientations (Malinowska & Tokarz 2020). Consequently, individuals with a high level of self-determined job motivation should be more likely and capable of using control opportunities in the work (Parker, Jimmieson & Amiot 2010). Since there is a difference between individuals and they vary from the level of intrinsic motivation that they have, it is crucial in this stage to define some steps that are important to enhance intrinsic motivation. To do so, the education setting gave concrete steps to create and sustain intrinsic motivation. Some of these steps enhance intrinsic motivation; identify individuals' needs, direct their behaviour, motivate participation, give more responsibility, challenge individuals, structured feedback, emotional support, choice and among others, the authors listed twelve tips; however, all these factors or tips would enhance intrinsic motivation and motivate their self-determination (Kusurkar, Croiset & Ten Cate 2011).

Intrinsic motivation and trust are key variables in SET and SDT, respectively (Aryee et al. 2015). The trust concept is a crucial factor in employee-employer relationships, since a lack of trust or justice may lead to failure in such relationships and diminish exchange ideology, which may negatively affect organisational performance. Therefore, employees who sense trust from their organisation will feel more obligated to spend extra effort as a way of returning to increase the social exchange connection (Skiba & Wildman 2018). As for appearance in a high-quality connection with the employer, trust obligates workers to feel a sense of responsibility for the employer and leads to intrinsic motivation, which leads to high job performance (Aryee et al. 2015). Based on SET, when individual employees are motivated in their workplace by their organisation or by the work itself, it creates a felt obligation to return that by exchanging more involvement and signalling positive behaviour at the workplace, may lead to positive outcomes

for the employee and the organisation. Thus, individuals with strong intrinsic motivation want to form good relations with their colleagues and management, as well as adopt the organisation's norms and guidelines (Tu & Lu 2016). In reviewing the literature, tremendous articles discuss and interpret intrinsic motivation, for it is a crucial factor that affects individual outcomes, such as performance, satisfaction, learning, engagement, creativity and innovation. Since intrinsic motivation served as a starting point for scientific studies into the more natural understanding of learning, which maintains that the drive to learn and improve is inherent and only needs to be encouraged rather than guided and regulated (Rigby et al. 1992). However, work that necessitates a high level of complexity and absorption should be related to intrinsic motivation (Cerasoli, Nicklin & Ford 2014). While many other tasks in the workplace are not intrinsically motivating, using strategies like participation to boost intrinsic motivation is not always applicable (Gagné & Deci 2005).

In summary, the majority of scholars agree about the crucial role of intrinsic motivation in different settings, either education or business. Even in sport settings, motivation plays a crucial role; for instance, intrinsic motivation is attempting to learn such complex training exercises to gain personal enjoyment (Pelletier et al. 1995). It may intrinsic motivation not only impact the individual's emotions and behaviour but also has the intention to impact the workplace positively towards desired outcomes. Specifically, when an individual employee is structured by intrinsic motivation, positive motivation would have a positive association with excitement in the workplace, having fun fulfilling the job demands, more dedication towards the tasks, and efforts are expected to be operationalised with enjoyment. Therefore, performing a task in the workplace with a high level of intrinsic motivation may enhance not only individual satisfaction and enjoyment but also competence, resulting in enhanced confidence for challenging tasks. When people feel motivated by the interest, delight, fulfilment and challenge

of the work itself, it will lead to creativity in their work (Amabile 2012). As such, when individuals are intrinsically motivated, it supposes that such motivation powers them to think differently, which may lead to creative behaviour. Therefore, organisational leaders aim to develop employees' intrinsic motivation by connecting their energies and engagement in tasks that may result in creativity (Siyal et al. 2021). The next section discusses the concept of extrinsic rewards for creativity.

**2.1.4 Extrinsic rewards for creativity**

Extrinsic rewards are considered in the current study the positive rewards, not the negative (e.g. punishment). *External regulation* refers to rewards and punishments that are usually experienced as regulated and non-autonomous (Ryan & Deci 2020). In essence, they target extrinsic rewards towards creativity rather than rewards related to general performance (Malik, Choi & Butt 2019; Yoon, Sung & Choi 2015). *Extrinsic motivation* is defined as doing something because it expects a distinguishable result (Ryan & Deci 2000). Amabile et al. (1994) defined extrinsic motivation as the motivation to work primarily in response to something apart from the work itself, such as reward or recognition or the dictates of other people. It is clear from reviewing the literature that extrinsic motivation and extrinsic rewards are used interchangeably. Thus, there is no clear definition of extrinsic rewards (Amabile et al. 1994; Ryan & Deci 2000). Only a few scholars defined extrinsic rewards and covered one part of the global definition, which mainly focuses on monetary rewards. For instance, Yin (2018) defined *extrinsic rewards* as quantifiable monetary benefits given to individuals, such as wage, extra, health and other benefits that primarily meet the individuals' basic needs, such as survival and security. Others define *extrinsic rewards* as comprehensive, including both monetary and non-monetary values, which has been adopted in the current study. Consequently, *extrinsic*

*rewards* are defined as "forms of reinforcement such as money, prises, desirable activities or outcomes, praise, or recognition" (Byron & Khazanchi 2012, p. 810), since praise and recognition satisfy employees' need to do work that fully reflects their competencies (Delaney & Royal 2017). Vallerand (1997) emphasised that extrinsic rewards apply to action as a means to an end, not for its own sake. However, this study considered extrinsic rewards from the SET perspective as a rational expectation that when individual employees perform the work or task, they will be rewarded in two forms: monetary (e.g. incentive, high rating in performance appraisal, promotion) and non-monetary rewards (e.g. recognition, appreciation, support, empowerment). Employees who are externally motivated will do their work because they will have favourable results, such as monetary incentives, job advancement, promotion or a rise in their income (Putra, Cho & Liu 2017). A social exchange will also occur if both of the actors can achieve satisfactory rewards but will not happen if the opposite occurs (Yin 2018). The consideration in this study is that extrinsic rewards play a crucial role in encouraging individuals to be more engaged in creative activities. Such an association between extrinsic rewards and creativity will enhance the creativity climate in the organisation (Shaheen, Waheed & Hashmi 2020).

The current study focused on extrinsic rewards intentions to creativity. Thus, reward contingency considers information as the key source related to what is expected and appreciated; hence, the contingent rewards linked to creativity are expected to explain creativity and its value rather than creativity, which is linked to performance only (Byron & Khazanchi 2012). Moreover, rewards contingency related to creativity will encourage individuals to show creativity (Malik, Choi & Butt 2019). Thus, the perception of individual employees, in this case, is important if they appreciate such rewards; therefore, the conclusion is that extrinsic rewards affect creativity when employees value this kind of reward, while the

opposite is true when employees do not appreciate this type of reward (Yoon, Sung & Choi 2015). Also, when employees keep in mind that they expect rewards from their organisation, it will motivate employees to propose new and beneficial ideas to achieve rewards associated with individuals' creative tasks (Shaheen, Waheed & Hashmi 2020). The argument is that extrinsic rewards are not offered in advance for either performance or creativity. It comes as a result for employees who demonstrate engagement in the work and suggest problem solutions. As such, a scenario may occur when the manager signals information or even for experience to employees that such work will be rewarded. Thus, the employee will be more likely to engage in creative activities. Since individual perceptions are affected by social influences, the expectation is influenced by subjective comparison groups and standards (Zafirovski 2005).

Extrinsic rewards can often conflict with intrinsic motivation, according to a large body of studies (Bénabou & Tirole 2003). However, early studies' contradictory findings related to reward-creativity results may be explained by the fact that extrinsic rewards increase intrinsic motivation in some situations while decreasing intrinsic motivation and creativity in others (Baer, Oldham & Cummings 2003). In line with intrinsic motivation, extrinsic rewards offer a motive for individuals to perform the task; thus, intrinsic motivation is not only the determinant of performance in practice (Shaheen, Waheed & Hashmi 2020). Rewards may boost intrinsic motivation and creativity once they confirm competence and offer valuable information in a supportive way (Hennessey & Amabile 2010). The researcher argues that extrinsic rewards should exist with a deeper understanding of employees' differences, types of rewards (monetary, non-monetary) and situations. Therefore, extrinsic factors are considered extrinsic motivates once they have a positive influence on the results (Fischer, Malycha & Schafmann 2019). Consequently, extrinsic rewards are considered in this study as leverage for employee morale and motivation towards desired outcomes. When extrinsic rewards are utilised to

recognise individual competence, it sends a reward signalling message to enhance individual motivation towards the desired outcome (Shaheen, Waheed & Hashmi 2020). Since actors are interested and encouraged by rewards and profit compared with punishment and cost based on SET (Zafirovski 2005). Based on the above arguments, it is evident that SET is one of the ideal theories to explain the employee-employer relationship in terms of rewards. As such, the organisation offers material and non-material to its employees, such as pay, medical health, pension, trust, support and recognition. Accordingly, expected to produce felt obligation that employee should repay that towards organisation objectives and goals (e.g. creativity). Consequently, as stated in the theoretical section, the basic foundation of SET is that human action is motivated by increasing benefits and decreasing costs (Yin 2018). Next, discusses the concept of employee creativity.

**2.1.5 Employee creativity**

In this section, employee creativity will be separated into two parts: defining creativity and comparing it with innovation and highlighting studies related to employee creativity and innovation behaviour in the UAE context.

*2.1.5.1 Differences between creativity and innovation*

Creativity has been a source of interest to academics and practitioners for more than 35 years (Cai et al. 2020). Following Oldham and Cummings (1996) for their two conditions of defined creative performance as products, ideas or processes that are original and possibly related to the organisation. However, creativity and innovation are often distinguished from each other.

Moreover, Stojcic, Hashi and Orlic (2018) stated that many researchers have sought to differentiate between creativity and innovation, thus concluding that innovation starts from a creative idea. Moreover, they examine the relation empirically and find that creative skills relate significantly to the generation of new ideas and more investment in research and development (R&D).

*Creativity.* Defined as "novel and useful products, ideas or procedures that provide an organisation with important raw material for subsequent development and possible implementation" (Oldham & Cummings 1996, p. 607). Creativity is the creation of suitable, beneficial new services, products and ideas through workers employing in a multifaceted context (Woodman et al. 1993). Creativity is generally defined as the "production of novel, useful ideas or problem solutions" (Amabile et al. 2005, p. 368). According to the above definitions, creativity is all about generating new ideas. Generation of creative ideas could encompass a sequence of steps: problem discovery, developing creative ideas, validation, modifications and solution selection (Zhou & Shalley 2003). Others provide definitions for creativity based on the level of the analysis. Thus, Bharadwaj and Menon (2000) defined individual creativity as practices carried out by individuals within an organisation to strengthen their ability to produce something meaningful and novel in the workplace. Moreover, organisational creativity refers to the degree to which the organisation has implemented systematic methods and provided resources to promote meaningfully and novel behaviour. In essence, Malik and Butt (2017) stated that one critical challenge for creativity researchers is the lack of clarity in the definition of creativity.

*Innovation.* Van de Ven (1986) defined innovation as the development and implementation of new ideas by employees who are engaged in executions and communications with another

workforce within the context of the firm. Innovation, like creativity, can be studied at the individual, team, organisational and country levels (e.g. global innovation index); this doctoral thesis considered the individual level a unit of analysis. Janssen (2003) stated that individual innovative behaviour contains three main dimensions: generation, promotion and execution, and De Jong and Den Hartog (2010) advanced four dimensions to assess innovation behaviour: exploration, generation, championing and implementation of ideas.

Employee creativity is at the core of organisational innovation (Jiang, Wang & Zhao 2012). The generation of ideas leads to innovations that have a significant impact on the whole economy and society; meanwhile, novel ideas do not necessarily result in innovative output (Weinberger et al. 2018). Hence, some scholars consider creativity a part of innovation, except in the execution or implementation phase. "Workplace creativity concerns the cognitive and behavioural processes applied when attempting to generate novel ideas. Workplace innovation concerns the processes applied when attempting to implement new ideas" (Hughes et al. 2018, p. 3). Hughes et al. (2018) differentiated between creativity and innovation by considering idea generation as part of both creativity and innovation, while idea promotion and implementation are part of innovation. Novelty is related to creativity but not necessarily to innovation. Other scholars (the second school) considered idea generation and promotion as part of creativity. Thus, Khazanchi and Masterson (2011) propose that employee creativity is capable of generating and promoting new ideas. The third group of scholars does not categorise idea promotion either with creativity or innovation. Creativity encompasses the generation of novel and beneficial ideas, while innovation involves the implementation of these ideas into new products and processes (Sarooghi, Libaers & Burkemper 2015). Revilla and Rodríguez-Prado (2018) distinguished between idea generation (e.g. divergent thinking) and idea implementation (e.g. convergent thinking). The first phase in innovation processes is creativity

as a concept of idea generation, which results in innovative outcomes such as new or enhanced products, services or processes (Weinberger et al. 2018). The main distinction between creativity and innovation concepts is that while creativity stresses the generation of new and useful ideas by individuals and teams, innovation stresses the application of new ideas or practices within the unit or organisation (Zhou & Shalley 2010). Similarly, innovation at the individual level is a broader process that encompasses creativity (idea generation) and idea implementation in the workplace (Hammond et al. 2011).

Creativity is not limited to the initial level but continues throughout the innovation process (Stojcic, Hashi & Orlic 2018). Based on 52 meta-analysis studies, creative ideas are more efficiently converted to innovation at the individual level. There is also a strong positive relationship between creativity and innovation, especially at the individual level (Sarooghi, Libaers & Burkemper 2015). Thus, creativity concentrates on absolute novelty, while innovation concentrates on relative novelty (Hammond et al. 2011). Even though it is evident from the literature that creativity represents the first stage of the innovation process, and innovation is related to the implementation phase, both creativity and innovation are important for individual and organisation success. The vast and thriving literature on creativity and innovation is based on the same fundamental assumption that creativity and innovation are almost characteristically positive outcomes (Khessina, Goncalo & Krause 2018). There are so many overlaps, similarities and synergies between creativity and innovation that they have the potential to advance the present inclusive understanding (Anderson, Potočnik & Zhou 2014). Since the current study is in the UAE context, Moonesar et al. (2019, p. 135) defined innovation and creativity as "the aspiration of individuals, private institutions and governments to achieve development by generating creative ideas and introducing new products, services and operations that improve the overall quality of life".

The other part that must be discussed is that positive feedback always affects creativity and, in some cases, negative feedback can also affect creativity. The association between negative events and creativity is limited in the literature and considered an interesting topic (Zhou & Shalley 2010). Anderson, Potočnik and Zhou (2014) suggested an attempt to develop an innovative model considering both sides (positive and negative) and suggested in the case of combined frameworks to consider innovation antecedents, mechanisms and results. Negative feedback highlights problems with current creativity, creating awareness of a gap between existing creativity and the standards; therefore, when the gap is recognised, individuals can be motivated to bridge the gap by refining their existing creativity (Kim & Kim 2020). In their laboratory experiment, Kim and Kim (2020) found that negative feedback enhances perceived creativity in the bottom-up feedback flow (from employee to direct supervisor) because it increases the recipients' emphasis on task processes, while in the top-down (from direct supervisor to employee) or even (between peers) flows, negative feedback increases the recipients' focus on meta-processes (psychological state) in which recipients feel vulnerable by negative feedback and consequently hampers recipient creativity. An abundance of studies found that positive impact can boost individual creativity via many psychological processes, for instance, initiating promotion of attention, expanding the scope of attention, easing cognitive agility and enhancing mental flexibility (Chang & Shih 2019). Asif et al. (2020) also suggested that the environment enables employees to practice integrity, honesty and self-respect, which motivate employees to create novelty and beneficial ideas. Next, discusses employee creativity in the UAE context.

### 2.1.5.2 Employee creativity in the UAE context

The innovation strategy of the UAE aims to help people turn their attention towards priorities and objectives in the seven concepts: exploration, new skills, quality of health, living and learning, green power, transportation and connecting with the technology to support humanity (Moonesar et al. 2019). Thus, the context of the current thesis is about six companies operating in the UAE. The aim is to concentrate on the research that has been done so far related to employee creativity and innovation in the UAE. To understand what scholars and practitioners find in their studies. First, the researcher discusses the study that examines creativity in the UAE context. Limited studies have been found; however, five studies are quantitative and one is qualitative. Politis (2005) conducted an empirical study of 104 employees involved in self-managing tasks in the UAE and found that factors of the work environment for creativity have a positive and significant effect on both productivity and creativity. Dayan, Zacca and Di-Benedetto (2013) conducted an empirical study of 119 managers and business owners of firms in the UAE and found that expertise and creative self-efficacy are significantly linked to entrepreneurial creativity and that intrinsic motivation and sensing opportunity are the key mediators among contextual variables and entrepreneurial creativity. Mohamed et al. (2019) conducted an empirical study of 278 employees from different departments (e.g. nurses, dentists and pharmacists) working in a health authority in Abu Dhabi emirate in the UAE. The findings showed that creativity significantly impacted innovation, which in turn affected organisational productivity. A recent empirical study conducted on 150 expatriate employees working in manufacturing and service industries in the UAE demonstrated that a high level of team potency resulted in less impact of leader-member exchange (LMX) on employees' creative work involvement (Almazrouei, Zacca & Alfayez 2020). Another empirical study conducted on 175 expatriates' employees working in manufacturing and service industries in the UAE demonstrated that job satisfaction mediates the association between cultural intelligence and creative self-efficacy (Almazrouei & Zacca 2020).

The conclusion from the above empirical studies is that creativity literature is lacking in the UAE context. This area of research has to be developed, and more research is needed. However, four studies have considered creativity as an outcome of their conceptual framework (Almazrouei & Zacca 2020; Almazrouei, Zacca & Alfayez 2020; Dayan, Zacca & Di-Benedetto 2013; Politis 2005), while only one study (Mohamed et al. 2019) considered creativity an independent variable. The common observations of the studies are conducted in the UAE; the creativity scale has been assessed by employees self-rating rather than supervisor or co-workers rating.

For qualitative studies concerned with creativity, a recent qualitative study conducted by Mehrajunnisa and Jabeen (2020) collected data from 27 interviews with top management in the UAE targeting the government, semi-government and private sectors and found that leadership support, personal attributes and organisational strategy are the most crucial elements that affect performance through employee suggestion systems. The suggestion has an impact on idea generation in the organisational context. Therefore, suggestion systems are considered in companies as an effective mechanism to encourage employees and boost creativity and innovation (Ahmed 2009). Thus, Mehrajunnisa and Jabeen (2020) stated the importance of defining strategic drivers to motivate employees to share their ideas and opinions, which will be reflected positively on organisational innovation capabilities; therefore, they characterised individual attributes into six factors that affect creativity (personality, cognitive style, self-efficacy, expertise, intrinsic motivation and extrinsic motivation). However, the UAE context lacking studies are related to creativity quantitatively and qualitatively for the different levels of analysis (e.g. individual level, team, organisation).

Secondly, to discuss the studies that are related to innovation in the UAE context, however, limited studies in the literature, specifically, on variables impacting the service innovative behaviour of frontline employees in the service sector from the perception of positive psychology, particularly in the UAE context (Al-Hawari, Bani-Melhem & Shamsudin 2019). Innovation is the successful implementation of creative ideas (Afsar, Masood & Umrani 2019). It becomes crucial to highlight that the studies are related to innovation, with a focus on studies that are related to individual behaviour only (e.g. IWB). Moonesar et al. (2019) stated that the value for both creativity and innovation would be obtained only after a thorough understanding of the two concepts. Thus, the objective to explore studies is related to individual-level innovation in the UAE context from 2000 to 2021. Studies related to innovation at the organisational level have been excluded from the analysis (e.g. Busaibe et al. 2017). Moreover, conference, thesis, qualitative research, not Scopus Indexed also excluded. Since then, the main aim of the thesis has been to explore creativity in the UAE context. Due to the lack of studies in that specific area (e.g. creativity), the approach adopted to study only innovation behaviour in the UAE context. Thus, the current study includes the variables used by the researchers, methodology, level of analysis, target audience, and the main findings.

The key findings from these (14) studies indicate that there is a focus somehow on innovative behaviour in the UAE context rather than creativity. The common factor between these studies is that 64% (n=9) focused on the service sector solely in the UAE, while one study focused on construction and service sectors (e.g. Dulaimi 2021); two studies concentrated on the public sector (e.g. Alhosani, Ahmad & Nawi 2019; Hussain, Iren & Rice 2019); public and private sectors (Suliman 2013); and financial and service sectors (Suliman & Al-Shaikh 2007). The majority of studies are focused on the service sector in the UAE, which is consistent with the statement in the research context section (1.6). The service sector is considered one of the major

economic drivers in the UAE (Abukhait, Bani-Melhem & Zeffane 2019). Therefore, the UAE context lacks studies related to manufacturing studies, and this study will contribute to the body of knowledge for emerging markets and specifically for the UAE.

In terms of methodology, almost 58% (n=8) of studies used structural equation modelling (SEM) and/or partial least squares (PLS), and the remaining 42% (n=6) used regression-based or Hayes-PROCESS macro. A cross-sectional survey was used in 86% (n=12) of studies, except two, which used longitudinal (e.g. Abukhait, Bani-Melhem & Shamsudin 2020; Abukhait, Bani-Melhem & Shamsudin 2019). Moreover, 93 (n=13) of studies used the self-rating technique to assess individual innovative behaviour, while only one study used a different technique, which is co-worker assessment of employees' innovative behaviour (e.g. Bani-Melhem, Quratulain & Al-Hawari 2021). The findings from the employee innovation-behaviour ratings are in the majority of studies in the UAE context. As such, it will open a new window for more studies in the context of assessing innovation employee behaviour by their supervisors or even third parties. It will add value to the literature in the UAE context.

All details of fourteen studies related to individual innovative behaviour can be seen in Appendix A. Moreover, Eid and Agag (2020) conducted a multilevel study of 2,618 employees in hotel industries in five different countries (UK, Germany, USA, UAE and China) and found that both institutional pressures and corporate support have been seen to have a positive impact on individuals' innovative behaviour.

As a result, these studies regarding creativity and innovative behaviour in the UAE context demonstrate more of individual innovative behaviour rather than creativity. Spread innovation culture within organisations can impact individual behaviour positively, which may lead to the

growth and success of an organisation (Busaibe et al. 2017). However, creativity is one of the key sources of competitive advantage. Moreover, innovation can't be occurred without creativity stage, thus, creativity considered as a base and foundation for innovation. Creativity was seen as an important individual skill, and it has progressively come to be acknowledged as a performance drive within businesses, serving as a foundation for the development of numerous research models (Castillo-Vergara, Alvarez-Marin & Placencio-Hidalgo 2018). Therefore, more research in this area is needed since creativity enables employees to generate new information and ideas and think to solve the problems in different and efficient ways, resulting in positive outcomes towards organisational creativity in the UAE. Furthermore, creativity is a well-developed topic that is rapidly becoming a major theme, representing research in the workplace, motivation, perceptions, systems, work, and decision-making (Castillo-Vergara, Alvarez-Marin & Placencio-Hidalgo 2018).

## 2.2 Social exchange theory

Social exchange is defined "as an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons" (Homans 1961, p. 13). SET refers to "voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do it in fact from others" (Blau 1964, p. 91). Blau emphasised technical-economic interpretation, while Homans focused on the psychology of behaviour (Emerson 1976). Economic consequences are those that claim that financial requirements be tangible, while socioemotional consequences are those that address one's social and esteem needs (Cropanzano & Mitchell 2005). However, Emerson (1976) posited that exchange theory should not be taken as theory – it should be considered a model of reference that considers the change of valued resources via social mechanisms. The social exchange scope is explained by the

supposition that a resource endures if there is a contingent reward. Psychologists call this contingent return underpinning, while economists call this reciprocally contingent exchange (Emerson 1976). The conclusion is that the fundamental principle of SET is that individual behaviour is motivated by maximising rewards and minimising costs (Attridge 2009).

Dulebohn et al. (2012) claimed that managers signal employees about their readiness to put extra effort into the relationship, which probably motivates employees to reciprocate by offering more than is expected. The employees spent most of their time doing work-related activities to enhance organisation suitability and competitive advantage; on the other hand, the organisation provides salary, insurance and other benefits. From this logic, the theory is flexible to consider the monetary and non-monetary in the relationship between the organisation and employees with the expectation of reciprocation. To put it simply, the advancement of a social exchange partnership depends on an actor doing an initial step by supplying a valuable resource to another actor, with the hope that the receiver will reciprocate (Skiba & Wildman 2018). Therefore, the individuals who have more social exchange experiences with their direct managers and colleagues appear to feel obligated to them; thus, they are more likely to exhibit prosocial attitudes at work (Kim & Qu 2020). From the previous definitions, it is evident that SET relies on two parties under the give and gain principle and the expectation that this relation starts with the organisation manager or representative (e.g. supervisor) as one party and the employee as the second party. This is not limited by the explanation of the relationship between organisation and employees; it could be between the teacher and student, or between the organisation and its customers. While mainly in the current study focuses on the association between organisation and employee's relationship.

This could raise the question of *why SET has been considered the central theory of the thesis.*

Social exchange philosophers approve of the mutual ideology of social exchange forms; not all frameworks elucidate the same values about resources (Mitchell, Cropanzano & Quisenberry 2012). Since the thesis falls under the organisational behaviour field, SET in the models of organisational behaviour is structured on the principle of the exchange rules the scholar depends on (Cropanzano & Mitchell 2005). Since the value of understanding individual motivation and how it contributes to organisational goals is illustrated by SET, views of organisational behaviour integrate individuals' motives to perform particular tasks under shared obligations between individuals and the organisation (Aselage & Eisenberger 2003).

SET is a comprehensive theoretical model capable of relating nearly any reasonable trend of conclusions, specifically in a post hoc style (Cropanzano et al. 2017). Consequently, it was evident that SET is considered one of the most influential theories to analyse employee behaviour in the workplace due to its flexibility in studying the direct and indirect relationships in one conceptual framework. The exchange principle also describes how employees react differently to the same exchange situation, which will affect the social exchange processes and the succeeding outcomes (Song & Gu 2020). It may react differently since employees who are low in exchange ideology are less expected to care about obligations and are less likely to be concerned if exchanges are not returned, while individuals who hold a solid exchange ideology are probably to reciprocate a decent action than those with a low in exchange ideology (Cropanzano & Mitchell 2005). Tacking in the consideration that the SET lens emphasises the dynamic aspects of the exchange association. It focuses on the exchange process, as well as its progress over time (Whitener et al. 1988). Also, social exchange behaviours are affected by employee-organisation relationships, as explained above, even though they come from diverse cultural contexts (Hui et al. 2020). All the above arguments confirm the flexibility of SET in

the relationship between the employees and their employers. Lawler, Thye and Yoon (2008) also raised a key question about social exchange theory: under what conditions do the actors relate their emotional interactions to a social function?

SET is considered a type of consolidative theoretical background for social science, specifically social psychology, which stems from the rational choice concept and behaviourism as main foundations (Zafirovski 2005). Song and Gu (2020) stated that few studies have investigated the central effect of exchange ideology on individual attitudes and behaviours. There is obvious ignorance in the literature about whether employee-organisational exchanges rely on employee creativity and other outcomes (Pan, Sun & Lam 2020). Pan, Sun and Lam (2020) also emphasised that the relationships between individuals and organisations in terms of social exchange lack sufficient research attention. It is valuable to study the sorts of resources that are exchanged in diverse kinds of associations (Cropanzano & Mitchell 2005). The resources that induce the mutuality norm can be measured (e.g. information or money) (Eisenberger et al. 2019). The resources could be tangible (e.g. money, goods and tools) while intangible resources (e.g. caring and well-being of the employees). However, SET emerged in sociology as a particularly micro tradition based on how people communicate and, specifically, on the rewards they offer each other (Lawler, Thye & Yoon 2008).

SET assumes that the rewarding activities undertaken between the organisation and its employees generate an organisational relationship. Employees with hopes that the company can provide a healthy working atmosphere and rewards (monetary or non-monetary) will be motivated to leverage their expertise and experience to accomplish their goals, resulting in organisations achieving their goals and objectives. A beneficial exchange relationship between individuals and the organisation, thus, results in an improvement in mutual relationships. SET

is concerned with reciprocity to explain the relationships between organisations and employees, and social relationships are expected to be reciprocal between organisations and employees. Thus, one of the fundamental tenets of SET is that favourable and reasonable social exchanges contribute to higher relationships that generate successful work behaviour and optimistic employee attitudes (Xanthopoulou et al. 2009). As such, SET will generate sustainability and a competitive advantage for organisations. The relational component of social exchange is related to the arrangements that appear to produce repetitive interactions between the same actors (Lawler, Thye & Yoon 2008). Therefore, the presumed social exchange relationship is categorised by a long-term relationship, provided that the exchange is continuing and based on a sense of responsiveness (Andersen, Buch & Kuvaas 2020).

Based on the above explanations and arguments, it was evident that SET fits the proposed theoretical and conceptual frameworks on employee perception and how motivational factors such as POS can be linked with employee creativity through different mechanisms (e.g. work engagement) and boundary conditions (e.g. intrinsic motivation and extrinsic rewards) that make this relation linked. Specifically, it is two actors in the relationship, the organisation from one side and the individual employee from the other. As such, the researcher considered SET the best theory to explain such a relationship, for its flexibility and validity. It also provides insight into how and when such a relationship can affect creative behaviour (e.g. employee creativity). SET provides clarification of why employees feel obliged to behave in ways that go beyond the job role and tasks (Settoon, Bennett & Liden 1996).

In this study, it is crucial to distinguish between theoretical background and conceptual framework. The theoretical background is used when examining a particular theory, while a conceptual framework grounds the research in the appropriate knowledge bases that depend on

the related position, research problem and questions (Rocco & Plakhotnik 2009). Therefore, (Figure 2.1) concerns the theoretical background of the thesis, while the conceptual framework has been incorporated into (Figure 3.1). Wherever the researcher stated theoretical background refers to (Figure 2.1). While (Figure 3.1) is primarily concerned with a conceptual framework or hypothesised model, it is employed depending on which is more relevant in the context's substance. Next, the main concept definitions will be discussed

Figure 2.1. Explains the theoretical framework of the study of how SET is considered a central theoretical framework along with the other four theories: organisational support theory, job demands-resources model, self-determination theory and componential theory of creativity. In detail, the SET has been integrated with each theory in order to come up with the concepts of the study, also, each concept has been derived from its own theory (e.g. POS has been derives from OST; work engagement from JD-R; intrinsic motivation and extrinsic rewards from SDT; and employee creativity from componential model of creativity). Since the conceptual model of the study focuses on concepts related to 'positivity' rather than 'negativity' the sign has been stated (+) in all integrations. Thus, the current study has focused on positive orientations such as (POS, intrinsic motivation, work engagement, extrinsic rewards and employee creativity). And excluded the negative orientations such as (burnout, punishment, and so on).

**Theoretical Framework**

| Main Theory | **Central theory: Social exchange theory (SET)** |
| Other relevant theories/models | Organizational Support theory (OST) | Job demands-resources (JD-R) | Self-Determination theory (SDT) | Componential theory of creativity |
| Concepts/ constructs | Perceived organizational support (POS) | Work engagement | Intrinsic motivation & Extrinsic rewards | Employee creativity |

**Conceptual framework: the relationships between the constructs**

Figure 2.1 Theoretical background

## 2.3 Organisational support theory

According to Rhoades and Eisenberger's (2002, p. 711) study, OST "supposes that employees personify the organization, infer the extent to which the organization values their contributions and cares about their well-being, and reciprocate such perceived support with increased commitment, loyalty, and performance". According to (Kurtessis et al. 2017, p.1854) study, "Organizational support theory (OST) proposes that employees form a generalized perception concerning the extent to which the organization values their contributions and cares about their well-being (perceived organizational support, or POS)". OST is built upon the employee-employer relationship; therefore, organisational scholars have concentrated on the social relations that improve the relationship between individuals and their organisation (Cropanzano & Mitchell 2005; Rhoades & Eisenberger 2002). Loi, Hang-Yue and Foley (2006) also stated that OST relies on the social exchange view to explicate employee-employer relationships.

OST recognises that a strong employee-organisation connection satisfies essential socioemotional needs for employees and therefore can improve employee well-being as specified by constructs (e.g. decreased strain, enhanced job satisfaction, safety) (Baran, Shanock & Miller 2012). Consequently, the fundamental disciplines of research in organisational science concerning how employees link to their organisational rules (Eisenberger et al. 2019). From the above, it was clear that OST spread positive signals; thus, positivity initiating actions might include organisational support and empowerment, while positive reciprocating responses could include commitment and prosocial behaviour (Cropanzano et al. 2017). OST is also a combination of interconnected mechanisms that could occur if individuals sense that their work organisation is satisfying their socioemotional needs; in this case, individuals may become more engaged in the organisation (Baran, Shanock & Miller 2012). OST helps clarify how superior care by the organisation and its representatives transforms into a belief that the organisation is compassionate and supportive and how such expectations of support contribute to positive human resource results (Shanock et al. 2019). In line with OST, individuals aim to compensate the organisation for its high degree of support by enhancing their efforts to help the organisation achieve its objectives, based on the reciprocity standard (Aselage & Eisenberger 2003).

Based on meta-analyses over the past 30 years Eisenberger et al. (2019), indicate that, on average, employees do not have high exchange relationships with their organisation but are willing to participate and be more engaged based on their perception of voluntary treatment by the organisation. One critique of OST is that POS states how employers support their employees without demonstrating how employees respond to employers, which only exposes the employer's half of the exchange (Pan, Sun & Lam 2020). The idea in the previous statement is applied to the majority of social sciences and psychological theories since it relies on feeling,

attitude and perception. However, the logic of the exchange principle has to be almost the same value, but this is not the case in reality. Since the exchange is concerned with how much you give to be returned in a form that the givers are looking for. Thus, employees exchange their time and resources at their job for valued results, according to OST (Rasool et al. 2021). The reactions of individuals to the reciprocity principle presents a foundation for recognising how the favourableness and care perceived from their organisations impact them towards commitment and performance, as well as why employees vary in their responsiveness to desired care (Eisenberger et al. 2001). Thus, it is comparatively assessed by the two parties (employer and employee), which may many factors are affecting this relationship, such as personal characteristics (e.g. individual differences) or organisational characteristics (e.g. organisational climate, leadership style).

Recent studies conceptualised OST as explaining the relationships between antecedents and their outcomes, for instance, POS and work engagement (Imran et al. 2020; Musenze et al. 2021), workplace environment and work engagement (Rasool et al. 2021); monetary and non-monetary resources and organisational commitment (Wang 2021); and organisational support and performance (Chen et al. 2020). OST may be the ideal background not only when linking POS and work engagement; it is also useful when researchers want to show the organisation-employee relationship since OST has an impact on individual perception and work behaviour to make them more engaged. In line with OST, employees categorise their job efforts and support level based on how concerned their organisation is with their well-being. As a result, when employees feel respected, trusted and encouraged by their organisation, they are more likely to join in desired behaviours, such as increased engagement, supportive actions, creativity and loyalty towards their organisation.

POS was created from psychological processes at the individual level, and it may also be merged with the effects of social context according to OST (Stinglhamber et al. 2020). It is interesting that some researchers have started extending the OST view to use new terminology (e.g. reinforcing organisational support) rather than POS. Thus, reinforcing organisational support offers positive influences and decreases the negative impact put on workers to reinforce positive behaviour, such as pay, well-being and good treatment (Chen et al. 2020). The reinforcing organisational support scale was taken from Eisenberger et al. (1986). However, the basic principle of organisational support research is SET (Saks 2006). Based on SET, OST expects individuals' attribution heuristics to increase the positive association between satisfactory treatment and POS (Kurtessis et al. 2017). Thus, by reviewing the literature, felt obligation is the crucial element when the individual employee perceives support from the organisation. However, Baran, Shanock and Miller (2012) defined felt obligation as the obligation received by an individual employee to benefit their organisation as a kind of reciprocate when employee perceived support from the organisation. OST assumes that such a procedure happens when the individual receives support from the organisation and then feels obligated to the organisation and commences to search for different mechanisms to achieve balance in the employee-employer association. In terms of OST, Kurtessis et al. (2017) stated that POS enhances workers' positive attitude towards the organisation via a social exchange, which enhances felt obligation, trust and prediction that such performance and effort will be rewarded. Thus, employees make active behavioural improvements to accomplish organisational objectives as they experience support and good treatment from their organisation (Rasool et al. 2021).

Finally, regardless of the drawback for each social science theory in general, OST found it to be one of the theories that confirm the integration of SET. OST suggests that POS creates a

universal felt obligation to respond to the employer in a positive way (Baran, Shanock & Miller 2012). When an individual feels an obligation, they will care about the organisation's well-being, commitment and in-role performance (Eisenberger et al. 2001). Since OST believes that their employers provide employees with tangible and intangible resources, a reciprocity standard provides a sense of duty for employees for the organisation to achieve its competitive advantage and sustainability. OST-POS does not come from a vacuum, as POS was created based on the dyadic employee-employer relationship to create desired outcomes; the support may be directed towards commitment, engagement, creativity and performance.

## 2.4 Job demands-resources model

The job demands-resources (JD-R) suggests that working settings may be characterised into two groups, job demands and job resources, that are distinctively concerned with determining outputs (Demerouti et al. 2001). *Job demands* refer to those physical, emotional, social or organisational characteristics in the work that demand continued physical and emotional effort (Bakker & Demerouti 2007). Job demands also play a critical role in diminishing health but not in the motivational mechanism (Bakker & Demerouti 2017). *Job resources* refer to those physical, emotional, social or organisational characteristics in the work that are functional in attaining job objectives, decreasing job demands, connecting physiological and emotional costs and encouraging individual growth and learning (Bakker & Demerouti 2007; Demerouti et al. 2001). Job resources include autonomy, social support, skill variety, quality of the relationship with the supervisor, work feedback, and opportunities for advance (Bakker & Demerouti 2017). Thus, increases in these resources based on the JD-R model may improve job engagement and defend against negative effects, including burnout and tension, because such resources stimulate the motivational path (Knight, Patterson & Dawson 2017). In summary, job resources

are characterised as the key drivers of work engagement, while job demands are the key cause of burnout and poor health (Bakker, Demerouti & Sanz-Vergel 2014). Moreover, the JD-R model may be implemented in a broad variety of professions and can be used to enhance individual happiness and performance (Bakker & Demerouti 2007).

The job JD-R model has received the attention of academics and practitioners for its flexibility and comprehensiveness. However, Schaufeli (2017) briefed the history of the JD-R model and stated that the original model only includes burnout (Demerouti et al. 2001). JD-R was later extended to include work engagement (Schaufeli & Bakker 2004) and personal resources (Xanthopoulou et al. 2009). Based on a meta-analysis of longitudinal studies, Lesener, Gusy and Wolter (2019) conclude that the JD-R model is an exceptional theoretical foundation for measuring individual well-being for different types of organisations. JD-R has grown into a major field of scientific study and has gained substantial academic research interest in the field of organisational psychology. The JD-R model is considered an influential theoretical foundation to define employee well-being in a broad range of organisations and industries (Lesener, Gusy & Wolter 2019). In reviewing the literature, scholars specified two additional terminologies are used in terms of JD-R (personal demand and personal resources); thus, it is crucial to distinguish between the two. *Personal demands* are defined as "the requirements that individuals set for their own performance and behaviour that force them to invest effort in their work and are therefore associated with physical and psychological costs" (Barbier et al. 2013, p. 751). An example of this based on the JD-R model is workaholism and performance expectations (Bakker & Demerouti 2017). *Personal resources* are defined as "beliefs people hold regarding how much control they have over their environment" (Bakker & Demerouti 2017, p. 275). For example, employees who have high levels of optimism and self-efficacy believe that good things will happen to them.

Bakker and Demerouti (2017) advanced JD-R theory by classifying it into eight propositions. Proposition one supposes that all types of job characteristics can be classified either as job demands or resources. Proposition two frames how job demands and resources affect two different mechanisms (health diminishing and motivational processes). Proposition three studies conditions and circumstances in which employees may flourish. Proposition four highlights how job resources impact motivation when job demands are high. Proposition five is that personal resources (e.g. self-efficacy) can have the same purpose as job resources (e.g. POS). Proposition six states that motivation has a positive influence on job performance, whereas job strain has a negative influence on job performance. Proposition seven suggests that motivated employees may be involved in job crafting behaviour that leads to higher levels of job resources, personal resources and motivation. Proposition eight states that individuals who are stressed by their work are probably to show self-undermining behaviours, which may lead to higher levels of job demands and job strain. Thus, each proposition can play a crucial role in building the conceptual framework for the studies that are concerned about employee engagement, which would give an indicator if the employees engaged or disengaged in their work. In reviewing the literature, it was evident that the JD-R model is the dominant theory used as a framework for employee engagement. Saks (2019) proposed work engagement as a mechanism constructed between a group of antecedents and consequences. Moreover, it becomes the dominant model when work engagement is linked with work-family. Based on the systematic literature review, the JD-R model has mainly been used to investigate both positive and negative associations between work engagement and family-related variables (Wood et al. 2020).

Based on SET, when employees trust that the organisation has satisfied its obligations in the employee-employer exchange, for instance, availing suitable job resources and fulfilment of the psychological contract, it encourages positive work results (Birtch, Chiang & Van-Esch 2016). SET underlines emotional and obligation attributes, which directs organisations to develop high-quality employee-organisation relationships. The more positive a relationship between supervisors and employees, the more employees engaged in their work, and this feeling will decrease the job demands (e.g. stress, pressure and working long hours) to job resources benefits. Therefore, when an employer demands greater contributions and effort from its workers, workers suppose a corresponding hike in the job resources anticipated to preserve balance (Birtch, Chiang & Van-Esch 2016). Employees concurrently engage in social exchanges with their peers, top management and the organisation; therefore, SET may offer employees different types of resources, such as common trust and feedback on their job roles (Liao et al. 2012). Organisations invest in their individuals through contributing efficient job resources; in this case, individuals return it with dedication, energy and, as a result, high performance (Bakker, Albrecht & Leiter 2011). JD-R contains two parts: job resources, which reflect positive orientation, and job demands, which reflect negative orientation. Subsequently, SET is a motivational factor that may contribute to and integrate with the JD-R model. When employees feel that their organisations offer them the needed resources in the work to execute their daily tasks, this type of feeling will allow them to exchange high-quality relationships, not only with the employer but also with colleagues and different departments. Meanwhile, if the employees do not receive the needed resources or the job requirements, it may lead to stress and burnout; therefore, if job demands are higher than job resources, a lower quality exchange principle may be reflected in a high rate of absenteeism, low employee satisfaction and turnover in special cases. Thus, JD-R is an important model for explaining the current study concepts and constructs in line with SET.

## 2.5 Self-determination theory

Ryan and Deci (2020) defined three fundamental needs relating to SDT. First, *autonomy* is related to an individual's ownership and initiatives. Second, *competence* is related to the sense that an individual can grow and succeed. Third, *relatedness* is facilitated by caring, respect and conveyance. Self-determination theory (SDT) is driven from the theory of human motivation and personality in social contexts that distinguish motivation as being autonomous and controlled (Deci & Ryan 2012). Therefore, SDT suggests that intrinsic and extrinsic motivation are the two generic types of motivated behaviours (Deci & Ryan 1980).

This section aims to draw two angles from the literature review: intrinsic motivation (autonomous) and extrinsic motivation (controlled). Autonomous motivation involves acting with a sense of decision and choice (e.g. intrinsic motivation), such as when people engage in an activity because they find it interesting (e.g. I work because it is fun) (Gagné & Deci 2005). Controlled motivation includes the practice of conditional rewards or punishment (Chua & Ayoko 2019). The main difference between SDT and most other motivational theories is that the emphasis of SDT is on the relative strength of autonomous versus controlled motivation, rather than motivation as a whole (Gagné & Deci 2005).

SDT is a very broad theory; thus, the concentration would be on the orientation of intrinsic motivation and extrinsic rewards. After digging with SDT, the finding that cognitive evaluation theory (CET) is related precisely to the current study's theoretical background. CET is the first of SDT's mini-theories and was formulated mainly in the 1970s and 1980s to coordinate and incorporate the findings of scientific research on how rewards, assessments, suggestions and

other extrinsic activities influence intrinsic motivation (Ryan & Deci 2017). Thus, CET proposed that feelings of competence and autonomy are crucial factors for intrinsic motivation; however, factors that weaken these feelings undermine intrinsic motivation and leave individuals either controlled by contingencies or unmotivated (Gagné & Deci 2005). However, Gagné and Deci (2005) stated five problems with CET. First, the majority of CET studies were laboratory tests rather than organisational studies. Second, CET propositions are difficult to integrate into dominant behavioural and expectancy-valence methods. Third, many work activities in the workplace are not intrinsically exciting, and using techniques like involvement to improve intrinsic motivation is not always possible. Fourth, most individuals who work tend to make money, so using rewards as a key motivator sounds realistic and interesting. Fifth, CET tended to suggest that practitioners and academics would have to choose between the two: either foster intrinsic motivation through involvement and empowerment while reducing the practice of extrinsic influences or optimise extrinsic rewards by ignoring the crucial role of intrinsic motivation.

Extrinsic motivation is frequently compared with intrinsic motivation. *External regulation* relates to behaviour determined by external rewards and punishment, which is considered controlled motivation (non-autonomous) (Ryan & Deci 2020). Malek, Sarin and Haon (2020) classified rewards into three categories: financial rewards (e.g. monetary incentives), recognition rewards (e.g. prestige), and social rewards (e.g. symbolic gesture). However, they aimed in this classification to divide extrinsic rewards into two types: monetary and non-monetary incentives. Based on SET, extrinsic motivation is considered the most controlled form of motivation (Donald et al. 2020) because it is controlled with external factors: either monetary or non-monetary rewards. However, SDT assumes that external control motivation, such as monetary rewards, will diminish intrinsic motivation (Duda & Appleton 2016).

Amabile, Goldfarb and Brackfield (1990) indicated that evaluation expectation undermines intrinsic motivation and creativity; intrinsic motivation is dominant or more salient, and individuals perform more creatively than when individually extrinsically motivated.

From another perspective, intrinsic and extrinsic motivations were considered two independent concepts and theoretically different variables that may achieve high or low values independent of each other. Therefore, a rise in one was not essentially at the expense of the other (Malik & Butt 2017). Gagné and Deci (2005) stated that autonomous and controlled motivation together will lead to a lack of motivation. In reviewing the literature, there seems to be a clear debate between intrinsic motivation and extrinsic motivation or rewards. Thus, the argument of the researcher is that intrinsic motivation and extrinsic motivation or rewards must be studied simultaneously since it is difficult to determine whether an individual employee's behaviour and attitude is motivated by individual intrinsic motivation or based on the support or recognition received that affected the intrinsic motivation. Therefore, both intrinsic motivation and extrinsic rewards are studied in the framework, and intrinsic motivation may be diminished when extrinsic rewards are produced or vice versa, which will be examined thoroughly in the discussion chapter.

Thus, within the SET context, once an organisation trusts its employees, employees will be encouraged to reciprocate in a discretionary way (Skiba & Wildman 2018). Most researchers depend completely on the norm of reciprocity to elucidate why the social exchange principle leads to desired outcomes without taking into consideration the crucial motivating potential stemming from the work itself (Kuvaas & Dysvik 2009). Despite SET and intrinsic motivation, regardless of their common concern in illuminating many of the same individual results, there are still few efforts to connect prosocial and intrinsic motivation (Kuvaas & Dysvik 2009). SET

and SDT offer theoretical support for a positive association between employee-employer exchanges and employee creativity (Pan, Sun & Lam 2020). This will occur when the employee-employer exchange is perceived as desired; the assumption behind this association can fulfil individuals' fundamental needs that SDT categorised as independence, capability and relatedness (Pan, Sun & Lam 2020). However, SDT proposes that social climate impacts individual outputs via intrinsic motivation (Kuvaas & Dysvik 2009). Moreover, the reciprocity concept is an intrinsic motivation to respond in caring (Falk, Gächter & Kovács 1999). Therefore, the argument from SET is that once the employee perceives autonomy, empowerment, caring, feedback and support, these positive orientations will improve the individual's motivation to respond positively to their organisation from one side. Furthermore, if employees receive monetary rewards, bounce, extra pay, recognition, promotion and compliments, these positive gains will also enhance employees' extrinsic motivation towards positive outcomes as reciprocate for their organisation.

## 2.6 Componential theory of creativity

Amabile (2012) emphasised four critical components for any creative answer: first, *domain-relevant skills* (e.g. product design and electrical engineering). Domain-relevant skills propose technical skills and task knowledge and rely on efforts such as education and cognitive skills (Dewett 2007). Thus, the idea that the employee receives training or education and career development from their organisation will enhance employees' skills in their domain and will create obligatory feelings for the employees towards the organisation's objectives (e.g. employee creativity). Second, *creative relevant processes,* which are related to risk-taking and taking new views on problems (Amabile 2012), and generating new ideas rely on experience and training (Dewett 2007). However, Dewett (2007) suggests that an employee's willingness

to take risks is positively linked with individual creativity. Amabile (2012) lists a group of factors that influence creativity, such as challenging work, collaboration, skill diversification and self-autonomy. The supervisor or top management also supports the development of new ideas, recognition for creative work and knowledge sharing for the ideas. When the organisation avails the required tools and resources for the employees, this will enhance the employee capability and return that on to be involved in risky activities, especially if the employee trusts the support from the organisation. Third, *intrinsic motivation* (e.g. individual passion) and these elements come from within the individual. The importance of intrinsic motivation is dominant and relevant to creativity (Dewett 2007). Zhou and Shalley (2003) also stated that the componential model of creativity in general considered an intrinsic motivation viewpoint of creativity. Fourth, the *social environment* comes from outside the individual (extrinsic motivators). The componential theory of creativity is recognised as one of the main theories of creativity at the employee level and incorporated partially with other theories in the current thesis. Therefore, it is considered an inclusive framework of the social and psychological mechanisms needed for employees to generate creative work (Amabile 2012). Based on the componential theory of creativity, creativity requires high intrinsic employee motivation along with high domain expertise, high creative thinking and a highly supportive environment for creativity.

The componential theory of creativity is critiqued, which may be essential to be refined to comprise the important roles of creative self-efficacy and prosocial motivation, also to intrinsic motivation, for creativity. (Liu et al. 2016). The researcher believes that componential theory is very broad and that future work to tighten the theory would be more widespread. The initial theory of intrinsic motivation claimed that individuals are the most creative when they are mainly intrinsically, not extrinsically, motivated. The theory was based on the notion that

extrinsic motivation operates in opposition to intrinsic motivation, which is never conducive to creativity if it is greater than intrinsic motivation (Amabile and Pratt 2016). Therefore, Amabile and Pratt (2016) modified and revisited these constructs in the revised theory, which is the dynamic componential theory of creativity. However, they updated the fundamental principles underlying the 1988 model, changed those components and, in particular, the causal linkages, and incorporated four new frameworks into the dynamic componential model: a sense of progress regarding creativity idea development, meaningful work, affect and extrinsic motivation (Amabile & Pratt 2016). In summary, the dynamic componential theory has two sub-models. The first is related to organisational innovation, and the second is related to individual or small group creativity. The current study is concerned with creativity at the individual level.

The dynamic componential theory of creativity suggests that employees who perceive support from their organisations will dynamically change their intrinsic and extrinsic motivation to accomplish the task, and this change will lead to employee creativity (Duan et al. 2020). Moreover, drawing from the dynamic componential theory of creativity, Kwan et al. (2018) proposed a comprehensive model of how and why perceived supervisor ostracism associates with individual creativity through task resources and creative process engagement influences. The above two studies confirmed that the dynamic componential theory of creativity has been deployed at the individual level, while the next study deployed at the organisational level. Stojcic, Hashi and Orlic (2018) stated that the dynamic componential theory of creativity enables learning and feedback that leads to a new sequence of innovation. However, considering the refining of the framework, the proposed new theory by Amabile and Pratt (2016) may be promising in creativity literature for its flexibility and power to integrate with the researchers' concepts or constructs. Some studies also used the dynamic componential

model of creativity as the background for their studies, e.g. to link POS and employee creativity (Duan et al. 2020).

It is evident in reviewing the literature that there are two common understandings between the componential theory of creativity and SDT. That two theories are concentrated on intrinsic motivation rather than extrinsic rewards. Moreover, both theories considered extrinsic motivation to diminish intrinsic motivation, as seen and highlighted in SDT (section 2.2.3). Further, Amabile (2012) stated that extrinsic motivators have undermined intrinsic motivation. The researcher argued that intrinsic motivation does not come from a vacuum; it should be the organisational strategy represented by the leader or direct manager to motivate such feelings or may the leadership style in the organisation motivate and let the employees feel intrinsically motivated. It could be the training offered by the organisation or information availability that will work as enablers for enhancing individual intrinsic motivation by having meaning for the work or for what they are doing. Finally, the researcher expects that this debate will be minimised shortly after the sophisticated theoretical and empirical models are presented, which will be examined simultaneously and lead to a balance between the two constructs. The new dynamic componential model of creativity stated that intrinsic motivation and extrinsic motivation are the first pillars in the updated model (Amabile and Pratt 2016). This will be elaborated in the theoretical contribution section (6.2).

Altogether, social exchange theory is the key theory, as it plays a crucial role in the current study through its capability, flexibility and rationality to integrate with the other four theories (OST, SDT, JD-R model and componential theory of creativity) to have a holistic theoretical background. Moreover, the five main constructs used in the study (POS, work engagement, intrinsic motivation, extrinsic rewards and employee creativity) in the proposed conceptual

framework have been driven from the mentioned theories (Figure 2.1). Figure 2.1 Explains the theoretical framework by showing that SET is the main theory of the current study, and also shows how the main theory integrated positively with the other four mentioned theories. This type of integration creates five different concepts that have been driven directly from each related theory. For example. POS has been driven from OST. Work engagement has been driven by JD-R, intrinsic motivation and extrinsic rewards have been driven by SDT, and employee creativity has been driven by the componential theory of creativity.

## 2.7 Chapter summary

Chapter two discusses the main definitions of the thesis concepts (POS, work engagement, intrinsic motivation, extrinsic rewards, and employee creativity) are presented. The employee creativity section has discussed two parts, the differences between creativity and innovation with a focus on the individual level along with their definitions and shed light on creativity and innovation behaviours studies in the UAE context. Then, the theoretical background of the thesis by stating that social exchange theory is the main theory in this thesis along with the rationality behind choosing this theory. Also, this chapter demonstrates for SET how it may be integrated with four other relevant theories or models: organisational support theory, job demands-resources model, self-determination theory and componential theory of creativity. Next, discuss the conceptual framework or model hypotheses in chapter 3.

# Chapter 3: Conceptual framework and model hypotheses

This chapter is subdivided into eight sections: POS and employee creativity; POS and work engagement; work engagement and employee creativity; the mediating role of work engagement in the relationship between POS and employee creativity; the moderating role of intrinsic motivation in the relationship between POS and work engagement; the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity; the moderating roles of intrinsic motivation and extrinsic rewards simultaneously in the relationship between POS and employee creativity through work engagement; and a summary of the seven hypotheses in the current study, ending with a presentation of the conceptual framework (Figure 3.1).

## 3.1 The relationship between POS and employee creativity

Creativity is affected by the hierarchical level of the organisation through line managers' everyday practices in dealing with individual employees, groups and their projects (Amabile & Pratt 2016). Therefore, organisations need to invest in employees' power to enhance their support perception and foster their capabilities and potential towards creative work activities. POS is seen as recognising, rewarding, appreciating and encouraging employees who demonstrate creativity (Zhou & George 2001) and creativity involved in generating novel ideas that have potential practical benefits for the organisation (Neves & Eisenberger 2014). Thus, the study on employee-employer relationships assists in integrating social exchange associations in work settings (e.g. relationships with organisations, direct managers and colleagues), which will enhance the research of social settings in individual creativity in general

(Pan, Sun & Lam 2020). The relationship between POS and creative behaviours has remained uninvestigated (Khazanchi & Masterson 2011). Since many scholars call for more studies in the relationship between POS and employee creativity, as stated earlier in the research gap (section 1.4). However, POS is based on organisational support theory, stressing the importance of seeing employees as valued and appreciated organisational assets deserving the company's investment to develop their full potential (Luksyte & Spitzmueller, 2015).

Employees who perceive high support from their organisations prompt positive attitudes and behaviours (Tsachouridi & Nikandrou 2018). Zhou and George (2001) argued that POS for creativity has a positive mechanism in challenging job dissatisfaction towards creativity. From this approach, the positive relationship between POS and employee creativity has been expected to improve and encourage individual creativity (Zhang, Bu & Wee 2016). Few studies in the literature examine these relations. Some studies have shown a positive and significant relationship between POS and employee creativity. A cross-sectional survey was conducted to gather data from six different organisations in Korea (e.g. railway, clothing, electronic and health care companies) and 198 respondents. The relationship between POS and employee creativity was positive and significant (Zhang, Bu & Wee 2016). Another empirical study Tang et al. (2017) conducted on 268 employees and matched supervisors from two different organisations in China found that POS has a positive and significant effect on employee creativity. A recent empirical study conducted on 410 employees from 68 organisations in China found that POS is positively and significantly associated with employee creativity (Duan et al. 2020). Based on previous empirical studies, POS plays a crucial role in the creativity of employees, as it helps to foster the possibility of employees generating new ideas and being creative. When the organisation appreciates employees' contributions, it encourages employees to think differently to generate new ideas and solutions for the issues that face the organisation.

Moreover, when employees receive perceptions and care from their organisation, such supportive feelings will create a norm of reciprocity towards organisation objectives and goals (e.g. employee creativity).

From another perspective, some empirical studies have found no significant relationship between POS and employee creativity. Suifan, Abdallah and Al-Janini (2018) conducted an empirical study of 369 employees working in the banking industry in Jordan and found that there is no significant relationship between POS and employee creativity. Moreover, Akgunduz, Alkan and Gök (2018) found that there is no significant direct relationship between POS and employee creativity for 274 hotel employees working in Turkey, while the indirect relationship between POS and employee creativity was positive and significant through the meaning of work. Furthermore, Agarwal (2014a) conducted an empirical study of 510 managers from two service organisations in India and found that the indirect relationship between POS and IWB was positive and significant, while the direct relationship between POS and IWB was insignificant. It is evident from the above arguments that some studies did not find a direct relationship between POS and employee creativity. Many concluded that support, care and appreciation may not be sufficient to lead to creativity, or there is another possibility that POS alone is not possible to lead to creativity. Additional mechanisms and conditions may have to be embedded in the conceptual framework for such relations to occur in reality. However, the study discussed these contradictory empirical findings in detail in the relationship between POS and employee creativity in the discussion chapter 6 (section 6.1).

Employees with a high level of POS should participate in greater job-related efforts, resulting in enhanced in-role job and extra-role performance (Kurtessis et al. 2017). Therefore, POS can enhance individuals' perceptions that the organisation is supportive of creative behaviours

(Khazanchi & Masterson 2011). Based on the OST, once employees realise and understand that the stressors that come from their hard work will be repaid, this feeling may turn to motivation and other benefits (Zhang, Bu & Wee 2016). Neves and Eisenberger (2014) suggested that employees with a high level of POS may trust their organisations and encourage more risk-taking, as they feel that their organisation will support them in case of failure. Therefore, the more employees' co-workers, supervisors and managers offer support related to creativity the higher their creative performance (Madjar, Oldham & Pratt 2002; Pinnington & Hammersley 1997).

Creativity needs personal and social considerations that are dealt with by social exchange like POS (Ahmed et al. 2015). Thus, supposing that employees who perceived support from its organisation, management or co-workers as they considered as an agent in the organisation will lead the employees to generate new ideas and be more creative in the workplace resulted in achieving organisational objectives and goals, as this type of supportive characteristic, including appreciations, values, employees' contributions and trust, will create a type of obligation for the employees aiming to return to the form of creativity based on the social exchange ideology. POS should prompt the norm of exchange, leading employees to work towards the desired outcome because they perceive gratefulness or felt obligation (Eisenberger, Shanock & Wen 2020). Therefore, high levels of POS are supposed to generate obligations within individual employees to repay the organisation (Settoon, Bennett & Liden 1996).

OST suggests that if employees perceive a positive behaviour, they feel obligated to reply to this behaviour positively (Akgunduz, Alkan & Gök 2018). As POS has its capacity to produce a 'felt obligation', which is driven by SET to care about and assist the organisation in achieving its objectives goals (Yu & Frenkel 2013). According to SET, felt obligation puts the employee

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in a position to repay the employer the favourable perception such as value the employee contribution which will lead to enhance the quality of relationship for the employee and organisation benefits. POS encourages individual employees' sense of obligation that leads them to assist reciprocally with their employer that will be expected to enhance organisational performance (Hameed et al. 2019). When organisations value employee contributions and care about their well-being, they are also more likely to take risks (Neves & Eisenberger 2014). From the view of social exchange, appreciated resources obtainable from the organisation can enhance individual creativity as a consequence of exchange norms (Kuvaas & Dysvik 2009). Social exchange associations advance when organisations 'take care of employees', thus creating beneficial consequences (Cropanzano & Mitchell 2005). SET proposed that the relationship between the employees who perceived support from their organisation will influence employees' behaviour towards creativity based on mutual benefits. Such support will reduce employees' thinking about the consequences of risk-taking through involvement in creative events or may encourage them to take risks through their contribution in generating novel ideas. This leads to the following hypothesis:

**Hypothesis 1.** POS relates positively to employee creativity.

## 3.2 The relationship between POS and work engagement

A meta-analysis of 112 studies containing at least one of the outcomes revealed that POS had a strong positive influence on employee engagement (Ahmed et al. 2015) since the organisational support theory creates an obligation for employees that will positively affect organisational performance that may be seen via high work engagement (Musenze et al. 2021). Given that organisations often measure and monitor engagement and are interested in fostering

employee engagement in their firms, the link between POS and engagement gives organisations insight into using support as a flexible lever for enhancing and promoting engagement (Eisenberger, Shanock & Wen 2020). Efforts in fostering employees' POS may not only benefit the employees but also the organisation (Ott, Haun & Binnewies 2019). It may for the support and organisation cares about their employees' different forms, for instance, when employees perceived care from their organisations through training and empowerment, employees demonstrate more engagement in their work (Nawaz et al. 2014). Thus, POS is a crucial concept for organisational survival and leads to different types of positive outcomes. It is evident from previous arguments that POS relates to employees being more energetic and engaged in their work, which will be reflected positively in their organisation's objectives and success.

From the perspective of JD-R, POS is considered a job resource that affects desired outcomes (e.g. work engagement). JD-R is the model in which having job resources (e.g. support, challenging work) directly expects work engagement (Byrne, Peters & Weston 2016). Therefore, POS directly reduces work stress (Eisenberger, Shanock & Wen 2020). Saks (2019) raised the research question of his revisited paper '*antecedents and consequences of employee engagement*' to examine if engagement mediates the relationships between antecedents and consequences. POS is a central part of the workplace for professional employees. From the model of JD-R, POS represents job resources factors that are considered antecedents for work engagement. However, many factors are considered job resources (e.g. feedback, rewards, learning and development). Because POS is a powerful and supportive concept, professional employees are likely to engage in different work activities. Through the impact of employees' behaviour, organisational support is supposed to enhance employees' capability to participate in work and make them concentrate on what they do for better organisational outcomes.

Through individualised perception, organisational support shows support, appreciation and caring for employees, which are expected to overcome negative feelings, leading to more dedication to the work. Organisational support encourages employees' autonomy and empowerment to be enthusiastically engaged with their work. Such an orientation will enhance employee self-trust, thus leading to work engagement. However, whether POS or PSS is more significant in affecting employees' work engagement remains unknown, particularly from a management outlook (Shi & Gordon 2020). More specifically, there is limited research examining the association between POS and work engagement (Eisenberger, Shanock & Wen 2020).

Many studies support the positive relationship between POS and work engagement. Saks (2006) conducted an empirical study of 102 employees working in different jobs and organisations and found that POS predicts both job and organisation engagement. A longitudinal study was conducted by Xanthopoulou et al. (2009) for 163 engineers in the Netherlands and find that job resources, personal resources, and work engagement are reciprocal over time. Many empirical studies in the literature support the positive relationship between POS and work engagement. An empirical study of 245 full-time participants from firefighters and their supervisors employed by four municipalities found that POS is positively related to job engagement (Rich, Lepine & Crawford 2010). Gillet et al. (2013) found that POS was positively related to the three dimensions of work engagement (vigour, dedication and absorption) and reported that POS is positively related to job engagement. An empirical study of 361 French dentists and their assistance found that POS relates positively and significantly to work engagement (Chevalier et al. 2019). A recent study of 638 employees working in the banking sector in Pakistan found that POS is positively and directly associated with work engagement and that POS is linked positively with work engagement indirectly through

flourishing and thriving (Imran et al., 2020). Another empirical study conducted on 2,408 employees working in private and non-profit organisations in the USA found that POS is positively and significantly linked with work engagement (Khodakarami & Dirani 2020). Meira and Hancer (2021) conducted an empirical study of 242 frontline hotel employees in the USA and found that the relationship between POS and work engagement through psychological empowerment was positive and significant. Musenze et al. (2021), conducted an empirical study of 142 employees in Uganda, found that the relationship between POS and work engagement is positive and significant, which is evident from empirical studies in different countries (e.g. USA, Netherlands, France, Pakistan) and industries (e.g. banking, hotels).

SET offers a theoretical background to explore employee engagement (Saks 2006). When employees are independent, perceive support, and have opportunities for learning and development, they are mostly to reciprocate by showing greater levels of engagement (Xanthopoulou et al. 2009). Therefore, organisations should realise what resources are most favourite by individuals to create a sense of obligation that is returned with greater levels of engagement (Saks 2006). Individuals who perceive greater organisational support are more likely to respond with higher levels of engagement in their organisation (Saks 2006). Engaged individuals create a feeling of energetic and effective linkages with their work activities and feel that they are capable of handling the requirements of their work (Chevalier et al. 2019). Valuing supervisors' well-being, opinions, work-life balance and giving them regular feedback are indicators of some significant support actions that need to be taken to increase work engagement (Shi & Gordon 2020). POS plays an important role in increasing employee engagement because the organisation's feedback and assessment of the employee's work make them feel more capable (Shanock et al. 2019). Individuals who perceived support from their

management and organisations are likely to be more engaged in doing their jobs and can feel they are part of the organisation, and such a feeling will make them more productive compared to employees who feel less supported. However, when an organisation values employees' contributions, cares about their well-being and supports them, employee engagement is also more likely to be encouraged.

From the perspective of SET (employee-organisation associations), valued employees are more likely to return desired treatments in three different ways: more dedication, more attention and concentration, and being energetic towards the organisation's goals. Thus, supposing that employees who perceive support from the organisation will lead the employees to be engaged in their workplace because of the support is related to many consequences, such as being enthusiastic, happy, energetic, dedicated, concentrated and proud of what they are doing. Such these perceptions of support will lead the employees to be more engaged in the workplace and let them feel that they are part of their organisations' objectives based on the social exchange principle. Lan et al. (2020) stated that POS is a vital predictor of work engagement; however, the fundamental reason behind that remains unclear. The argument that once employees perceive support from their organisation that will create positive intention towards their organisations lead those employees to be more involved and engaged in the work. In Saks' (2019) revised model of work employee engagement, the following concepts are considered antecedents for employee engagement: job characteristics, POS, PSS, rewards, justice and others. Since POS is one of the key antecedents of employee engagement, the assumption in the current conceptual framework is that POS has its effect on work engagement. Based on the above and previous arguments, the hypothesis has been stated as:

**Hypothesis 2.** POS relates positively to work engagement.

## 3.3 The relationship between work engagement and employee creativity

In a meta-analytic study, Christian, Garza and Slaughter (2011) conceptualised work engagement into three main dimensions: physical (e.g. vigorous, energetic, resilient), emotional (e.g. attachment and dedication to job performance), and cognitive (e.g. absorbed, cognitively focused, vigilant). Such work engagement dimensions (physical, emotional and cognitive) operate as sources and antecedents for employee creativity, so these concepts have the capability and power to motivate employees to discover ideas or solve serious problems. Bakker et al. (2020) stated that once employees are engaged in their work, they will be more open to new ideas. However, research studies on the relationship between engagement and creativity are lacking (Ismail, Iqbal & Nasr 2019), no research has been conducted on the relationship between employee engagement and employee innovative behaviour (Slåtten and Mehmetoglu, 2011), and little is known about the value of employee engagement in explaining work performance behaviours (Eldor & Harpaz 2015). Work engagement focused on the employees' work tasks, and in this case, engagement should be positively linked to task performance (Christian, Garza & Slaughter 2011). Kahn (1990) specified that employees become physically attached to the tasks, whether individually or with other people, cognitively and sympathetically linked to others in the work that they are doing in different ways that show what they feel and think, as well as their creativity, values and beliefs. Therefore, Slåtten and Mehmetoglu (2011) emphasised that positive emotions embedded in work engagement that relate to behaviour and creativity mean positive emotional orientations support the ability to be more creative when providing a service. Employees who are more intensively engaged apply high-quality contributions and creativity (Garcia Martinez 2015). Jiang and Yang (2015) stated that employees who engage insightful and critical thinking are likely to be more involved in

the creative process via exploring the cognitive process and truth. Thus, engaged employees who practice positive modes and emotions (e.g. inspiration, challenge and enthusiasm) in their work could be more expected to think outside the box and become more adaptive and creative in their work (Eldor & Harpaz 2015). It is evident from previous scholars' thoughts that engagement is positively related to employee creativity, as dedication, energy and vigour influence employee engagement in creative work activities.

The literature revealed interesting studies positively associated with creativity. Ismail, Iqbal and Nasr (2019) conducted an empirical study of 186 respondents working in Lebanese companies and found a positive and significant relationship between engagement and creativity. Another empirical study conducted by Asif et al. (2019) on 233 respondents from the eastern China region from the public sector found work engagement significantly predicts employee creativity. A recent empirical study conducted by Hui et al. (2020) for 281 professional employees from China find that the relationship between work engagement and employee creativity is positive and significant. Moreover, employee engagement is related to co-workers' creativity and innovation in the workplace. Specifically, engaged employees have high levels of enthusiasm and energy about their work; therefore, Slåtten and Mehmetoglu (2011) suggested that employee engagement links positively to employees' innovative behaviour. As mentioned earlier, work engagement is one construct in this study that follows many academics' views; however, some studies have studied work engagement as three dimensions following Kahn (1990), who considered engagement a multidimensional motivational concept classified into physical, emotional and cognitive engagement. Thus, Garcia Martinez (2015) conducted an empirical study for 259 completed responses from Kaggle's members to examine each element of work engagement separately with creativity and found in her study that emotional and cognitive engagement were positively related to

creativity. Recent empirical studies to support the arguments of Bakker et al. (2020) conducted an empirical study of Dutch employees from different organisations and backgrounds and found that work engagement is positively and significantly related to employee creativity. Also, an empirical study of 272 employees working in R&D organisations (small and medium enterprises) in Jordan found a positive and significant relationship between work engagement and employee creativity (Al-Ajlouni 2020). Zhang and Bartol (2010) conducted an empirical study for a large information technology (IT) company headquartered in the Republic of China. Employee survey responses from software engineers and product developers found that process engagement is also positively related to employee creativity. An empirical study conducted with 563 employees in four different industries (banks, telecom, cement, textile) in Pakistan found that work engagement relates to employee creativity (Islam & Tariq 2018). It is evident from previous empirical studies that the strong positive link between work engagement and employee creativity has been confirmed in different countries, such as Lebanon, China, Jordan, Pakistan and the Netherlands, for different professional employees (e.g. bankers, R&D, software engineers).

Employee engagement exists in SET and is considered a stronger theoretical background (Saks 2006). Employees' dedications and energetics do not come from vacuums; they should come from leaders and line managers who motivate their employees to be engaged in their work roles, thus supposing that when employees are motivated and dedicated to their job, they can spend extra effort and time working efficiently and more creatively. In line with SET, this study believes that a higher level of work engagement which organisation or supervisor behind this situation, this type of motivation will create feelings with employees to reciprocate by being involved in more creative tasks and activities that lead to desired outcomes (e.g. employee creativity). SET in the employee-organisation relationship may be started by an organisation's

support, feedback and learning opportunities; however, this type of treatment from the organisation puts the employees in a position to repay it in the form of more engagement and creativity. The situation may differ from one organisation to another, and the process may start from employees by engaging in creative work activities to enhance the creative behaviour that put them in a position to be rewarded from their organisation or employer based on the SET. However, a climate of positive social-exchange relationships between the employees will enhance this type of thinking and perception, which will lead to positive outcomes for the employee and the organisation. A high level of work engagement in experimental and explorative tasks in the workplace can put employees in a better position to offer creative ideas (Chang & Shih 2019). Al-Ajlouni (2020) argued that employee creativity can be gained and improved through highly engaged employees. Furthermore, Bakker and Demerouti (2007) learned that the JD-R model for work engagement influences performance, specifically for in-role and extra-role performance, financial turnover and creativity. Since creativity is one of the work engagement consequences, the assumption in the current conceptual framework is that work engagement has its influence on employee creativity. Employees who practice a high level of engagement in their work tasks will encourage them to be actively influenced and to be engaged in creative activities challenges. Since energetic professional employees may continuously search for something new and challenging, satisfying their needs. Based on this logic and previous arguments, the hypothesis is stated:

**Hypothesis 3.** Work engagement relates positively to employee creativity.

## 3.4 The mediating role of work engagement

In the previous sections, the relationships between POS and employee creativity, POS and work engagement, and work engagement and employee creativity have been thoroughly discussed. In this section, the aim is to understand *how* work engagement could explain the relationship between the two concepts POS and employee creativity. To put it differently, there is a need to examine how work engagement mediates the relationship between POS and employee creativity. By reviewing the literature, it is evident that the majority of studies have used work engagement as a mediator. Moreover, in a meta-analytic study, Christian, Garza and Slaughter (2011) conceptualised work engagement as a mediator between the antecedents and consequences. Furthermore, work engagement has lately been given a lot of attention as a crucial mediator in the relation between job characteristics and employee outcomes (De Spiegelaere et al. 2014). However, many studies have found support for a mediating effect of employee engagement in the relationship between different antecedents and consequences (Saks 2019). However, there is a lack of studies that examine the mediator role of work engagement specifically in the relationship between POS and employee creativity.

Some studies show the important mechanism of work engagement that leads to creativity between different antecedents and work engagement. An empirical study conducted with 400 employees working in 110 different manufacturers in Pakistan found that work engagement mediates the two independent variables, namely empowerment and training, and employee creativity (Nawaz et al. 2014). Chaudhary and Akhouri (2018) conducted an empirical study of 219 employees working in different IT organisations in India and found that work engagement fully mediates the relationship between intrinsic corporate social responsibility and employee creativity. Moreover, Chaudhary and Akhouri (2019) conducted an empirical study of 316 employees from diverse IT companies in India and found the relationship of corporate social responsibility perceptions with creativity being mediated by work engagement.

Further, Ismail, Iqbal and Nasr (2019) stated that engaged employees enjoy their work, duties and tasks, which leads them to think creatively and to move ahead even in uncertain situations. Thus, the expectation is that employees who experience POS will promote work engagement and employee creativity more than employees who do not experience POS. A recent empirical study of 320 employees working in high-tech from small and medium enterprises in Spain found a positive and significant relationship between LMX and employee creativity through work engagement (Vila-Vázquez, Castro-Casal & Álvarez-Pérez 2020). Another empirical study of 600 leaders and employees working in start-ups in India found that perceived authentic leadership has positive and significant effects on employee creativity through work engagement (Sengupta, Sharma & Singh 2021). Moreover, Truong, Nguyen and Phan (2021) recently conducted an empirical study on 602 small and medium enterprises (SMEs) in Vietnam and found that job resources and co-worker support are positively and significantly related to work engagement and that work engagement is also positively and significantly associated with employee creativity. A recent empirical study by Tian, Wang and Rispens (2021) on 176 employees working in energy firms in China also found that work engagement mediates the relationship between job crafting and employee creativity.

SET offers a theoretical background to clarify why individuals choose to become more or less engaged in their organisation. When individuals perceive these resources from their organisation, they feel obliged to return to the organisation with higher levels of engagement (Saks 2006). And the assumption that POS is one of the job resources related to work engagement that will result in desired outcomes (e.g. employee creativity) as per the JD-R model. When individuals are fulfilled with their experience at their work, they lead not only to feel dedicated, satisfied and proud but also to show creativity at work (Ismail, Iqbal & Nasr 2019). When individuals obtain appreciation and rewards from management, they feel obliged

to reciprocate with greater levels of engagement (Saks 2006). When the leader supports their employees, employees' sense of obligation to meet organisational goals is enhanced based on SET (Choi, Tran & Park 2015). As such, employees will be encouraged to be more creative. Therefore, providing recognition and investing in employees may encourage the development of a strong social exchange between employees and employers (Wayne, Shore & Liden 1997). OST and SET and the concept of exchange relations between supervisors and employees, in terms of giving support and care to employees, which creates a continuous obligation for employees to exchange it with valuable outcomes (e.g. employee creativity).

Within the cultural context of the current study and the line of argument based on SET, individuals will assess the risks compared to the benefits and should feel supported by their supervisors in ways that tolerate the inevitable risks of creativity tasks. Individuals are expected to participate and engage in creative work when their ideas or contributions are supported and valued by their organisation. The main principle is that employees regulate their relations with others in the workplace based on their self-analysis of cost against the benefit (Blau, 1964). Consistent with SET, successful mutual exchanges by employees can transform economic exchange relationships into high-quality social exchange relationships within the organisation (Cropanzano et al. 2017). Cost-benefit analysis perspectives encourage making a set of rational, calculative expectations before any venture or project. If employees expect to be supported for their creativity, these motivational factors will enhance the proposed relationship between work engagement and employee creativity desired actions and outcomes such as employee creativity. However, getting a promotion, monetary incentives or other physical rewards may enhance the POS-employee creativity relationship from one side and work engagement-employee creativity from the other. More specifically, once employees perceive job resources (e.g. POS) that will lead to increases in work engagement, self-esteem and, in some cases, employee expectation

levels that their efforts will be appreciated, the employees will work creatively as reciprocity. When leaders show accessibility, openness and availability to their employees, they perceive these resources as motivational factors and respond by dedicating and engaging themselves to the work roles and applying more empathy and cognitive and physical resources to their organisations (Choi, Tran & Park 2015).

Job and personal resources are the main constructs related to work engagement, and they gain their importance specifically in the setting of high job demands. Engaged employees are more productive, creative and willing to go the extra mile (Bakker & Demerouti 2008). However, Bakker and Demerouti (2007) conceptualised work engagement in the JD-R model as a mediator in relationships between (job and personal resources) and performance (e.g. creativity). Saks' (2019) revised model considered work engagement as a mediator between the antecedents (e.g. POS) and consequences (e.g. extra-role performance). This suggests that work engagement is a potential mediator that may explain the relationship between POS and employee creativity. Specifically, in a workplace where organisations or direct supervisors show positive behaviours such as caring for employees' well-being and value employees' contribution as per OST, employees, in this case, are expected to be positively engaged in their work and achieve greater creative performance and foster employee creativity. Thus, when employees have a high level of autonomy, this will enhance their intrinsic motivation; as such, internal motivational factors will strengthen the relationship between POS and work engagement. Based on the above arguments, the hypothesis has been stated:

**Hypothesis 4.** Work engagement mediates the positive relationship between POS and employee creativity.

## 3.5 The moderating role of intrinsic motivation

In this section, the aim is to investigate the moderating role of intrinsic motivation in the relationship between POS and work engagement. The assumption is that employees' work engagement is influenced by POS when intrinsic motivation is high. Since POS is one of the job resource elements that enhances the employee's well-being, dedication and absorption, when individual employees experience fun, interest and satisfaction while working along with the organisation caring for their well-being and support, employees will be more engaged in their work roles and tasks. Self-determined individuals may be more suited to cope with elevated workloads and may be more likely to use environmental control opportunities as a stress reliever (Parker, Jimmieson & Amiot 2010). From another direction, if the employees POS while feeling the job is not interesting and calculate each hour in the work, this feeling will make the individual employee disengaged in the workplace, which affects the employee and organisation performance overall. The justification of having intrinsic motivation as the first moderator and work engagement as a mediator, although like the certain level, nevertheless, they are considered not identical constructs (De Spiegelaere et al. 2014). Bakker (2011) stated that motivation is different from work engagement. Though POS allows individuals to be more engaged at work, enhancing such a relationship relies on intrinsic motivation.

There is empirical support for stated assumptions in the literature, as there is a positive relationship between POS and intrinsic motivation from one side and intrinsic motivation and work engagement from the other side. However, the starting point would be empirical studies

related to POS and intrinsic motivation. Zaitouni and Ouakouak (2018) claimed that no research to date has shown evidence of a direct relationship between POS and intrinsic motivation. However, few empirical studies have been found in the literature about these relationships directly and indirectly, which is POS in relationship with intrinsic motivation. Support, compensation and training are positively related to intrinsic motivation, work satisfaction, and role conflict (Babakus et al. 1996). POS is positively related to intrinsic motivation in their empirical study (Rich, Lepine & Crawford 2010). Another empirical study of 256 questionnaires for five hospitals found that POS was positively related to intrinsic motivation (Mitchell et al. 2012). Moreover, Gillet et al. (2013) conducted two studies and found that POS in Study 1 had 235 participants from the French police force and PSS in Study 2 for 147 police forces involved in vocational training; however, they found a positive relation with self-determined motivation. Further, based on an empirical study of 163 employees working in various service organisations in Kuwait and pursuing an MBA. POS is significantly and positively associated with intrinsic motivation (Zaitouni & Ouakouak 2018). However, as specified earlier, scholars call for much research to link POS and intrinsic motivation (Eisenberger, Shanock & Wen 2020).

Further, organisations that help employees and their families would diminish employees' perceived difficulties and challenges for working and living overseas. This would in turn motivate employees to more autonomously work abroad (Chen & Shaffer 2017). Furthermore, an empirical study of 260 completed responses from soccer referees of South Korea found that POS is related positively and significantly to the intrinsic motivation of referees (Hong, Jeong & Downward 2019). It is clear from the previous empirical studies that POS is positively related to intrinsic motivation, as SET states the necessity of considering individuals' enthusiasm and its association to the achievement of organisational objectives. Such views of

organisational behaviour integrate individuals and encourage them to perform specific objectives and events within the mutual obligations among individual-organisation relationships (Aselage & Eisenberger 2003). Employees who feel supported by their organisations are more enthusiastic when doing their work and can be internally motivated and more productive compared to employees who feel less supported, which may lead to demotivation.

From another perspective, by linking intrinsic motivation and work engagement. Intrinsic motivation plays a vital role in enhancing work engagement. An empirical study of 143 responses from seventeen different restaurants in Midwestern town in the USA found that intrinsic motivation is positively and significantly related to the work engagement dimensions vigour, dedication and absorption (Putra, Cho & Liu 2017). Intrinsic motivation occurs when activities align with orientations, personal attitudes, and when the work activity is meaningful (Delaney & Royal 2017). Such motivational factors will make the employees more likely to engage positively in their work. Creating a positive workplace culture and making the job more meaningful and interesting will enhance employees' intrinsic motivation, which will be reflected positively to engage more in their work (Putra, Cho & Liu 2017). Motivation is also positively associated with work engagement (Gillet et al. 2013). Specifically, it would be understood that intrinsic motivation occurs between the individual and the task (Ryan & Deci 2000).

The previous literature considers intrinsic motivation as the ideal moderator linking POS and work engagement, specifically, that intrinsic motivation can influence and enhance the support that will lead to energetic employees (e.g. work engagement). However, the literature lacks the study of intrinsic motivation as a moderator in the relationship between job resources (e.g.

POS) and work engagement. SET should be experienced as autonomous and pleasure-based when accompanied by high levels of intrinsic motivation (Kuvaas & Dysvik 2009). SDT has stressed that social autonomy-supportive characteristics, such as managerial style, may be considered the equivalent of job resources under the JD-R model; however, such characteristics tend to ease the achievement of job objectives and employee growth (Fernet, Austin & Vallerand 2012). In the current study, POS is considered a job resource that an organisation will use to support its employees, which will enhance work engagement when an individual employee has high intrinsic motivation. Therefore, SET encourages high-quality employee-employer relationships to maintain positivity in the workplace and enhance work engagement. The expectation that this resource will place the employees under responsibility towards their organisations to influence the employee motivation and engagement as a response from the employees to their organisations based on SET. Moreover, Malinowska and Tokarz (2020) assumed that the motivational process may play a moderator role in the relationship between job resources and work engagement. The assumption is that a high level of intrinsic motivation of individual employees will strengthen the relationships between POS and work engagement. Consequently, increased intrinsic motivation and employee POS levels will empower professional employees to be more engaged and dedicated towards work tasks and activities as reciprocate to their organisations according to SET. Thus, the following hypothesis has been proposed:

**Hypothesis 5.** Intrinsic motivation moderates the relationship between POS and work engagement, such that this relationship is stronger when employees have higher intrinsic motivation.

## 3.6 The moderating role of extrinsic rewards

The assumption is that extrinsic rewards moderate the relationship between work engagement and employee creativity. Limited research has tried to connect tangible (extrinsic) job resources, such as pay, to work engagement (Putra, Cho & Liu 2017). The literature also lacks studies investigating the relationship between extrinsic motivation and work engagement (Miao, Rhee & Jun 2020). However, as stated earlier, extrinsic rewards refer to financial and nonfinancial rewards offered by employers Malik, Choi and Butt (2019), considering that the rewards-creativity relationship differs depending on employees' differences Malik, Butt and Choi (2015) and job types. The impact of monetary rewards and appreciation on creativity varies depending on the job type and the individual (Baer, Oldham & Cummings 2003). Offering workers incentives for creativity will successfully concentrate workers on confirming that their innovative ideas are worthy since the incentive shows the particular parameters that will be used to determine novelty, the degree to which it also facilitates the achievement of organisational objectives (Sue-Chan & Hempel 2016). However, extrinsic motivation is related to actions for reasons carried out other than their internal satisfactions (Ryan & Deci 2000).

In reviewing the literature, limited studies construct extrinsic rewards as a moderator. However, some studies construct extrinsic motivation between the big five of personality and creativity. Sung and Choi (2009) conducted a longitudinal study of 304 students at a North American business school and found that the relationship between openness to experience and creativity was stronger when the student had high extrinsic motivation. Agreeableness was a positive predictor of creative performance only when the student's extrinsic motivation was low.

Moreover, in an empirical study conducted by Malik, Butt and Choi (2015) on 181 employee-supervisor dyads, the responses collected from employees registered in executive training programmes at two private universities in Pakistan indicated that the importance of rewards moderates positively and significantly the relationship between extrinsic rewards and creative performance of employees. Lim (2012) conducted a mixed-method study in UAE and found that UAE nationals and expatriate generation 'Y' were looking for stability in their work and were most motivated by extrinsic rewards. A recent empirical study conducted on 235 internet taxi drivers found that the association between monetary rewards and work engagement is positive and significant (Hua et al. 2020). Further, Marsden et al. (2015) conducted a neuroimaging study which showed that participants who received an extrinsic incentive exposed task accuracy performance compared to participants who did not receive the incentives.

Extrinsic motivation is affected by the organisation and working setting (Delaney & Royal 2017). Thus, extrinsic motivation indicates the crucial role of a supportive work environment that offers different types of resources to enhance employees' willingness to be more dedicated and engaged to do their job tasks (Wan 2018). Putra, Cho and Liu (2017) stated that employees who are externally motivated will do their work with a sense of motivation because they expect to be returned, such as promotions, increased salaries, bounces and monetary rewards. Based on the previous arguments, extrinsic rewards are the other face of organisational support that will lead employees to be more engaged in their work. The assumption is that work engagement is associated with employee creativity; thus, work engagement and employee creativity would be strengthened when employees have a high degree of extrinsic rewards and weakened when they have a low degree of extrinsic rewards.

In line with JD-R (Saks 2019), POS, rewards and recognition are considered antecedents for employee engagement. Thus, job resources have an influence on extrinsic motivation by enhancing the understanding of organisational objectives and decreasing organisational work demand (Miao, Rhee & Jun 2020). More specifically, job resources (e.g. POS) are supposed to play an extrinsic motivational role by supporting employees towards organisational objectives (Bakker 2011). Therefore, extrinsic motivation concentrates on rewards that may be attained as a consequence of participation (Vallerand 1997). In this essence, rewards programmes motivate employees to provide new ideas and to be creative (Jiang, Wang & Zhao 2012). Consequently, the assumption that work engagement is associated with employee creativity could be increased with a high level of extrinsic rewards. Rewards are considered a job resource that affects a positive outcome in the work engagement-creativity relationship.

In terms of SET, when employees receive rewards and recognition from their organisation, they will feel obliged to respond with higher levels of engagement (Saks 2006). This type of dedication and engagement may create expectations from the employees of receiving extrinsic rewards based on previous experiences of the same employees or other colleagues in the same organisation, which will motivate employees to engage in creative behaviour. SET considers that individuals compare their contributions to those of other individuals or organisations (Akgunduz, Alkan & Gök 2018). This will encourage employees to be more creative and will give meaning to why they need to be engaged in creative activities in the workplace. The argument is that when extrinsic rewards are high, employees will be motivated to be engaged in creative activities. In line with SET and the concept of exchange relations between managers and subordinates, once they are motivating the employees to be engaged in their work along with extrinsic rewards such these giving creates a continuous obligation for the employees to give back valuable outcome (e.g. employee creativity). Furthermore, employees will assess the

risks compared to the benefits and should feel supported and rewarded by their managers in ways that tolerate the inevitable risks of creativity tasks. Therefore, employees should be encouraged to participate in creative work when their ideas or contributions are rewarded by their organisation. As stated by Blau (1964), employees regulate their relations with others based on their self-analysis of cost against benefit. Therefore, when individuals expect to be rewarded for their creativity, these expectations will enhance the proposed relationship between work engagement and employee creativity.

Hence, spreading supportive rewards and a creative culture amongst employees encourages different creative activities that may lead to novelty or solve problems. It is evident from the literature that the role of extrinsic rewards is considered an antecedent and driver of employee creativity. However, extrinsic rewards are related to risk-taking, and creativity remains mostly unexamined in practical contexts. As emphasised in the research gap section, studies concerned with the relationships between extrinsic motivator elements on creativity and innovation are scarce (Fischer, Malycha & Schafmann 2019). Once the employees are engaged, the assumption is that such perception will increase employee expectation levels to expect that their efforts will be rewarded, which will motivate employees to work creatively as reciprocity for their organisations. Since work relationships are in line with SET, they directly impact managers' willingness to initiate and strengthen the interchange of such rewards (Whitener et al. 1988). Subsequently, tangible rewards explicitly directed at creativity are expected to boost individual creativity (Yoon, Sung & Choi 2015). Thus, the assumption that work engagement is associated with expectations of extrinsic rewards should enhance employee creativity. Based on the above argument, the hypothesis has been stated:

**Hypothesis 6.** Extrinsic rewards moderate the relationship between work engagement and employee creativity, such that this relationship is stronger when employees have higher extrinsic rewards.

## 3.7 The moderating role of intrinsic motivation and extrinsic rewards

The assumption that intrinsic motivation and extrinsic rewards are moderated simultaneously in the relationship between POS and employee creativity through work engagement. Thus, this section will provide a holistic approach for two stages of moderators, since intrinsic motivation and extrinsic rewards are essentially opposed and not suggested for simultaneous study (Cerasoli, Nicklin & Ford 2014). CET concentrates on elements that ease or weaken intrinsic motivation (Ryan & Deci 2017). Moreover, both intrinsic and extrinsic motivation have consequences for creative performance because high levels of energy, focus and willingness are needed (Sung & Choi 2009). More specifically, to have a holistic approach of studying the indirect relationships between POS and employee creativity through the multiple moderated mediation model intrinsic motivation, extrinsic rewards and work engagement.

No research that studies the integrative model, like the current study, was found. However, empirical studies confirm the indirect relationships between POS and employee creativity through different mechanisms and boundary conditional processes. An empirical study by Tsai et al. (2015) conducted in Taiwan for 320 employees who are working in the tourism and hospitality industries found that organisational support is indirectly related positively and significantly to employee creativity through its effects on multiple mediators' justice, motivation, knowledge sharing and promotion. Another empirical study Tan et al. (2019) conducted on 198 undergraduates from two universities in Malaysia participated in this study and found that the sequential indirect effect of openness on creativity through intrinsic motivation and creative process engagement is positively and significantly related by using

multiple mediators' mechanism. An empirical study conducted by Malik, Choi and Butt (2019) on 220 independent employee-supervisor dyads confirmed that intrinsic motivation and extrinsic rewards influence radical and incremental creativity. An empirical study of 303 employees working in public and private banks in Pakistan found that extrinsic rewards have positive and significant relationships with creative performance through the mediating role of intrinsic motivation (Shaheen, Waheed & Hashmi 2020). On the other hand, Yoon et al. (2015) conducted an empirical study of 271 employees working in insurance companies in South Korea and found that extrinsic motivation is positively and significantly related to employee creativity, but there was no significant relationship between intrinsic motivation and employee creativity. However, the theories agree that intrinsic and extrinsic motivation are two different types of motivation; thus, individuals perceive the influence of these motivational criteria on creativity and innovation (Fischer, Malycha & Schafmann 2019).

The assumption again in this section is that the MMM model of intrinsic motivation, extrinsic rewards and work engagement indirectly explains the relationships between the study constructs. The argument in this approach is that *when* employees get support from their direct supervisor or organisations, this support will motivate them intrinsically and make them enthusiastic to do their work. Specifically, if they know that such positive activities will be rewarded, they will be more engaged and creative. The question here is how long these motivational factors can be sustained, which depends on the source (Delaney & Royal 2017). The argument here that support characteristics and motivational and behavioural factors, including work engagement , intrinsic and extrinsic motivation, should be part of organisational behaviour to reach the desired outcome and to sustain achievements, which can be renewed from time to time based on changes in the employee's interests. The current study supposes that what motivates employees will differ in the future. However, intrinsic motivation suggests

that intrinsic rewards are capable of sustaining work engagement through ongoing activities to sustain employees motivated for a long time, specifically for complex and unstructured tasks (Stumpf et al. 2016).

In line with OST, SET and the concept of exchange relations between managers and subordinates, in terms of supporting and valuing employees' contributions and appreciating them in line with internal motivational factors, such as to be more motivated and engaged. Giving these creates a continuous obligation for employees to reciprocate or exchange it for a valuable outcome (e.g. employee creativity). In the cultural context of the current study, employees should feel supported, appreciated, valued and motivated by their direct supervisors to facilitate their engagement in the workplace in ways that foster employee creativity and make the employees more engaged with idea generations and problem-solving capacity. When the degree of intrinsic motivation and extrinsic rewards are high, individual employees will perceive that their organisation is fair and supportive, which intrinsically motivates individual employees to be more energetic, dedicated and engaged in creative events as per the reciprocate norm.

To simplify the complication of the current hypothesis, two explanations would be interpreted. Theoretically, assumed from collective perspectives for the current concepts, POS will influence work engagement and employee creativity when intrinsic motivation and extrinsic rewards are high. Hence, POS is one of the job resources that is expected to enhance employees' well-being, making them more vigorous, dedicated and absorbed in their work (work engagement). These positive orientations foster individual creativity (employee creativity), specifically when employees experience fun and find their work interesting and satisfying (intrinsic motivation) and expect that such behaviour will be rewarded by their organisations (extrinsic rewards). From a methodological perspective, the current hypothesis

explains a model of MMM in which a mediating variable (work engagement) carries the effects of the independent variable (POS) to the dependent variable (employee creativity), and those effects are conditional on the levels of the moderator variables (intrinsic motivation and extrinsic rewards). Since organisational support is related to the work environment and job resources that have a role in affecting work engagement and employee creativity, specifically when this relation is moderated by intrinsic motivation and extrinsic rewards. Thus, the hypothesis assumes influences of POS on employee creativity through work engagement that would be positive for employees with high intrinsic motivation and extrinsic rewards. Based on the above logic and arguments, the final hypothesis has been stated.

**Hypothesis 7.** Intrinsic motivation and extrinsic rewards moderate the indirect effect of POS on employee creativity through work engagement, such that this indirect relationship is stronger when employees have higher intrinsic motivation and extrinsic rewards.

Figure 3.1. Explains the main conceptual framework of the current study: POS is an independent variable, work engagement is a mediator, intrinsic motivation is the first stage moderator, extrinsic rewards is the second stage moderator and employee creativity is the dependent variable.
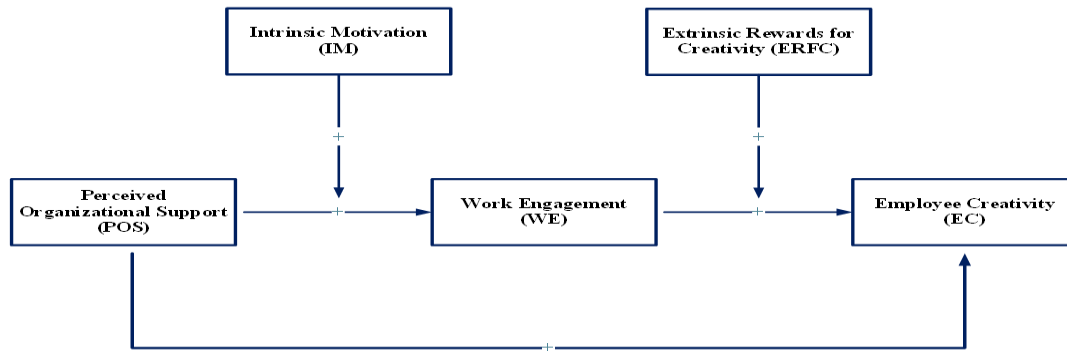
Figure 3.1 Conceptual framework linking POS and employee creativity.

## 3.8 Chapter summary

In chapter three, seven hypotheses have been formulated for further examination in the next chapters. The first hypothesis examines the effect of POS on employee creativity. The second hypothesis examines the effect of POS on work engagement. The third hypothesis examines the effect of work engagement on employee creativity. The fourth hypothesis examines the effect of POS on employee creativity through work engagement. The fifth hypothesis investigates the moderating role of intrinsic motivation between POS and work engagement. The sixth hypothesis investigates the moderating role of extrinsic rewards between work engagement and employee creativity. The seventh hypothesis investigates the roles of intrinsic motivation and extrinsic rewards in the relationship between POS and employee creativity through work engagement (Figure 3.1).

# Chapter 4: Research methodology

This chapter is subdivided into eight main sections reflecting the different research approaches that have been applied. Positivism, deduction, quantitative research, cross-sectional questionnaires, ethical considerations and research methods are covered from sections 4.1 to 4.6. Section 4.7 describes the elements of a preliminary analysis. Finally, section 4.8 summarises the chapter.

A research methodology is the philosophical reasoning for the study design and associated methods, whereas methods are the specific measures used to collect and examine data (Baillie & Douglas 2014). Based on Saunders, Lewis and Thornhill (2019), research philosophies are classified into the five following types: positivism, critical realism (causal mechanisms), interpretivism (how we can gain knowledge of the world), postmodernism (all truth is relative e.g art music film) and pragmatism (applying our experience and thoughts). However, the present research is interested in *positivism* based on the research problem and questions stated in the introduction chapter of the thesis.

## 4.1 The positivist approach

Reviewing the methodological literature on organisational behaviour for methodologies and ideas that may elucidate the entrepreneurship field, Gartner, Bird and Starr (1992) found that there is no dominant standard in organisational behaviour, only an assembly of several ideologies and perspectives. Straub, Boudreau and Gefen (2004) defined positivism as the need to confirm that the data being collected are as objective as possible and a comparatively

accurate representation of the original phenomenon is dominant. Moreover, Saunders, Lewis and Thornhill (2019) relate positivism to the theoretical stance of the normal scientist, where it is operationalised with social reality to generate a law of generalisations. However, there are three types of research assumptions to distinguish research philosophies—ontology, epistemology and axiology.

**First, the term positivist ontology** refers to assumptions about the nature of reality, identifying what research objects and phenomena a study can focus on and how the researcher can approach them (Saunders, Lewis & Thornhill 2019). From this concrete definition, the aim of the doctoral thesis was to examine professional employees' perceptions, incorporating the ontological position by focussing solely on objectivism. From this perspective, the study examines the POS, work engagement, motivational process (intrinsic motivation and extrinsic rewards) and creativity of employees as phenomena that can be examined and tested. Thus, the five concepts are created socially through perception and actions by social actors. Objectivism supports the aim of the study by examining how work engagement can test the relationship between POS and employee creativity. Moreover, it helps identify the boundary conditions by which the relationship between POS and employee creativity can occur in reality. Thus, from the research point of view, phenomena that exist in reality can be studied within the sample through a survey to assess employees' perceptions of the study constructs. The conclusion from the above paradigm means that the research aim has to be measured in an objective way, which ensures objectivism as an ontological orientation without any intervention from the researcher's involvement; this will give added value via the possibility of checking the validity, reliability and generalisability of data collection in the study. Genuine and true events can be researched logically and empirically, as well as explained by articulate and logical inquiry and analysis, via positivist research (Aliyu et al. 2014).

**Second, the term positivist epistemology** refers to assumptions about knowledge (Saunders, Lewis & Thornhill 2019). First, the knowledge has to be true, second, the researcher must justify the claim, third, the justification should be logical. Baillie and Douglas (2014) suggested that the objective of positivist research is to produce objective knowledge, based on an interpretation from 'the outside', without researcher engagement or interest. The positivist view includes the operationalisation of theoretical assumptions using several guidelines. First, it uses the guidelines of 'formal logic', which is a logical clarification stated in recognised assumptions; thus, the guidelines of formal logic may be functional. Second, the positivist view uses the guidelines of hypothetico-deductive logic, comprising the rules of recognised logic. Third, it holds the theoretical assumptions up to the four requisites of falsifiability, logical consistency, relative explanatory power and survival (Lee 1991). Ali and Birley (1999) stated that positivists test theory, whereas interpretivists develop theory. The aim in this thesis is to test the hypothetico-deductive theory, and therefore, a positivist approach is used. Moreover, the positivist orientation in this doctoral thesis is epistemological, which the researcher thinks is the best orientation for investigating the research problem, along with the four research questions, in the thesis.

**Third, the term positivist axiology** refers to the role of values and ethics (Saunders, Lewis & Thornhill 2019). More specifically, the researcher should exclude personal opinion and remain the topic being researched. Therefore, axiology plays a crucial role in the selection and formation of research questions (Biddle & Schafft 2015). Thus, the four research questions in the doctoral thesis have been formulated in a way that allows hypothetical examination without any intervention from the researcher. Moreover, the doctoral thesis has followed many rigorous steps in data collection and analysis to control bias as much as possible and avoid affecting the respondents; more details can be found about ethical considerations in this chapter (Section

4.5). From a statistical perspective, the study produces many empirical tests for common method bias among other validity and reliability tests to ensure that the researcher follows the positivist ontology, epistemology and axiology.

From another perspective, axiology is concerned with what is valuable and beneficial for people and society (Biedenbach & Jacobsson 2016). Specifically, the findings of the current study may extend the body of knowledge and literature from a theoretical point of view. In terms of practical implications, for organisations operating in the United Arab Emirates—specifically, the service sector, including the three industries chosen for this study (banks, IT, hospitals)—this study produces four different programmes that may support the human resource managers or senior managers in these organisations by enhancing employee well-being and the community overall. The next section discusses the deductive approach.

## 4.2 The deductive approach

In reviewing the methodological literature, the research found several common approaches used for theory development (deduction, induction and abduction); thus, each approach has to be defined to give insight and justification for the current choice. Saunders, Lewis and Thornhill (2019) defined the three approaches as follows: In *deduction*, a theory and hypotheses are established, and a research strategy intended to examine the hypotheses is delineated. In *induction*, information is gathered, and a theory is established as a consequence of the information analysis. Finally, in *abduction*, information is used to explore a phenomenon, categorise themes and clarify patterns to produce a new theory or alter the present one; the theory is then examined via extra information gathering. Since the current conceptual framework is built based on hypotheses, the *deductive* approach is the best choice for answering

the study research questions and giving insight about the model hypothesis tests. Since the deductive approach moves from the universal to the specific (Colton & Covert 2007), the deductive method is ideal for measuring the pervasiveness of 'known' phenomena and fundamental patterns of association, including interpretations of causal relationships (Klassen et al. 2012). Moreover, deductive scholars begin with the current theoretical foundation (or occasionally, a specific method to examine hypotheses; Woiceshyn & Daellenbach 2018). A criticism of this model is that it tests only the existence of hypothesised relationships; it does not assist the investigator in recognising what other anticipated variables exist (e.g. contingent or new variables; Ali & Birley 1999). However, it can be argued that it is impossible to have a study that will cover all anticipated variables. The current study is concerned with how much variance in the model can be accounted for by including the relevant variables that may lead to substantial results. The next section discusses the quantitative approach.

## 4.3 The quantitative approach

Two parts are discussed in this section. The different types of approaches (quantitative/ qualitative/ mixed methods) and their definitions are discussed in the first part. The second part is here. Which approach is the most appropriate for the current study?

As clarified in the methodological literature, research methods can be generally categorised into three approaches—the quantitative, qualitative and mixed-methods approaches. First, the *quantitative approach* is applied when the researcher uses numerical data to respond to research questions; this approach naturally relies on measuring the strength of the relationship between the instrument and another measure of the same construct (Colton & Covert 2007). Quantitative research methods depend on statistics and charts (Jean Lee 1992). Moreover, the quantitative

approach may rely on primary or secondary data. In the current, quantitative research method, a survey questionnaire has been adopted to collect the data. More specifically, the quantitative method used here relies on primary data (e.g. survey) to address the thesis research questions and aim of the study because secondary data for the thesis variables are not available. Since the quantitative research methods employed in the natural sciences ensure objectivity, measurement, reliability and validity (Jean Lee 1992). Second, the *qualitative approach* is when the researcher uses textural data to respond to research questions; qualitative research method relies on language and description (Jean Lee 1992). Third, *mixed methods* are when the researcher uses both numerical and textual data approaches to respond to research questions.

From a different perspective, it can be said that a quantitative method is a confirmatory approach in that it confirms the hypotheses (Saunders, Lewis & Thornhill 2019). Moreover, if the variables are defined in advance, it can be logically concluded that the results are essentially quantitative (Marton 1981). Thus, from the descriptions above and based on the research questions and problem statement, the quantitative method has been chosen rather than qualitative or mixed methods because the study's aim is mainly relying on statistical data to address the research questions and research problem. Moreover, the quantitative method allows survey results to be generalised. Furthermore, it will give another opportunity to collect and gather different opinions that could be reached (e.g. 372 surveys completed by the respondents), unlike other methods, that can be restricted to a specific number of participants (e.g. 20 interviews). In addition, the targeting of professional employees from different industries (six organisations) allows the quantitative method to reach the maximum number of professional employees on a large scale and include a representative sample from each stratum. The need to collect objective data from hundreds of respondents will play a crucial role in the

current method selection. The quantitative research method is seen as a conservative method in organisation research, and it is considered objective (Jean Lee 1992).

Quantitative researchers begin experimenting with a genuine enquiry that needs several interpretable findings from the researcher (Zyphur & Pierides 2019). The final justification for using a quantitative method is that it allows the researcher to test the internal reliability (e.g. Cronbach's alpha test, construct validity, composite reliability (CR) and perform other tests that ensure the reliability and validity of the study. In addition, it can incorporate all other empirical tests that do not involve researcher intervention, which will lend solid validity and reliability for the data collection process, resulting in dataset. Moreover, generalising the data to a large population is possible to a certain level compared with qualitative methods. In this study, the researcher's approach to testing the thesis variables through a quantitative method relies on a cross-sectional survey, as described in the next section.

## 4.4 Cross-sectional questionnaires

In the quantitative method, the *questionnaire* is normally linked with the deductive approach, as discussed in the previous sections. It is common to use questionnaires in business management, and the approach is most often operationalised to respond to 'who', 'what', 'where', 'how much' and 'how many' questions. Thus, it tends to be used for examination and descriptive study (Saunders, Lewis & Thornhill 2019). Questionnaires are well accepted because they permit the collection of a large amount of information from a large population, usually through operationalisation to a sample. The data are homogenous, permitting in-kind comparison. Consequently, the current study relies on questionnaire design which is perceived as confident by individuals overall and is both relatively easy to clarify and to understand (e.g.

charts, figures, statistics or numbers) (Saunders, Lewis & Thornhill 2019). Lindell and Whitney (2001) recommended having the survey be short to prevent feelings, such as monotony and tiredness; if respondents find a survey to be extremely long, inappropriate or repetitive in some items, they will spend less intellectual energy into and provide rapid, inaccurate responses. To have an adequate survey to boost the reliability and validity of the current study, the researcher adopted concrete procedures to guarantee the adequacy of the information, such as concentrating on selecting short, reliable scales (e.g. POS: 10 items taken from a 36-item scale; work engagement: 9 items taken from a 17-item scale); the measurement section (4.6.3) explains the adopted measurements, aiming to follow the best practices in survey design, in detail.

The study relies purely on cross-sectional research for many reasons. First, cross-sectional research is used to determine prevalence[1]. Second, the measurements for each person are conducted at one point in time. Finally, associations are identified that can then be studied more thoroughly using cohort research or randomised controlled research (Mann 2003). However, there is still scientific criticism of using (self-reported) cross-sectional surveys in the methodological literature because of the bias of collecting data at a specific time from the same source. Spector (2006) emphasised that the concern about common method variance (CMV), also called mono-method bias, appears to increase when cross-sectional, self-report questionnaires are operationalised. It is a common assumption that relationships between constructs measured with the same method will be increased because of the role and action of CMV (Spector 2006). Therefore, a specific section in the current study was assigned for CMV and different statistical tests are conducted to ensure that CMV is not a problem in the current study. Moreover, it has been argued that adopted scale items from known theories will provide

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[1] The prevalence is the number of cases in a population at a given point in time.

reliability for cross-sectional surveys. Thus, Rindfleisch et al. (2008) stated that cross-sectional data are most fitting for studies that test adapted variables, samples with highly educated respondents, research using a varied range of measurement and scales and methods that are powerfully derived from theory. Furthermore, cross-sectional questionnaires could serve as an efficient substitute for longitudinal data collection (Rindfleisch et al. 2008). The next section discusses the research ethical consideration.

## 4.5 Research ethical considerations

The researcher followed specific measures to make sure that all ethical aspects were considered prior to data collection. The researcher conducted risk analysis and found a low degree of risk because the target sample did not include government entities, military directorates and so on; moreover, the audience was not from top management or people with special needs; it was directed to professional employees from any hierarchical level. Moreover, informed consent was embedded in the survey. After respondents carefully read the aim and objective of the study, they clicked 'agree' or 'disagree' to indicate their choice. Considering that informed consent is a critical part of social science research ethics in general, respondents were informed about the study (Oliver 2010; for more details, see Appendix B). The survey had some conditions, where only employees who had completed one year of work in the organisation could participate; this was done to ensure they had sufficient familiarity with the organisation to fulfil the study objectives. The survey stated that the anonymity and confidentiality of respondents would be upheld. To communicate with senior managers ('gatekeepers'[2]) for the selected organisations, official letters were sent to them from the British University in Dubai.

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[2] The person who controls access to a specific organisation (Oliver 2010).

To keep the organisations anonymous, letters were addressed 'to whom it may concern'. (An example of this official letter is given in Appendix D).

The survey did not ask the target audience their names or any question that could lead to identifying the respondent. Moreover, the researcher stated clearly that the respondent could withdraw from the survey at any time. Furthermore, email addresses for the researcher and director of studies (DoS) were included in the informed consent in case of any violation or question raised by any potential issue on the survey. In addition, the researcher stated to the respondents that the survey answers would be sent to a link at SmartSurvey.co.uk, where the data would be stored in a password-protected electronic format. Finally, the research objectives, sample, survey and all its items were reviewed and approved by the British University in Dubai committee (approval dated 04 December 2019). The complete and approved research ethics form can be found in Appendix C. The next section discusses research methods and techniques.

## 4.6 Research methods and techniques

In research techniques (methods) has divided into three sections: research data collection and procedures, demographic information and research measurements

### 4.6.1 Data collection and procedures

In this study, the data collection process is described to explain how the data are composed, the sampling and population for the questionnaire and how the questionnaire is circulated (Saunders, Lewis & Thornhill 2019). Here, the thesis data collection employs a stratified

sampling method. Stratified sampling involves a procedure of categorising the groups in the target population; thus, a more representative sample can be attained (Tracy & Carkin 2014). Tracy and Carkin (2014) identified many advantages of stratified sampling: First, it can be used when the researcher has a concrete theoretical basis to expect that particular categories of the population may have an influence on the dependent constructs; second, it is appropriate to guarantee representation of people involved with the phenomenon of interest; and finally, it produces desirable statistical relationships. Moreover, benefit is taken of information the researcher has about the population; second, the researcher will have greater capability to make interpretations within a stratum and across strata; third, the researcher can expect smaller random sampling errors; and finally, a more representative sample can be obtained (Daniel 2012).

As stated above, there are many factors that motivate the researcher to use the stratified sampling. However, there are different types of stratified sampling that should be identified; these are proportionate and disproportionate stratified sampling. Daniel (2012) defined *disproportionate stratified sampling* as a stratified sampling process in which the number of elements sampled from each stratum is not proportional to their representation in the total population. In the current study, disproportionate stratification is employed because there is difficulty in obtaining specific figures for the sub-group data of the current sample. To explain this, the dataset contains two groups of hospitals in the current sampling (public and private), and the number of hospitals in the UAE is known and available; however, when it comes to each sub-group, such critical data are not available (e.g. number of employees in each group or even in sub-groups), and the availability of such data would make it easier to carry out proportionate stratified sampling. Thus, for support the accuracy and validity of the findings,

the method deployed in the current study is the disproportionate stratified sampling methodology.

The UAE is considered an emerging economy; competition for innovation in economies from this group is becoming more crucial (Yu & Frenkel 2013). The UAE has invested significantly in a range of industries, including hospitality, IT, telecommunications and tourism (Ahmad & Daghfous 2010), and government policymakers and employers are attending to organisational and management issues in consumer services (Aldabbas, Pinnington & Lahrech 2021). The thesis focused on six large companies located in the UAE and operating mainly in the services sector representing three industries (banks, IT, hospitals). For IT, 2 of the 100 major companies in the UAE have been selected (Naukri 2020). Considering in the selection process, one company represents a software company and the other is a hardware company. For hospitals, there are 111 hospitals in the UAE (Emiratesdiary 2020); however, only 97 hospitals are classified as public or private. Of these, (n=34; 35%) are public hospitals and (n=63; 65%) are private hospitals. One major hospital from each type has been selected. The banking sector in the current study is represented by two of the major banks in the UAE. When the research was conducted, the UAE had 27 foreign and 22 national banks (Central Bank 2020); the study includes one foreign and one national bank.

The procedures of data collection through the Smart Survey weblink were shared with the senior manager from each organisation to enable employees to participate in the survey. The survey link was distributed from December 2019 to February 2020 (approximately two months). The professional employees (e.g. quality assurance officers, software engineers, credit analysts, nurses). Face-to-face meetings, emails and phone calls were held with senior managers in each organisation to explain the relevance and aim of the survey; two reminder

emails were also sent. In addition, the researcher adopted some strategies to ensure the reliability and validity of the results, such as excluding professional employees who had been working for less than one year because they might not be as familiar with aspects of the organisation related to the purpose and implication of the study. The next section discusses demographic information.

### 4.6.3 Research measurements

The current study follows some recommendations prior to measurement selection, such as to include measures that are valid, unitary, not overlapped with other constructs and predictive (Straub, Boudreau & Gefen 2004). The survey was completed in English; this is the UAE's second official language, and it is used as the main means of communication in organisations with a significant number of expatriate employees (Hussain, Iren & Rice 2019). Specifically, that this survey targeted professional employees in six enterprise organisations. The thesis measurements contain five main constructs (perceived organisational support, work engagement, intrinsic motivation, extrinsic rewards, and employee creativity), each of which is explained separately below.

#### *4.6.3.1 Perceived organisational support*

Perceived organisational support is the independent variable in the thesis. Ten short version survey items were selected and used as recommended by (Eisenberger, Shanock & Wen 2020). Eisenberger, Shanock and Wen (2020) selected the highly loading items based on the original 36- item scale of (Eisenberger et al., 1986). An example of these items is 'The organization values my contribution to its well-being'. The researcher follows Eisenberger and colleagues'

recommendation to use the 10- items scale of 5- or 7-point Likert scale (Eisenberger, Shanock & Wen 2020). However, a 7-point Likert-scale was deployed in the current study ranging from 1 = strongly disagree to 7 = strongly agree. The overall Cronbach's α for all 10 items was .948 which exceeds .70 taken as a cut-off (Taber 2017). Further, in reviewing the methodological literature, the findings that many scholars used different numbers of items, including 3 items Stinglhamber et al. (2020); 4 items Alfes et al. (2019); 9 items Singh et al. (2018); and Wayne, Shore and Liden (1997). The current study adopted 10 items consistent with the recent suggestion by (Eisenberger, Shanock & Wen 2020; Shanock et al. 2019).

### 4.6.3.2 Work engagement

Work engagement is the mediator variable in the thesis. Following Schaufeli, Bakker and Salanova (2006) suggestion choose 9 items as shortened version were taken from original 17-items (Utrecht WE Scale) (Schaufeli et al. 2002). However, Schaufeli et al. (2006) stated that work engagement scale has been examined in over ten different countries with sample of (14,521). Moreover, dozens of studies on engagement have been published and the majority of them have used the same scale to measure work engagement (Knight, Patterson & Dawson 2017; Saks 2019; Schaufeli 2012).

The nine items reflect the core dimensions of engagement: vigour, dedication, and absorption. However, work engagement has employed in the current study as one construct containing three dimensions (vigour, dedication and absorption). Acknowledge Saks' (2019, p. 34) findings that "the single-item measures for job and organization engagement operate similarly to the complete scales which in turn operate similarly to the UWES measure of work engagement". The 9 statements are all about how you feel at work, an example question item

is 'At my work, I feel bursting with energy'. A seven-point Likert scale from 0 to 6 scale (0 = never to 6 = always) was used and the Cronbach's α for these nine items was .906.

### 4.6.3.3 Intrinsic motivation

Intrinsic motivation is the first moderator variable in the study. Four items on intrinsic motivation were adopted from Grant's (2008) work. It commences with the statement, 'I go to work every day. . .' and then asks respondents to rate their motivation level and an example item is 'Because I enjoy the work itself'. The same items have been adopted by different scholars since the 4 items are based on SDT (e.g. Zhu, Gardner & Chen 2018). Recent studies have been used the 4 items scale of Grant's (e.g. Siyal et al. 2021; Zhang et al. 2020). A 7-point Likert-scale was deployed ranging from 1 = Strongly disagree to 7 = Strongly agree. And the Cronbach's α for these four of items was .905.

### 4.6.3.4 Extrinsic rewards for creativity

Extrinsic rewards is the second moderator variable in the thesis. Eight survey items on extrinsic rewards for creativity as one-dimension scale, were selected and used similar to Malik, Butt and Choi (2015); Malik, Choi and Butt (2019); Yoon, Sung and Choi (2015). An example of these items is 'When I perform creatively, I receive financial rewards, such as incentives or bonuses'. While other scholars divided the extrinsic rewards for creativity into two dimensions, one is related to tangible rewards for creativity and intangible rewards for creativity (Yoon, Sung & Choi 2015). A 7-point Likert-scale was deployed ranging from 1 = Strongly disagree to 7 = Strongly agree. And the Cronbach's α for this group of items was .952.

*4.6.3.5 Employee creativity*

Employee creativity is the dependent variable in the thesis. Five items on employee creativity were adopted from Coelho and Augusto (2010). Following many recent studies are using the same scale to measure individual employee creativity (Hur, Moon & Ko 2018; Hur, Moon, & Lee 2020; Liao, Chen & Hu 2018; Moon, Hur & Hyun 2019). However, Coelho and Augusto (2010) stated that the original scale items have been adapted from Ganesan and Weitz (1996) and Scott and Bruce (1994). An example item is 'I try to be as creative as I can in my job'. A 7-point Likert-scale was deployed ranging from 1 = Strongly disagree to 7 = Strongly agree and the Cronbach's α for this group of items was .887.

In the current study employee creativity is investigated at the individual level along with all other constructs in the study, however, as stated earlier that creativity and innovation can occur at the level of the individual, work team, organisation, or at more than one of these levels combined (Anderson, Potočnik & Zhou 2014). Self-reported data is potential for measurement error due to CMV (Richardson, Simmering & Sturnam 2009). In the self-rating for innovation performance, it is possible to use a wide and diverse pool of employees (Zacher, Robinson & Rosing 2014). Collecting supervisor ratings also complicates ethical considerations of confidentiality and possibly raises more validity concerns (Shalley, Gilson & Blum 2009). Scholars often choose to rely on 'self-ratings' of individual creativity because employees are more aware of their own creative ideas and suggestions than their line managers (Ng & Feldman 2012). Possibly, employees may be in a better position than line managers or colleagues to assess which new ideas essentially are creative in their work contexts (Ng & Feldman 2012). Moreover, self-report creativity may be able to identify creative behaviour more thoroughly rather than supervisor rating (Tsai et al. 2015). One item measures

respondents' sense of the direct manager's opinion of their creativity (e.g. 'My boss feels that I am creative in performing my job') and so with this item included in the scale the direct manager's or supervisor's assessment is addressed from the employee's perspective. According to (Ng & Feldman 2012, p. 1039) meta-analysis study "that inflation of results owing to common method variance is less likely to occur when 'objective' background and work history variables, supervisor and coworker exchange variables, and positive affect variables are used as correlates". More specifically, they compared many personal and contextual factors regarding non-self-report measures of creativity vs self-ratings (e.g. supervisor support) find that sample-size weighted correlations is lower in case of self-rating of creativity (sample = 2089, r=.14), compared with non-self-report measures of creativity (sample= 2641, r=.17)

Whereas employee self-ratings possess varied degrees of bias, so too may the supervisor's rating of individual employees' creativity possess bias and be influenced by their political and organisational context. Hence, the survey relies on the self-rating principle to assess employee creativity and other constructs (POS, work engagement, intrinsic motivation, and extrinsic rewards) in relation to the research questions, objectives and overall research problem. All of study constructs are based on employee's perceptions of employee creativity in UAE work contexts. Finally, given all these arguments about the shortcoming of self-reporting and manager ratings are would expect that the best option is employ the two.

### 4.6.3.6 Control variables

The current study controlled for five demographic variables (gender, age, educational level, job tenure, and their industry type) since these demographic characteristics could potentially influence the dependent variable (employee creativity). In accordance with previous studies

measuring creativity in the workplace, used gender, work tenure, level of education (e.g. Amabile et al. 2005; Tse, To & Chiu, 2018). Moreover, Zhang and Bartol (2010) controlled for five demographic variables that may affect the employee creativity including gender, age, education, tenure, and job type. A recent study controlled for five demographic information since they expect to affect employee creativity gender, education, tenure, position, and type of organisation (Hui et al. 2020). It seems the control variable almost agreed between scholars that may affect employee creativity.

In more detail, gender was measured as a dummy variable coded as 1 for male and 0 for female. Age (0= other ranges, 1= 31-40 years old). Education level (0 = other degrees, 1 = bachelor's degree). Job tenure (0 = other, 1= job tenure from 2 to 7). Used industry type following several scholars measuring creativity in recent studies (e.g. Ismail, Iqbal & Nasr 2019). Malik, Choi and Butt (2019) used services sector industry type to allow them to control for any industry-specific peculiarities and influences related mainly to rewards and creativity. Organisation type was measured as a dummy variable coded as 1 for (IT) and 0 for hospitals and banks, and dummy 2 was coded as 2 for (hospitals) and 0 for IT and banks.

## 4.7 Preliminary analysis

In preliminary analysis has divided into seven sections: outliers, normality, multicollinearity, exploratory factor analysis, common method variance and confirmatory factor analysis.

### 4.7.1 Outliers

First, outliers which are data values that diverge noticeably from others (Aguinis, Gottfredson & Joo 2013). Although the consequence of outliers, there is no clear rules about how to deal

with them appropriately by the scholars, however, there is little transparency go around how practical scholars explain, recognise, and operationalise outliers in published journal articles (Aguinis, Gottfredson & Joo 2013). Thus, Aguinis, Gottfredson and Joo (2013) defined single construct techniques which inspect extreme data points within each individual construct. Crawford et al. (2015) highlighted and cited other scholars that normality assumption also explains why outliers (e.g. cases that are more than three standard deviations from the mean) are typically seen as statistical variances that must be cleansed from the dataset (Aguinis, Gottfredson & Joo 2013; Andriani & McKelvey, 2007). Moreover, Shiffler (1988) emphasised that outliers are sometimes defined as those values for which Z in absolute value |Z| exceeds three standard deviations from the mean (Sincich 1986). However, Thompson (2006) stated that when the Z score of an observation exceeds value of (e.g. ± 2.5 or 3.0), it is considered extreme outliers. Following Thompson (2006) cut-offs the researcher will check the score for each construct separately and considered any value ± 2.5 as outliers and will be eliminated from the dataset in order to complete the other tests without outliers' effects. Thus, this is considered the first step for dataset cleansing. The completed respondents are 379 professional employees and becomes 372 respondents after detecting 7 records in the current dataset as extreme outliers, however, a small number of outliers can have a major influence on parameter estimation (Thompson 2006).

**4.7.2 Normality (skewness and kurtosis)**

Second, the normality assumption also needs to be tacking in the account for validation of dataset presented in the methodological literature (Ghasemi & Zahediasl 2012). Yap and Sim (2011) conclude that simulation outcomes describe that for symmetric short-tailed distributions, D'Agostino and Shapiro–Wilk tests are powerful. For symmetric long-tailed

distributions, the power of Jarque–Bera and D'Agostino tests is almost similar with the Shapiro–Wilk test, as for asymmetric distributions, the Shapiro–Wilk test is considered influential and powerful test followed by the Anderson–Darling test. The understanding from the above arguments that regardless of the current dataset is asymmetric either short or long distributed or even the data is an asymmetric distributed Shapiro–Wilk test is considered the most powerful test. Consequently, the conclusion is aligned with Ghasemi and Zahediasl (2012) which the Shapiro-Wilk test, provided by the SPSS software, is highly recommended as it is a desirable test that normality be measured both visually and via normality tests.

Measuring the normality assumption should be taken into consideration for using parametric statistical tests (Ghasemi & Zahediasl 2012). Thus, to check the normality assessment (skewness and kurtosis). Skewness and kurtosis measures are often operationalised to show patterns directions of distribution (Joanes & Gill 1998). The researcher will rely on Blanca et al. (2013) for cut-off points of contamination (e.g. if maximum values of skewness and/or kurtosis 0, |0.25| is near normal; |0.26, 0.75| slight; |0.76, 1.25| moderate; |1.26, 1.75| high; |1.76, 2.25| extreme; |> 2.25| very extreme. Since there is evidence to suggest that real data are often not normally distributed, thus, to check the skewness and kurtosis need to be tested previously to continuing with the chosen statistical test (Blanca et al. 2013). Based on the (Table 4.1), find that skewness and kurtosis does not exceed ± 1; that means the current dataset has normal distribution. More specifically, ± 1.96 ranges for skewness and kurtosis considered normal distribution (Gravetter, Wallnau & Forzano 2016).

Table 4.1 Statistics (Skewness and Kurtosis)

|  | POS | IM | WE | ERFC | EC |
|---|---|---|---|---|---|
| Skewness | -.815 | -.914 | -.572 | -.071 | -.209 |
| Std. Error of Skewness | .126 | .126 | .126 | .126 | .126 |
| Kurtosis | -.049 | .277 | .032 | -1.005 | -.654 |
| Std. Error of Kurtosis | .252 | .252 | .252 | .252 | .252 |

N= 372.
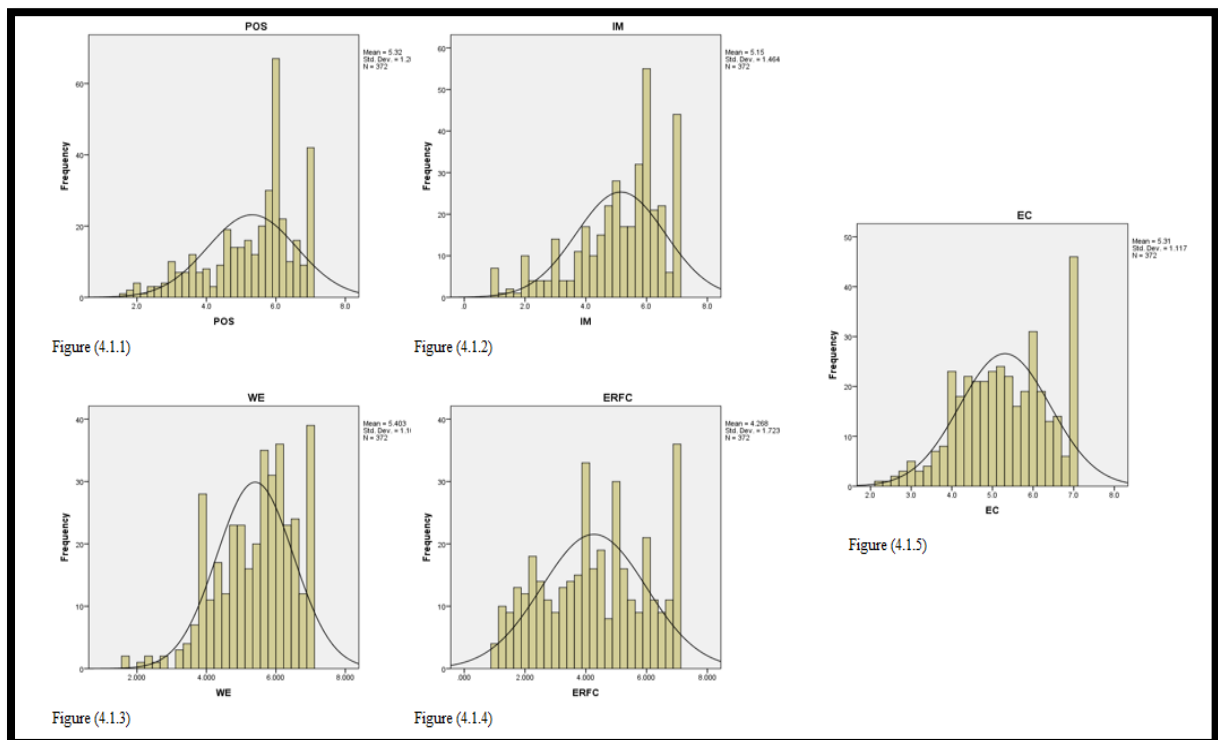


Figure 4.1 Normality charts

Figure 4.1 represents the five constructs in the study, the researcher aims to interpret each diagram separately. First construct represents the POS; the claim that based on the chart and Blanca et al. (2013) cut-offs' suggestions that the data for the mentioned construct is moderately skewness and is near to normal distributed regarding kurtosis (Figure 4.1.1). Second construct represents the intrinsic motivation; the claim that based on the chart and Blanca et al. (2013) cut-offs' suggestions that the data for the mentioned construct is moderately skewness and is slightly distributed regarding kurtosis (Figure 4.1.2). Third

construct represents the work engagement; the claim that based on the chart and Blanca et al. (2013) cut-offs' suggestions that the data for the mentioned construct is slightly skewness and is near to normal distributed regarding kurtosis (Figure 4.1.3). Forth construct represents the extrinsic rewards; the claim that based on the chart and Blanca et al. (2013) cut-offs' suggestions that data for the mentioned construct is near to normal skewness and is moderately distributed regarding kurtosis (Figure 4.1.4). Five construct represents the dependent variable employee creativity; the claim that based on the chart and Blanca et al. (2013) cut-offs' suggestions that the data for the mentioned construct is near to normal skewness and is slightly distributed regarding to the kurtosis (Figure 4.1.5). Researcher concluded that the sample is slightly to moderately distributed. As general rule the assessment of normality test (skewness and kurtosis) provide values for all constructs were between < 1, demonstrating that they met the acceptable range for normality (e.g. |skewness|< 1, |kurtosis|< 1).

### 4.7.3 Multicollinearity

Third, multicollinearity occurred when there is high correlations among the latent exogenous constructs and considered .70 to .80 among latent variables are fairly common (Grewal, Cote & Baumgartner 2004). While, Hair et al. (2010) considered bivariate correlations of .70 or above may be problematic. Based on the bivariate correlation results of the current study the highest correlation between intrinsic motivation and work engagement which is 0.700 (Table 5.4). Moreover, to eliminate a multicollinearity concern regarding the latent exogenous constructs, the researcher conducted a variance inflation factor (VIF) test. The results in (Table 4.2) showed that POS is 2.268, work engagement is 2.252, intrinsic motivation is 2.601, and extrinsic rewards is 1.739. Since, the VIFs of the constructs were below the threshold value of 5.0. Further, Grewal, Cote and Baumgartner (2004) considered multicollinearity is between

(4.0 and 5.0), Type II error rates tend to be quite small. In the current study the multicollinearity is below 3.0 which confirms that multicollinearity is not an issue. Which confirms that each latent variable in the study below the suggested threshold (Hair, Ringle & Sarstedt 2011).

Table 4.2 Collinearity statistics

| | Coefficients [a] | | | | | | |
|---|---|---|---|---|---|---|---|
| | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
| Variables | B | Std. Error | Beta | T | Sig. | Tolerance | VIF |
| Constant | -.001 | .030 | _ | -.043 | .966 | _ | _ |
| POS | .033 | .058 | .032 | .576 | .565 | .441 | 2.268 |
| Work engagement | .563 | .061 | .510 | 9.254 | .000 | .444 | 2.252 |
| Intrinsic motivation | .001 | .056 | .001 | .019 | .985 | .384 | 2.601 |
| Extrinsic rewards | .243 | .046 | .255 | 5.280 | .000 | .575 | 1.739 |

Note. a. Dependent variable: Employee creativity

### 4.7.4 Exploratory factor analysis

Fourth, exploratory factor analysis (EFA). When the researcher ends with the three assumptions (outliers, normality (skewness and kurtosis) and multicollinearity and find that the three assumptions are adequate, then move to exploratory factor analysis. EFA is a widely used and generally applied statistical technique in the social sciences (Costello & Osborne 2005). However, there are 36 items in the survey (10 items POS factor; 9 items work engagement; 4 items intrinsic motivation factor; 8 items extrinsic rewards and 5 items employee creativity factor). An exploratory factor analysis will be performed to test the sample

size and examine the potential factor structure of the data. Thus, extract the Kaiser-Meyer-Olkin (KMO) to measure the adequacy of the sample. If the KMO is above .70 which means the sample is adequate (a common cut-off score for KMO is $\geq 0.70$), since close to 1 means the items are adequately related to their respective factor. To assess the amount of correlation for factor analysis Bartlett's test has been applied of sphericity which it should be significant at least at 5%. EFA will apply as a further check for reliability. Moreover, it is an influential tool to better understand the structure of the dataset and categorise the logical combinations of constructs (Hair et al. 2014). A principal component analysis (PCA) Varimax rotation (using Kaiser Normalization) will be used in order to inspect the loadings for the items. Since Varimax rotation technique is considered the most common choice, however, Varimax, quartimax, and equamax are commonly available orthogonal methods of rotation (Costello & Osborne 2005).

Checking if these factor loadings strongly match with the main constructs of the survey design or not. As the ultimate objectives of running the EFA that to make sure that there are no items are cross-loading or overlapping between the constructs (Table 4.3). Furthermore, Fabrigar et al. (1999) stated five main methodological problems that a researcher should consider when conducting EFA. First, to choose what constructs to comprise in the research and the sampling size. Second, to decide if EFA is the most proper procedure of examination taken in the consideration the objectives of the research. Third, supposing that EFA is proper, a precise technique to fit the model to the data should be chosen. Fourth, to choose how many variables should be involved in the model. Finally, it is typically essential for a researcher to decide a technique for rotating the initial factor analytic solution.

Based on the above guidelines. An exploratory factor analysis with varimax rotation was performed. Results revealed a significant Bartlett's test of sphericity at 0.001 and KMO of .958

which means the sample is adequate (a common cut-off score for KMO is ≥ 0.70). Moreover, the loadings for the items were ranged between .466 and .865 which strongly match with the main constructs of the survey design. Furthermore, the results all exceed .40, again all items were adopted, and it was fairly accepted, also, couldn't find any overlap or cross loading. Therefore, all 36 items were retained without any item deleted. For further clarification, scree plot from the SPSS has been generated and the set cut-off of an eigenvalue ≥1. That gives another proven indication that the study contains only 5 constructs. Furthermore, the x-axis reflects number of items that has been adopted in the current study (Figure 4.2). Also, in the (Table 5.3), the lowest loading was item (1 and 9) from work engagement scale. Similar to the recent study by Imran et al. (2020), item 1 and 9 was the lowest average loading compared with other items (0.563; 0.513) respectively. As a result, based on (Figure 4.1) all factors retained with eigenvalues greater than 1.0 which is most likely have 5 underlying factors, which is another evidence that all 36-items for the current survey fall under its own factors, which considered the best choice for the researcher (Costello & Osborne 2005).

Table 4.3 Rotated component matrix for all items

| Survey items | Component | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| POS (1) The organization values my contribution to its well-being. | .825 | | | | |
| POS (2) The organization strongly considers my goals and values. | .908 | | | | |
| POS (3) Help is available from the organization when I have a problem. | .863 | | | | |
| POS (4) The organization really cares about my well-being. | .894 | | | | |
| POS (5) The organization wishes to give me the best possible job for which I am qualified. | .722 | | | | |
| POS (6) The organization cares about my general satisfaction at work. | .843 | | | | |
| POS (7) The organization takes pride in my accomplishments at work. | .819 | | | | |
| POS (8) The organization would forgive an honest mistake on my part. | .541 | | | | |
| POS (9) The organization is willing to extend itself to help me perform my job to the best of my ability. | .675 | | | | |
| POS (10) The organization cares about my opinions. | .731 | | | | |
| IM (1) I go to work every day.  Because I enjoy the work itself | | | | | .773 |
| IM (2) I go to work every day. Because It's fun. | | | | | .721 |
| IM (3) I go to work every day. Because I find the work engaging. | | | | | .642 |
| IM (4) I go to work every day. Because I enjoy it. | | | | | .713 |
| WE (1) At my work, I feel bursting with energy. | | | | .404 | |
| WE (2) At my job, I feel strong and vigorous. | | | | .674 | |
| WE (3) I am enthusiastic about my job. | | | | .790 | |
| WE (4) My job inspires me. | | | | .754 | |
| WE (5) When I get up in the morning, I feel like going to work. | | | | .665 | |
| WE (6) I feel happy when I am working intensely. | | | | .642 | |
| WE (7) I am proud of the work that I do. | | | | .868 | |
| WE (8) I am immersed in my work. | | | | .758 | |
| WE (9) I get carried away when I am working. | | | | .432 | |
| EC (1) I try to be as creative as I can in my job | | | .694 | | |
| EC (2) I experiment with new approaches in performing my job. | | | .711 | | |
| EC (3) When new trends develop, I am usually the first to get on board. | | | .842 | | |

| | | | | | |
|---|---|---|---|---|---|
| EC (4) My boss feels that I am creative in performing my job. | | | .593 | | |
| EC (5) On the job I am inventive | | | .785 | | |
| ERFC (1) When I perform creatively, I receive financial rewards, such as incentives or bonuses. | | .862 | | | |
| ERFC (2) When I perform creative work, it affects my promotion. | | .855 | | | |
| ERFC (3) If I suggest new ideas for tasks, this approach influences my performance evaluation. | | .770 | | | |
| ERFC (4) I get recognized by my supervisor when I suggest new ideas for the task. | | .695 | | | |
| ERFC (5) My co-workers recognize me when I perform creatively at work. | | .568 | | | |
| ERFC (6) When an employee exhibits creative performance, my company offers some treats such as a celebration dinner. | | .918 | | | |
| ERFC (7) When I perform creatively at work, my company offers corresponding benefits in return. | | .986 | | | |
| ERFC (8) When I perform creatively at work, my manager or the top management compliments me publicly | | .870 | | | |

Note. Extraction Method: Maximum. Likelihood Method: Promax with Kaiser Normalization.
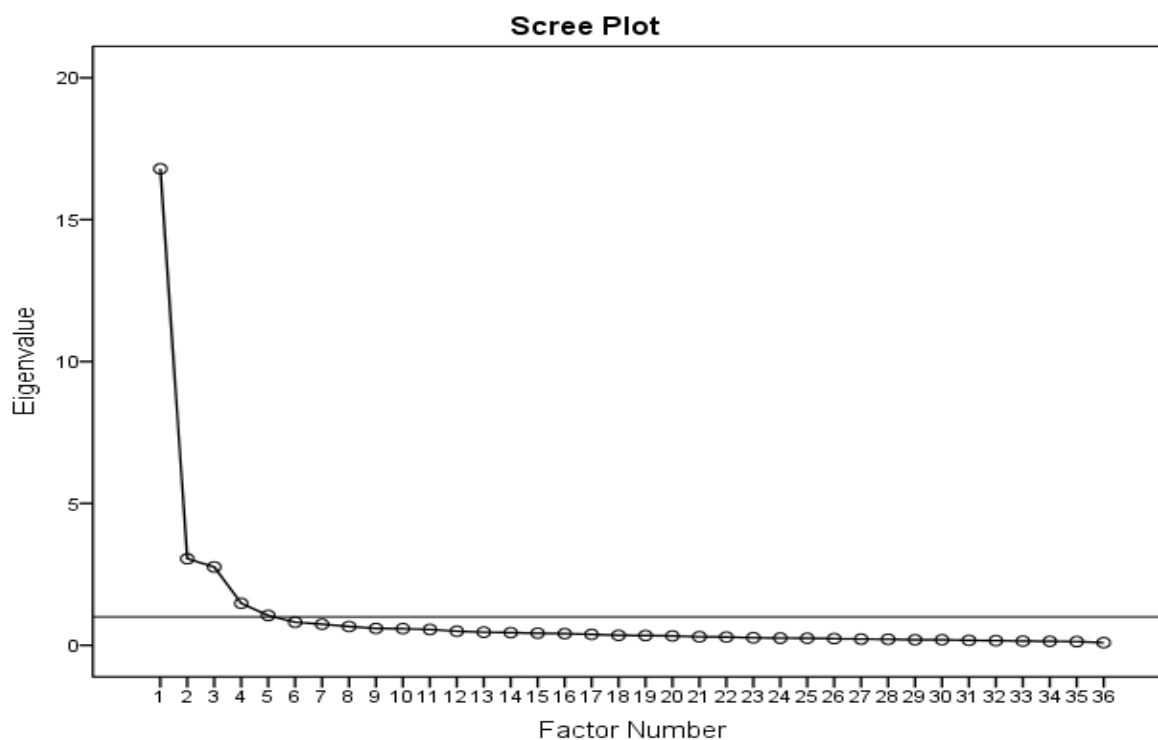


Figure 4.2 Scree plot.

### 4.7.5 Common method variance

Fifth, Common method variance to ensure reliable results are obtained an analysis of CMV is important (Podsakoff et al. 2003). Moreover, CMV is well recognised as an interactive approach (Malhotra, Schaller & Patil 2017). Furthermore, the assessment of the occurrence of CMV has often been mandatory by many journal articles (Hair et al. 2017). Since the sample has been collected from the same source that may cause of CMV, therefore specific measurements have been taken in the questionnaire design to minimise the impact of CMV.

First, the questionnaire contains 36 questions or items which means short to avoid the respondents feel boredom and fatigue (Lindell & Whitney 2001). Moreover, demographic questions have been placed at the end of questionnaire since such these questions need little cognitive processing (Lindell & Whitney 2001). Furthermore, another technique has been used in the survey is assured anonymity and confidentiality for the respondents, and the items specific and simple to minimise the impact of CMV (Tehseen, Ramayah & Sajilan 2017). Final step has been taken in the consideration while designing the survey was targeting the professional and educated employees (Rindfleisch et al. 2008)

Second, following Harman's Single-Factor Test (Podsakoff et al. 2003), the aim to extract the total variance with unrotated factor method to make sure that variation should be below the 50% cut-off to conclude that CMV is not a major concern for this study. Following Harman's Single-Factor Test, the extracted total variance with un rotated factor method producing five factors and the first factor (e.g. POS) accounting only for 46.642% of the variance which is below the 50% cut-off (Table 4.4) (Eichhorn 2014). However, Fuller et al. (2016) criticised

technique assessing CMV levels involves a one-factor test that examines how much common variance might exist in a single dimension. Therefore, the choice to conduct further tests.

Third step that has been taken to make sure that CMV is not a major concern in the current study, confirmatory factor analysis (CFA) technique has been used by loading all items into one factor, the results indicate that the one factor model as recommended by Malhotra, Kim and Patil (2006), (merged all indicators of POS, work engagement, intrinsic motivation, extrinsic rewards and employee creativity ) is ($X^2$= 4811.420, df= 594, CFI= 0.620, TLI= 0.597, SRMR= 0.102, RMSEA= 0.138) (Table 4.5), has unacceptable goodness of fit. Therefore, CMV is not a problem in the presented sample (Podsakoff et al. 2003).

Fourth step used another technique which is common latent factor (CLF) as suggested by Eichhorn (2014) through creates new latent variable and relates all items into the new latent factor, however, all paths are controlled to be equal and the variance of the CLF is controlled to be 1. Specifically, CLF has been used in some recent studies to detect CMV issues (Archimi et al. 2018; Siyal, Ding & Siyal 2019). However, the technique used by introducing new common latent variable controlled with variance equal to 1 and after that link it with all indicators in the model then compare the standardised coefficient results with the two models (with and without CLF), then compare the difference for each item with the cut-off .200. Then, find that all results are below 20% which means that CMV is not an issue with the current dataset. The differences in these standardised coefficient weights were found in the sample (<0.200) (Gaski 2021). Which is another proving that CMV is not a problem in the dataset.

Finally, the correlation matrix (Table 5.5) does not specify any highly correlated between variables, since the highest correlation is r = .70, while indication of CMV should have resulted in extremely high correlations (r > .90) (Pavlou et al. 2007).

Table 4.4 Total variance explained

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 16.791 | 46.642 | 46.642 | 16.791 | 46.642 | 46.642 |
| 2 | 3.049 | 8.469 | 55.111 | 3.049 | 8.469 | 55.111 |
| 3 | 2.762 | 7.672 | 62.783 | 2.762 | 7.672 | 62.783 |
| 4 | 1.479 | 4.109 | 66.892 | 1.479 | 4.109 | 66.892 |
| 5 | 1.050 | 2.917 | 69.809 | 1.050 | 2.917 | 69.809 |
| 6 | .814 | 2.262 | 72.071 | | | |
| 7 | .742 | 2.061 | 74.131 | | | |
| 8 | .661 | 1.835 | 75.967 | | | |
| 9 | .595 | 1.653 | 77.620 | | | |
| 10 | .586 | 1.628 | 79.248 | | | |
| 11 | .556 | 1.545 | 80.793 | | | |
| 12 | .496 | 1.379 | 82.172 | | | |
| 13 | .463 | 1.285 | 83.457 | | | |
| 14 | .444 | 1.232 | 84.690 | | | |
| 15 | .427 | 1.186 | 85.875 | | | |
| 16 | .410 | 1.138 | 87.013 | | | |
| 17 | .383 | 1.065 | 88.078 | | | |
| 18 | .352 | .979 | 89.057 | | | |
| 19 | .346 | .960 | 90.017 | | | |
| 20 | .329 | .914 | 90.931 | | | |
| 21 | .300 | .833 | 91.764 | | | |
| 22 | .290 | .805 | 92.569 | | | |
| 23 | .267 | .741 | 93.311 | | | |

| 24 | .253 | .702 | 94.013 | | | |
|----|------|------|--------|---|---|---|
| 25 | .247 | .687 | 94.699 | | | |
| 26 | .233 | .648 | 95.348 | | | |
| 27 | .219 | .609 | 95.956 | | | |
| 28 | .212 | .589 | 96.545 | | | |
| 29 | .197 | .547 | 97.092 | | | |
| 30 | .193 | .536 | 97.628 | | | |
| 31 | .176 | .490 | 98.118 | | | |
| 32 | .165 | .459 | 98.576 | | | |
| 33 | .147 | .409 | 98.985 | | | |
| 34 | .141 | .393 | 99.378 | | | |
| 35 | .132 | .366 | 99.744 | | | |
| 36 | .092 | .256 | 100.000 | | | |

Note. Extraction Method: Principal Component Analysis.

### 4.7.6 Confirmatory factor analysis

Confirmatory factor analysis (CFA) analysis focuses on the covariation between the observed variables; therefore, CFA has to be created based on the relationships between constructs by relying on previous research or theory, moreover, statistical analysis in CFA is critical for determining that the proposed framework fits with the real-world data, and as such will enhance the validity of the study (Lewis 2017). However, if the items were all accepted based on EFA, coming under their own single construct. Then, proceed with confirmatory factor analysis, in order to use a path analysis test for the constructs (Yong & Pearce 2013).

*Measurement Model:* Without any modification indexes, CFA (measurement model 1) (Table 4.5) revealed the following results: $X^2$ [584] = 1475.034, $p < 0.001$, CFI=0.920; TLI=0.913; SRMR=0.049; RMSEA=0.064. The results demonstrate a good fit model. Since CFA provides

good indicator for how much measurement model accounts for the covariance regarding study sample (Straub, Boudreau & Gefen 2004). In fact, the comparative fit index (CFI) for the measurement model and is greater than .90 which indicates a good model fit. The closer CFI is to 1, the more it reflects perfect fit which is rare in research (Cheung & Rensvold 2002). Tucker-lewis index (TLI) a cut-off close to .95 which is a good result according to Hu and Bentler (1999). The standardised root mean square (SRMR) in the study is less than .05 and can be considered a good fit since it may consider accepted within the range $.05 < \text{SRMR} \leq .10$. Meanwhile, Hu and Bentler (1999) proposed a cut-off result of SRMR close to 0.08. The root mean square error of approximation (RMSEA) should be less than 0.08, thus it is accepted and considered reasonable error according to (Chen et al. 2008). Moreover, the chi-square $(\text{chi})^2$ test is significant $p < 0.001$ to examine model data fit (Shi et al. 2018). However, Shi, Lee and Maydeu-Olivares (2019) stated that fit indexes rely on the model fit and context of the model.

*Hypothesised Model*: The CFA (model 2) (Table 4.5) revealed the following results: $X^2$ [587] = 1519.377, $p < 0.001$, CFI=0.916; TLI=0.910; SRMR=0.069; RMSEA=0.065. Thus, the results confirm that all indicators have acceptable levels of fit. Table 4.5 summarises all the model fit indexes, also all possible alternative models. Interestingly, that merged intrinsic motivation and extrinsic rewards it doesn't bring good fit index. Since the combination of the two motivational factors may produce global motivation. Thus, global motivation defined as universal motivation direction which relates to self-determined, controlled, or amotivation (Gillet et al. 2013).

Table 4.5 Model fit indexes

| Model | $X^2$ | Df | CFI | TLI | SRMR | RMSEA |
|---|---|---|---|---|---|---|
| Five-factor (Measurements model 1) | 1475.034 | 584 | 0.920 | 0.913 | 0.049 | 0.064 |
| Five-factor (Hypothesised model 2) | 1519.377 | 587 | 0.916 | 0.910 | 0.069 | 0.065 |
| Four-factor (merged POS and IM) | 1992.986 | 588 | 0.873 | 0.864 | 0.062 | 0.080 |
| Four-factor (merged IM and ERFC) | 2421.280 | 588 | 0.835 | 0.823 | 0.101 | 0.092 |
| Four-factor (merged POS and WE) | 2490.839 | 588 | 0.829 | 0.816 | 0.084 | 0.093 |
| Four-factor (merged POS and ERFC) | 3133.334 | 588 | 0.771 | 0.754 | 0.079 | 0.108 |
| Three-factor (merged POS, IM and WE) | 2794.125 | 591 | 0.801 | 0.788 | 0.081 | 0.100 |
| Three-factor (merged IM, ERFC and WE) | 3262.426 | 591 | 0.759 | 0.743 | 0.084 | 0.110 |
| Three-factor (merged POS, IM and ERFC) | 3633.923 | 591 | 0.726 | 0.708 | 0.088 | 0.118 |
| Two-factor (merged POS, IM, ERFC and WE) | 4320.115 | 593 | 0.664 | 0.643 | 0.098 | 0.130 |
| One-factor (merged POS, IM, WE, ERFC and EC) | 4811.420 | 594 | 0.620 | 0.597 | 0.102 | 0.138 |

Note. $X^2$ values for the measurement and structural models are significant at p < .001.

## 4.8 Chapter summary

This chapter, the methodology was described in seven sections. The sections described positivist research, the deductive approach, the quantitative method, cross-sectional questionnaires and ethical consideration. Furthermore, research methods and techniques were covered, including data collection, demographic information and research measurements. Finally, the researcher has multiple objectives, which are as follows: 1) to implement solid measures and assumptions to make sure the data are cleaned from outliers, 2) to check the normality of the data (skewness and kurtosis), 3) to check for multicollinearity, 4) to explore factor analysis, 5) to check for CMV; and 6) to conduct confirmatory factor analysis. The aforementioned sections and objectives will be used for further analysis in next chapter.

# Chapter 5: Data results

The study's findings and interpretation are summarised in five sections. The first section contains descriptive statistics. The second section contains convergent and discriminant validity. Section three contains the seven hypothesis studies, as well as mediation and moderator analyses. Section four covers alternative model tests, and the chapter concludes with a summary.

## 5.1 Demographic information

A total of 484 surveys were received, however, (101) surveys were incomplete, 4 disagree to participate in the questionnaire, and 7 respondents considered as outliers and so were all omitted from the analysis. The actual response rate was (n=372, 77%) out the total of 484 surveys. The returns are from male employees (n=223, 59.95%). The average age of the participants was 35 years. The respondents to the survey are professional groups of employees (e.g. quality assurance; credit analysis; software engineer; nursing). Possessing an average job tenure of eight years and mostly a bachelor's degree as level of education (n=229, 62%). The concentration of the IT in the service sector in the sample was (n=151, 40.6%), hospitals was (n=125, 33.6%), and banking was (n= 96, 25.8%). For more details (Table 5.1). Table 1 gives details about demographic information such as (gender, age, education, tenure, and industry type).

Table 5.1 Demographic information

| Variables | Frequency | Percent |
|---|---|---|
| *Gender* | | |
| - Female | 149 | 40.05% |
| - Male | 223 | 59.95% |
| *Ages* | | |
| - Under 30 years old | 71 | 19.09% |
| - 31-40 years old | 209 | 56.18% |
| - 41-50 years old | 74 | 19.89% |
| -51-60 years old | 12 | 3.23% |
| - 61 years old or older | 6 | 1.61% |
| *Education* | | |
| - Primary school | 3 | 0.81% |
| - High school | 18 | 4.84% |
| - College degree | 49 | 13.17% |
| - Bachelor's degree | 229 | 61.56% |
| - Masters and above | 73 | 19.62% |
| *Tenure (in this organisation)* | | |
| - Under 2 years | 50 | 13.44% |
| - 2-7 years | 163 | 43.82% |
| - 8-13 years | 92 | 24.73% |
| - 14-19 years | 38 | 10.22% |
| - 20 years and above | 29 | 7.80% |
| *Industry Type* | | |
| - Banks | 96 | 25.81% |
| - Information Technology (IT) | 151 | 40.59% |
| - Hospitals | 125 | 33.60% |

**5.2 Assessment of Cronbach alpha**

Internal consistency, as defined by Tavakol and Dennick (2011), is the degree to which all of the questions in a test measure the same variable. Cronbach's alpha is generally used practice that is standard in the methodological literature (Taber 2017). In science education, it stays general common technique to consider alpha attaining the value of 0.70 as an adequate indicator of reliability or internal consistency of an instrument (Taber 2017). Ranging from 0.70 to 0.95 considered as acceptable values of Cronbach alpha (Tavakol & Dennick 2011). When the questions in a test are associated to each other, the value of alpha is enhanced, while a low Cronbach alpha is due to poor association among questions then some questions should be reviewed or eliminated, moreover, Tavakol and Dennick (2011) stated very critical note that Cronbach alpha above .90 may suggest redundancies. Thus, it is recommended that researchers need to do more than basically show the statistic without further interpretations (Taber 2017). To confirm the reliability and validity of the internal consistency test should be specified before a test can be operationalised examination objectives (Tavakol & Dennick 2011). However, the understanding that all items- scale in the thesis are adopted by good quality of journals and scholars, but still to conduct Cronbach's alpha test is mandatory as the items-scale are used in a different context (e.g. UAE), moreover, such this test will give more reliability for the study dataset.

Table 5.2 Cronbach alpha

| Variables | No if items | Cronbach alpha |
|---|---|---|
| Perceived organisational support | 10 | .948 |
| Work engagement | 9 | .906 |
| Intrinsic motivation | 4 | .905 |
| Extrinsic rewards | 8 | .952 |
| Employee creativity | 5 | .887 |

## 5.3 Descriptive statistics

The first part of descriptive statistics is about cross tabbing, and the second part is about interpreting the mean, standard deviation, and correlations between the research variables. Cronbach alpha is the third part of the study.

### 5.3.1 Crosstabulation

The mean scores for the five key constructs used in the analysis are shown in Table 5.3. Based on mean scores and the research sample, cross tabulation results show that the mean score for males has the highest mean scores for all constructs except work engagement, which has the highest mean score for females.

Table 5.3 Crosstabulation between gender and five main constructs

| Gender | POS | Work engagement | Intrinsic motivation | Extrinsic rewards | Employee creativity |
|--------|-----|-----------------|----------------------|-------------------|---------------------|
| Female | 5.198 | 5.440 | 5.146 | 4.168 | 5.250 |
| Male | 5.395 | 5.378 | 5.150 | 4.335 | 5.346 |
| Mean | 5.316 | 5.403 | 5.149 | 4.268 | 5.308 |

Note. Number of males = 223; Number of females=149; Total male and female =372.

Table 5.4. Shows how cross tabbing was used in the survey for three industries. The results, however, showed that IT employees had the highest mean scores for the five main constructs as compared to banks and hospitals employees.

Table 5.4 Crosstabulation between industry type and five main constructs

| Industry Type | POS | Work engagement | Intrinsic motivation | Extrinsic rewards | Employee creativity |
|---|---|---|---|---|---|
| Banks | 4.953 | 5.059 | 4.977 | 4.241 | 5.100 |
| IT | 5.538 | 5.549 | 5.306 | 4.684 | 5.521 |
| Hospital | 5.326 | 5.491 | 5.090 | 3.787 | 5.210 |
| Mean | 5.316 | 5.403 | 5.149 | 4.268 | 5.308 |

Note. N =372, Number of male and female working in banks, IT and hospitals (96, 151, 125) respectively

## 5.3.2 Mean, standard deviation, and correlations

Table 5.5 represents mean, stranded deviation and the correlation. Correlation is a measure of the relationship between two variables and a perfect correlation of –1 or +1 (Schober, Boer & Schwarte 2018). Correlation coefficients define the strength and direction of relationship between constructs (Schober, Boer & Schwarte 2018). Based on the Pearson correlation (Table 5.5) find that the five main constructs in the study are correlated positively and significantly at .01. Since the significant reflects the strength between the two variables and the sign reflects the direction. Moreover, the highest correlation is between work engagement and intrinsic motivation (r=.700, p< 0.01), followed by POS and intrinsic motivation (r=.697, p <0.1). From other side, the lowest correlation between the main variables of the study is POS and employee creativity (r=.482, p <.01). However, all variables are correlated almost moderately correlated to strongly correlated (Schober, Boer & Schwarte 2018) stated that the correlation coefficient from 0.40 to 0.69 is considered moderately correlated and from 0.70 to 0.89 is strongly correlated.

Table 5.5 Mean, Standard deviation (SD) and the Pearson correlations (r) between the

variables

| Variable | POS | WE | IM | ERFC | EC | Mean | SD |
|----------|-----|-----|-----|------|-----|-------|-------|
| POS | 1 | | | | | 5.316 | 1.282 |
| WE | .591** | 1 | | | | 5.403 | 1.103 |
| IM | .697** | .700** | 1 | | | 5.149 | 1.464 |
| ERFC | .583** | .574** | .518** | 1 | | 4.268 | 1.723 |
| EC | .482** | .674** | .512** | .567** | 1 | 5.308 | 1.117 |

Note. N = 372.  * p < .05, ** p < .01.

## 5.4 Convergent and discriminant validities

Convergent and discriminant validity is required for establishing construct validity (Campbell

& Fiske, 1959). The importance of construct validity answers the fundamental inquiry of

whether the researcher's chosen measures fitting together in a way that captures the nature of

the construct (Straub, Boudreau & Gefen 2004). Thus, convergent validity depends on the

average variance extracted and composite reliability. The AVE is as follows, POS is .623; work

engagement is .465; intrinsic motivation is .510, extrinsic rewards is .681 and employee

creativity is 0.533, given that five constructs exceed .50 it indicates adequate convergence

except work engagement (Hair et al. 2014). However, Hair et al. (2014) stated that the average

loading should exceed .70 to account for .50 of AVE. The average loading for all constructs

(POS, work engagement, intrinsic motivation, extrinsic rewards and employee creativity) was

.782; .665; .712, .815 and .725 and so respectively all exceed .70 except again the work

engagement was below the cut-off .70. Because of low loading for the work engagement

constructs creates that AVE to be below the threshold.

The AVE for work engagement is below the cut-off .50, as general role the researcher followed

some steps. First, that multicollinearity has to be checked in this case, the multicollinearity has

been checked in section (4.7.3) and the result shows below 3.0 which confirms that multicollinearity is not an issue. Second, the correlations between constructs preferable to not be exceeded .80 or .90 in some cases and the highest correlation is between work engagement and intrinsic motivation has been found (r=.70). Third, the five constructs are distinguishing from each other theoretically and statistically, since each construct has fall under its factor based on EFA. Fourth, the CFA results indicate good of fit for our hypothesised model. Fifth, the AVE may be a more conservative estimate of the validity of the measurement model, and on the basis of (composite reliability) alone, thus, may conclude that the convergent validity of the construct is adequate (Fornell & Larcker; Lam 2012). Consequently, CR was calculated based on (Gefen & Straub 2005) (equation 1)[3]. POS, work engagement, intrinsic motivation, extrinsic rewards and employee creativity were .942; .882; .805, .911 and .890. All results are greater than .70 as a cut-off. Therefore, convergent validity is established. That means all items in the study correlated strongly within their particular construct. Moreover, CR is all above .70 that gives statistical justification to proceed with the hypothesis's tests. Further, the Cronbach's Alpha for all five constructs are exceed the cut-off.

The discriminant validity test is a prerequisite for examining relationships between latent variables (Henseler, Ringle & Sarstedt 2015). By examining the square root of the AVE, found that all are greater than are the correlations with other constructs (Gefen & Straub 2005). Except the work engagement as the correlation between intrinsic motivation and work engagement is slightly higher than the square root of the AVE for the work engagement. Hence, the conclusion that discriminant validity is established for the constructs in the current study which confirms that measurement items are strongly associated with their construct rather than the

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[3] CR= $(\Sigma \lambda i^2)/((\Sigma \lambda i^2) + (\Sigma (1- \lambda i^2))$ ----------------(equation 1)

values of its bivariate correlations (Table 5.6). The idea is that a construct should be more closely associated to its own factor than to other variables (Grewal, Cote & Baumgartner 2004). However, if the variables are too highly correlated, in this case, they lack discriminant validity (Grewal, Cote & Baumgartner 2004).

Without the assistance of theory and literature, statistics will not be able to work. Thus, the 9-item work engagement scale has been thoroughly researched and tested, with the goal of testing the shortened version without removing any items. As a result, the factor loading cut-off in EFA for the current study was set at .40. consequently, based on a three-year longitudinal study (n = 2,555), Seppälä et al. (2009) found that the adopted scale (UWES-9) has good construct validity and that using the 9-item version in future studies is strongly suggested.

Table 5.6 The correlations, discriminant validity, average loading, AVE and CR

| Variables | POS | WE | IM | ERFC | EC | Average loading | AVE | CR |
|-----------|------|------|------|------|------|---------|------|------|
| POS | **.790** | | | | | .782 | .623 | . 942 |
| WE | .591 | **.682** | | | | . 665 | .465 | . 882 |
| IM | .697 | .700 | **.714** | | | . 712 | .510 | . 805 |
| ERFC | .583 | .574 | .518 | **.825** | | . 815 | .681 | . 911 |
| EC | .482 | .674 | .512 | .567 | **.730** | .725 | .533 | . 890 |

Note. N = 372. The bold figures in bold which is provided in diagonal represents the square roots of AVE.

Based on the results and findings of previous tests. Thus, moving on to the hypothesis tests in the following section.

## 5.5 Hypotheses testing

The study deploys PROCESS macro for hypotheses tests, more specifically (Hayes 2018b, Model 21) which relies on ordinary least square (OLS) regression which considered one of the most commonly used technique for suitable linear statistical models (Hayes & Cai 2007). Following Certo et al. (2016) suggestion for the researchers to use different estimator (e.g. OLS), to test the research since the sample induced endogeneity may not produce bias. Moreover, in many social sciences, using the PROCESS macro to conduct mediation and conditional process has been the norm (Sarstedt et al. 2020). Since, OLS measures beta, which is the magnitude of the effect of independent variable(s) 'x' on the dependent variable 'y', in an unbiased and effective manner (Certo et al., 2016). Thus, "OLS is indeed an unbiased estimator (when the necessary assumptions are met) of the correlation in the population between an independent variable (X1) and a dependent variable (Y), controlling for a confounding factor (X2), based on this correlation in the sample" (York 2018, p. 676). Due to confounding variable, associations among factor of interest and the dependent factor in non-experimental data may considered inaccurate. As such is recommended that potentially confounding variables to be controlled in the statical model (York 2018). For instance, in the current study industry type may confound the association between POS and employee creativity, therefore, and in line with the creativity literature at individual level, all demographic variables has been defined through binary method and controlled as covariate in the statistical model. The aim of the aforementioned steps to reduce the bias and give more rigours and validity for the study findings.

Since the study includes one mediator and multiple moderators in the conceptual framework. More specifically, 'multiple moderated mediation model' it becomes crucial in this stage to

give rationality behind adopted statistical technique; thus, to differentiate between ordinary OLS and SEM. Hayes, Montoya and Rockwood (2017) gave to the methodological literature valuable insights of the difference between the two techniques; SEM has greater flexibility related to model specification and operationalising missing data, moreover its capability to estimate for random measurement error, specifically, when estimating related influences including latent constructs which consider as an interesting choice. However, that derives at the price of greater energy and programming capability mandatory to estimate appropriate statistics and techniques of explanation that PROCESS-macro does directly and painlessly. Since, the conceptual framework has complexity to the certain level especially that used MMM model which makes the objective of computing these relationships through SEM is complex somehow. Thus, for frameworks that are based completely on observed constructs, researchers can rest assured that it generally makes no difference which is operationalised, consequently will be considered functionally identical (Hayes, Montoya & Rockwood 2017). Based on the previous fact the researcher will use PROCESS- macro for hypotheses tests. More specifically, for MMM model tests will use 'model 21' as the researcher reviewed the 10s models of Hayes (2018b) and find that the best model is fit exactly to the current conceptual framework is (Model 21).

For computing such MMM, the findings in the methodological literature, that some studies are used three different models from PROCESS macro, one to examine the moderating role (model 1), and one to examine the mediation effect (model 4), and (model 21) to examine the MMM effect (see, Bai et al. 2020). However, the argument that researcher adopts that MMM model based on the current framework and hypotheses that has to be tested simultaneously. Otherwise, may the findings not be consistent if the models have been separated (e.g. model, 1, model 4, model 21), since that the same path will have different results which lead to question the

methodology. Following the previous suggestion these steps as it will give clarity and simplicity for the reader/ reviewer to understand the whole model with its interpretations once tested simultaneously. However, Hayes model 21 will be used to test the seven hypotheses from (H1 to H7); in order to make it simple and rigours findings, the hypotheses tests have been divided into four sections, first the mediation test for work engagement. Second, the first stage moderator (intrinsic motivation) in the relationship between POS and work engagement. Third, the second stage moderator (extrinsic rewards) in the relationship between work engagement and employee creativity. Fourth, the whole model test (the integrative model). To give understanding of the indirect relationship between POS and employee creativity through two stages of moderators (intrinsic motivation and extrinsic rewards) through work engagement.

### 5.5.1 Mediation test-Work engagement

The aim of this section is to test the first four hypotheses. PROCESS macro, model (21) Hayes (2018b) was used to test the hypotheses (H1 to H4). After controlling for demographic information (e.g. gender, age, educational, job tenure and their industry type) to investigate the effect of POS on the two other variables, all constructs have tested together. Firstly, the direct relationship between POS and employee creativity is insignificant ($B$ =0.024, $t$=0.471, $p$ = 0.638) which is not support hypothesis 1. Secondly, the findings that the relationship between POS and work engagement is positive and significant ($B$ =0.182, $t$=3.843, $p < 0.001$) which supports hypothesis 2. Thirdly, the relationship between work engagement and employee creativity is positive and significant ($B$= 0.627, $t$=11.268, $p < 0.001$) which supports hypothesis 3.

To test the mediator (hypothesis 4), since the relationship between POS and work engagement (path a) significant, and between work engagement and employee creativity (path b) is significant too, and the relationship between POS and employee creativity is insignificant, the results demonstrate that the relationship between POS and employee creativity is fully mediated by work engagement. However, Sobel (1982) suggested a method for measuring the mediation effect, specifically the indirect relationship. Consequently, Sopel test calculator has been used after applying the coefficients for (path a and path b) along with its standard error (Preacher & Leonardelli 2001). The Sobel test results demonstrate that the indirect relationship between POS and employee creativity is significant [z= 3.660, SE=0.031 $p < 0.001$] (Table 5.8). Even though Preacher and Leonardelli (2001) suggests bootstrapping techniques gives better alternative results than Sobel test. Or bootstrapping technique was used for further supported the Sobel test (e.g. Tse, To & Chiu 2018). Therefore, 95% bootstrapping with 5000 resampling confidence interval has been used, and the confidence interval range [.289, .462], the zero is not fall between the confidence interval range, also, the results concluding that p < 0.001, thus, (hypothesis 4) is again supported.

Table 5.7   Regression results (Hayes 2018b, Model 21).

| | Work engagement (Mediator variable) | | | | | Employee creativity (Dependent variable) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Beta | SE | t | p | [LLCI, ULCI] | Beta | SE | t | p | [LLCI, ULCI] |
| *Control variables* | | | | | | | | | | |
| Constant | -0.270 | 0.076 | -3.565 | 0.000 | [-0.419, -0.121] | -0.038 | 0.085 | -0.445 | 0.657 | [-0.205, 0.129] |
| Gender | -0.075 | 0.056 | -1.342 | 0.180 | [-0.186, 0.035] | 0.085 | 0.064 | 1.332 | 0.184 | [-0.040, 0.210] |
| Age | 0.060 | 0.053 | 1.118 | 0.264 | [-0.045, 0.164] | -0.025 | 0.061 | -0.410 | 0.682 | [-0.144, 0.094] |
| Education | -0.011 | 0.054 | -0.196 | 0.844 | [-0.117, 0.096] | 0.041 | 0.062 | 0.673 | 0.502 | [-0.080, 0.162] |
| Tenure | 0.154 | 0.053 | 2.872 | 0.004 | [0.048, 0.259] | -0.142 | 0.061 | -2.340 | 0.020 | [-0.261, 0.023] |
| IT | 0.204 | 0.069 | 2.965 | 0.003 | [0.069, 0.339] | -0.001 | 0.079 | -0.011 | 0.991 | [-0.156, 0.154] |
| Hospital | 0.235 | 0.069 | 3.413 | 0.001 | [0.099, 0.370] | -0.065 | 0.081 | -0.804 | 0.422 | [-0.225, 0.094] |
| *Main effects* | | | | | | | | | | |
| POS | 0.182 | 0.047 | 3.843 | 0.000 | [0.089, 0.275] | 0.024 | 0.051 | 0.471 | 0.638 | [-0.076, 0.124] |
| WE | __ | __ | __ | __ | __ | 0.627 | 0.056 | 11.268 | 0.000 | [0.518, 0.737] |
| IM | 0.530 | 0.044 | 12.114 | 0.000 | [0.444, 0.616] | __ | __ | __ | __ | __ |
| POS X IM | 0.109 | 0.034 | 3.196 | 0.002 | [0.042, 0.176] | __ | __ | __ | __ | __ |
| ERFC | __ | __ | __ | __ | __ | 0.187 | 0.049 | 3.839 | 0.000 | [0.091, 0.283] |
| WE X ERFC | 0.109 | 0.034 | 3.196 | 0.002 | [0.042, 0.176] | 0.160 | 0.048 | 3.317 | 0.001 | [0.065, 0.255] |
| $R^2 = 0.744$ | | | | | | $R^2 = 0.729$ | | | | |
| $F_{(9,362)} = 49.748 < 001$ | | | | | | $F_{(9,361)} = 40.913 < 001$ | | | | |

Table 5.8 Sobel test results (online calculator)

| Input: | | Test statistic: | Std. Error: | p-value: |
|---|---|---|---|---|
| a | 0.182 | Sobel test: 3.65964575 | 0.03118171 | 0.00025256 |
| b | 0.627 | Aroian test: 3.6466779 | 0.03129259 | 0.00026565 |
| $s_a$ | 0.047 | Goodman test: 3.67275293 | 0.03107043 | 0.00023995 |
| $s_b$ | 0.056 | Reset all | Calculate | |

Note. a: path POS→WE. b: path WE→EC. Sa: standard error for a. sb: standard error for b.

## 5.6.2 Moderation test- Intrinsic motivation

Hypothesis (H5) stated that intrinsic motivation moderates the relationship between POS and work engagement, such that this relationship is stronger when employees with higher intrinsic motivation. The interaction of POS and intrinsic motivation had a positive and significant effect on work engagement ($B = 0.109$, $t=3.196$, p < 0.01), also the intrinsic motivation and work engagement had a positive and significant relationship ($B = 0.530$, $t=12.114$, p < 0.001). The

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result indicates that the relationship between POS and work engagement was moderated by intrinsic motivation which supports (hypothesis 5). For more details (Table 5.7).

Besides, the interaction of POS and intrinsic motivation had a positive and significant effect on work engagement. Moreover, the effects of POS on work engagement across three levels of intrinsic motivation at lower level ($B$ =0.090, SE=0.053, [-0.014, 0.195]), at mean level ($B$ =0.184, SE=0.047, [0.091,0.277]) and at higher level ($B$ =0.278, SE=0.058, [0.163, 0.393]) demonstrates that the relationship of POS on work engagement was significantly stronger at higher level (+1 SD) of intrinsic motivation and significantly weaker at lower level (−1 SD) of intrinsic motivation which again supports (Hypothesis 5) (Table 5.9) and (Figure 5.1).



Figure 5.1 The effect of POS on work engagement at values of the moderator intrinsic motivation.

### 5.6.3 Moderation test- Extrinsic rewards

The hypotheses (H6) sated that extrinsic rewards moderate the relationship between work engagement and employee creativity, such that this relationship is stronger when employees with higher extrinsic rewards. The interaction of work engagement and extrinsic rewards had

a positive and significant effect on employee creativity ($B = 0.109$, $t=3.196$, p $< 0.01$), also the extrinsic rewards and employee creativity had a positive and significant relationship ($B = 0.187$, $t=3.839$, p $< 0.001$). The result indicates that the relationship between work engagement and employee creativity was moderated by extrinsic rewards which supports (hypothesis 6). For more details (Table 5.7). Besides, the interaction of work engagement and extrinsic rewards had a positive and significant effect on employee creativity. Moreover, the effects of extrinsic rewards on work engagement across three levels of extrinsic rewards at lower level ($B =0.491$, SE=0.062, [0.369, 0.613]), at mean level ($B =0.628$, SE=0.056, [0.519,0.738]) and at higher level ($B =0.766$, SE=0.076, [0.616, 0.916]) demonstrates that the relationship of work engagement on employee creativity was significantly stronger at higher level (+1 SD) of extrinsic rewards and significantly weaker at lower level (−1 SD) of extrinsic rewards which again supports (Hypothesis 6) (Table 5.9) and (Figure 5.2).



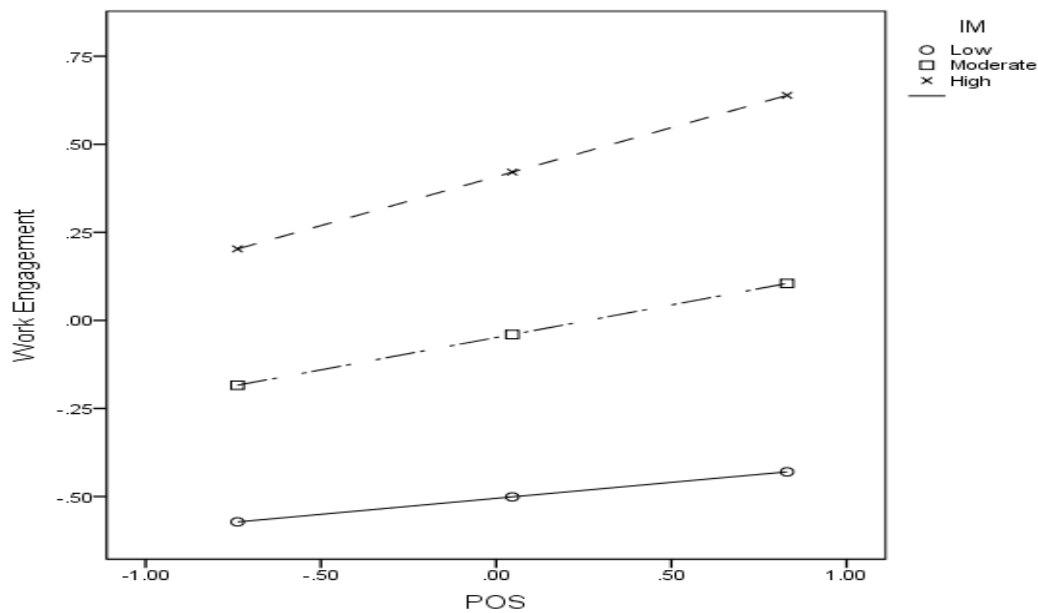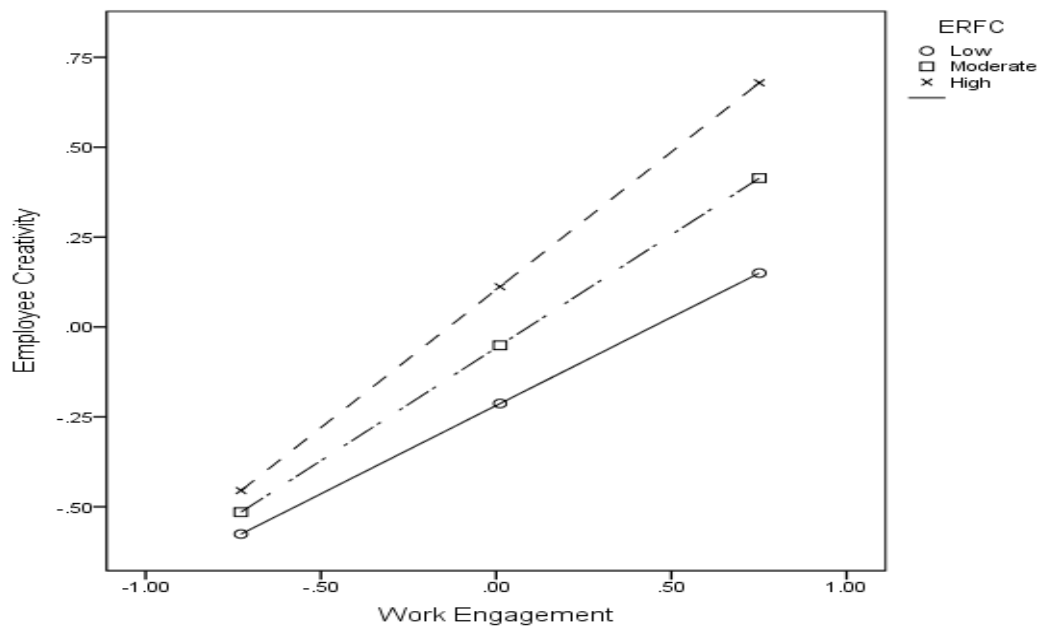Figure 5.2 The effect of work engagement on employee creativity at values of the moderator extrinsic rewards

Table 5.9 Tests of conditional direct and indirect effects of MMM model

| Conditional effects of POS on WE | Effect | SE | t | p | 95%CI [LLCI,ULCI] |
|---|---|---|---|---|---|
| IM at -1 SD | 0.090 | 0.053 | 1.701 | 0.090 | [-0.014,0.195] |
| IM at Mean | 0.184 | 0.047 | 3.885 | 0.000 | [0.091,0.277] |
| IM at +1 SD | 0.278 | 0.058 | 4.766 | 0.000 | [0.163,0.393] |
| Conditional effects of WE on EC | Effect | SE | t | p | 95%CI [LLCI,ULCI] |
| ERFC at -1 SD | 0.491 | 0.062 | 7.916 | 0.000 | [0.369,0.613] |
| ERFC at Mean | 0.628 | 0.056 | 11.273 | 0.000 | [0.519,0.738] |
| ERFC at +1 SD | 0.766 | 0.076 | 10.045 | 0.000 | [0.616,0.916] |
| Conditional indirect effects of POS on EC via WE | Effect | SE | t | p | Bootstrap 95% CI [LLCI,ULCI] |
| IM & ERFC at -1 SD | 0.044 | 0.030 | _ | _ | [0.009,0.108] |
| IM & ERFC at Mean | 0.090 | 0.026 | _ | _ | [0.044,0.145] |
| IM & ERFC at +1 SD | 0.136 | 0.037 | _ | _ | [0.072,0.214] |

**5.6.4 Multiple moderated mediation test**

In reviewing the methodological literature, scholars use various terminology for the same concept, such as moderated moderated-mediation model, multiple moderation mediation model (e.g. Raggiotto & Scarpi 2020), or dual moderated mediation model (e.g. Van Esch & Mente 2018). The three terms used commonly measures of how fast the association between a moderator and an indirect effect is changing as a second moderator changes (Hayes 2018a). To put it simply, the index of MMM model in the present study computes the rate of change in the intrinsic motivation of the indirect effect of POS as extrinsic rewards changes, as well as the rate of change in the extrinsic rewards of the indirect effect of POS as intrinsic motivation changes, therefore, such this test considered a first and second stage of moderated moderated-mediation model (Hayes 2018a).

The hypothesis (H7) stated that intrinsic motivation and extrinsic rewards moderate the indirect effect of POS on employee creativity through work engagement, such that this indirect relationship is stronger when employees have higher intrinsic motivation and extrinsic rewards. To put it simply, H7 stated that work engagement would mediate the relationship between POS and employee creativity only *when both* intrinsic motivation and extrinsic rewards are high. To test this hypothesis, analyses of the conditional indirect effects of POS on employee creativity has conducted by using the PROCESS macro.

Consequently, the conditional indirect effect of POS on employee creativity through work engagement across three levels of intrinsic motivation and extrinsic rewards at lower level ($B$ =0.044, bootstrap SE=0.030, [-0.009,0.108]), at mean level ($B$ =0.090, bootstrap SE=0.026, [0.044,0.145]), and at higher level ($B$ =0.136, bootstrap SE=0.037, [0.072, 0.214]), demonstrates that the indirect relationship of POS on employee creativity through work engagement was significantly stronger at higher level (+1 SD) of both intrinsic motivation and extrinsic rewards and insignificantly weaker at lower level (−1 SD) of both intrinsic motivation and extrinsic rewards. Since the zero is not fall between the two levels (mean and high) of confidence interval range, conclude that $p < 0.05$, which supports (hypothesis 7) (Table 5.8).

To further verify whether the indirect effect is affected by two stages of moderators (stage one: intrinsic motivation and stage two: extrinsic rewards), to test whether the bootstrap confidence interval (CI) of the index of the MMM model contained zero. The results indicated that the MMM effect was positive and had a non-zero probability ($B$ =0.017, bootstrap SE=0.009, [0.002, 0.037]). Therefore, intrinsic motivation and extrinsic rewards had positively and

significantly moderated the indirect relationship between POS and employee creativity through

work engagement which again further supports hypothesis 7 (Figure 5.3).
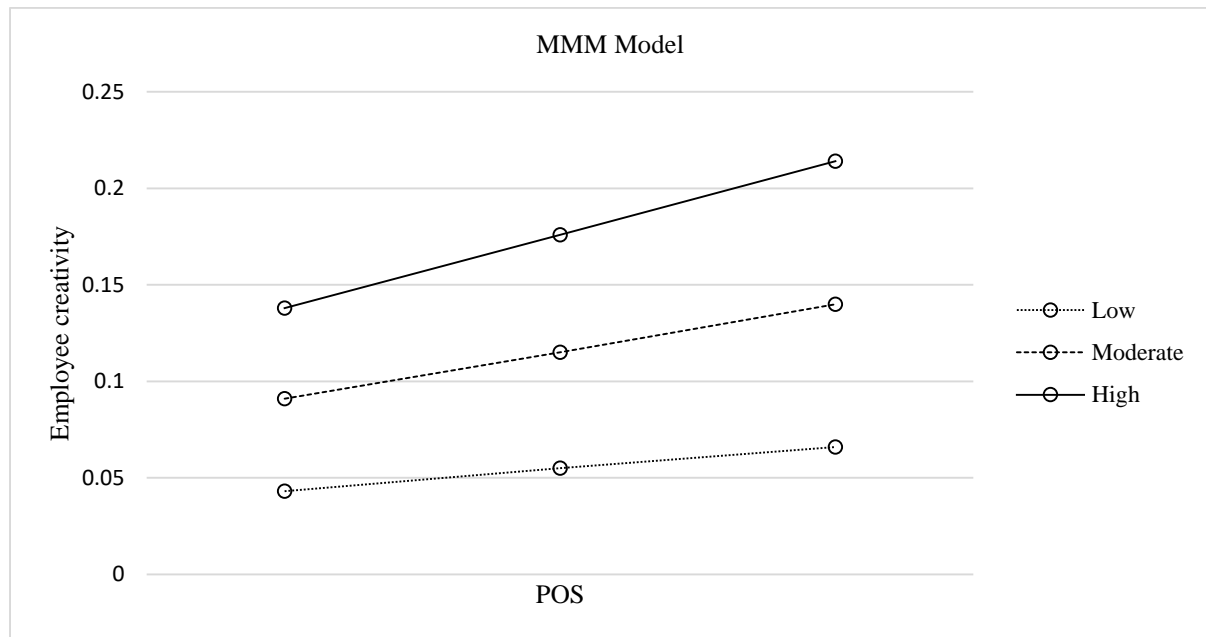


Figure 5.3 The conditional indirect effect of POS on employee creativity vis work engagement
at value of the two moderators (intrinsic motivation and extrinsic rewards).

Table 5.9 shows the final results for the seven hypotheses in this study, indicating whether they

are statistically supported or not. Six hypotheses are statistically supported, whereas one is not.

Table 5.10 The results of the seven hypotheses.

| Hypothesis | The Hypothesis | Results |
|---|---|---|
| Hypothesis 1 | POS relates positively to employee creativity. | Not supported |
| Hypothesis 2 | POS relates positively to work engagement. | supported |
| Hypothesis 3 | Work engagement relates positively to employee creativity. | supported |
| Hypothesis 4 | Work engagement mediates the positive relationship between perceived organisational support and employee creativity. | In directly supported |

| Hypothesis 5 | Intrinsic motivation moderates the relationship between POS and work engagement, such that this relationship is stronger when employees with higher intrinsic motivation. | Supported |
|---|---|---|
| Hypothesis 6 | Extrinsic rewards moderate the relationship between work engagement and employee creativity, such that this relationship is stronger when employees with higher extrinsic rewards. | Supported |
| Hypothesis 7 | Intrinsic motivation and extrinsic rewards moderate the indirect effect of POS on employee creativity through work engagement, such that this indirect relationship is stronger when employees have higher intrinsic motivation and extrinsic rewards. | Supported |
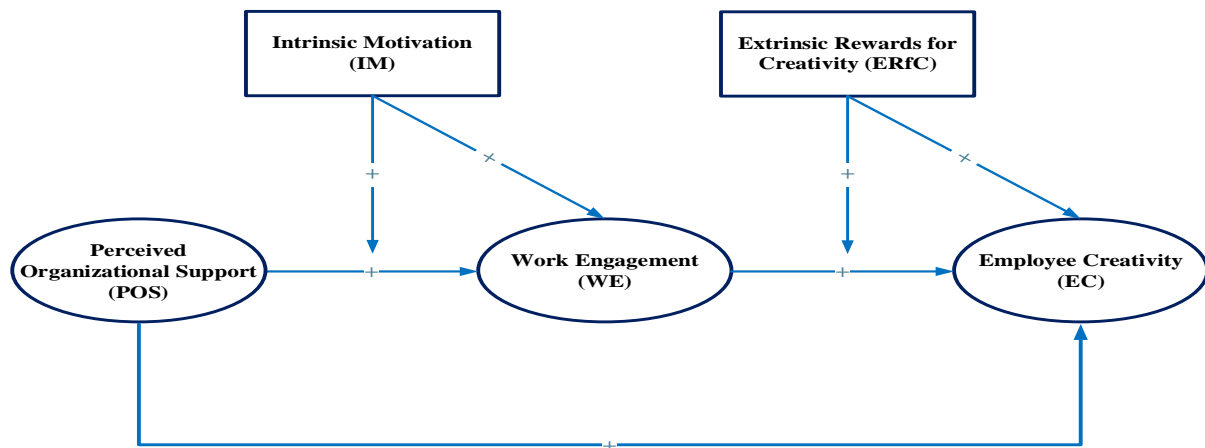


Figure 5.4 Final conceptual framework linking POS and employee creativity.

## 5.7 Testing of alternative models

This section reviews the results of the alternative models based on the CFA findings in order to determine which model best fits the current study (see Table 4.5). However, there is a theoretical basis for considering whether or not employee creativity can positively affect work engagement, and the researcher assumes that employee creativity mediates the relationship between POS and work engagement (Table 5.10). As a result, reviewing different perspectives and results based on the study's sample is critical at this stage. To make a rigorous comparison, all assumptions have been applied to the alternative three models. The demographic variables, for example, were included in the alternative models but not reported in this analysis, which only provides concentrations for the key study variables.

Choi, Tran and Park (2015) suggested, theoretically and empirically, that employee creativity has a positive impact on work engagement. This argument was based on evidence that creative employees can tolerate anxiety, allowing them to focus and be more engaged in their work. Based on the previous research, it would be interesting to learn what would happen if intrinsic motivation and extrinsic rewards were examined at the same time, with work engagement as a dependent variable, employee creativity as a mediator and POS as an independent variable. Is it possible for such an alternative model to create meaningful and constructive relationships?

Table 5.11 Alternative scenarios (Model 1)

| Variables | Alternative assumption Model 1 | Hypothesised model |
|---|---|---|
| Independent variable | POS | POS |
| Mediator variable | *Employee creativity* | *Work engagement* |
| First-stage moderator | Intrinsic motivation | Intrinsic motivation |
| Second-stage moderator | Extrinsic rewards | Extrinsic rewards |
| Dependent variable | *Work engagement* | *Employee creativity* |

The findings based on the assumptions of Table 5.11 are that the relationship between POS and employee creativity is positive and significant (B=.265; $p < .001$). The multiplication between POS and intrinsic motivation on employee creativity is significant (B=.215; $p < .001$), while the multiplication between employee creativity and extrinsic rewards on work engagement is negative and insignificant (B=−.010; $p = 772$). The relationship between POS and work engagement is positive and significant (B=.248; $p < .001$), as is the relationship between employee creativity and work engagement (B=.405; $p < .001$). However, the index of the MMM model indicated that the model effect had a negative zero probability between the ranges (B =−0.002, bootstrap SE=0.009, [−0.020, 0.015]). Thus, extrinsic rewards have no impact or moderating role on the relationship between employee creativity and work engagement. Even the MMM index is insignificant, indicating that the model is not robust.

Second, it would be interesting to know whether the same hypothesised model used in this study could be used if the two moderators were switched, as mentioned in the assumptions (Table 5.12). The results from Table 5.12 show that there is a positive and significant relationship between POS and work engagement (B=.367; $p < .001$), as well as the

multiplication between POS and extrinsic rewards on work engagement (B=.096; p < .05). There is also a significant relationship through multiplication between work engagement and intrinsic motivation on employee creativity (B=.164; p < .001). The POS and employee creativity relationship is insignificant (B=.087; p=.121), while work engagement and employee creativity is positive and significant (B=.724; p<.001). However, the MMM index indicates that the model had a non-zero probability between the ranges (B=0.016, bootstrap SE=0.010, [0.000, 0.041]).

Table 5.12 Alternative scenarios (Model 2)

| Variables | Alternative assumption Model 2 | Hypothesised model |
|---|---|---|
| Independent variable | POS | POS |
| Mediator variable | Employee creativity | Work engagement |
| First-stage moderator | *Extrinsic rewards* | *Intrinsic motivation* |
| Second-stage moderator | *Intrinsic motivation* | *Extrinsic rewards* |
| Dependent variable | Work engagement | Employee creativity |

Alternative Model 2 yields results that were nearly identical to those of the hypothesised model. In terms of the MMM model (index), the hypothesised model (B=0.018) shows marginally stronger results than the second alternative model (B=.017). This raises the following question: Why did the researcher in the hypothesised model place intrinsic motivation as a first-stage moderator and extrinsic rewards as a second-stage moderator? The explanation is that the scale of extrinsic rewards, including all items, is geared towards creativity. If extrinsic rewards were placed as a first-stage moderator, the examination would be of work engagement, which is not related to the scale used (extrinsic rewards for creativity). This assumption is also not in the

current study's best interest. Moreover, it could be that extrinsic rewards are unrelated to work engagement; a recent empirical study conducted with 1,201 participants in Poland found that there is no association between financial rewards and employee engagement (Kulikowski & Sedlak 2020).

However, it is very interesting that swapping the positions of intrinsic motivation and extrinsic rewards produce almost the same results. The MMM model (hypothesised) reveals that work engagement explains such relationships positively and significantly. When the moderators' stages are exchanged, the MMM model (not hypothesised) reveals that work engagement again explains such relationships positively and significantly. Moreover, the relationships for both models (hypothesised and alternative Model 2) retain the direct relationship between POS and employee creativity as insignificant.

Third, can the same hypothesised model used in this study also be used if the independent variable is replaced with the dependent variable, as stated in the assumptions below? The findings based on Table 5.13 shows that association between employee creativity and work engagement is positive and significant (B=.388; p<.001), while the multiplication between employee creativity and intrinsic motivation on work engagement is insignificant (B=.019; p=.553). Also insignificant is the multiplication between work engagement and extrinsic rewards on POS (B=−.033; p=.512), and similarly the direct relationship between employee creativity and POS (B=.026; p=.638). The work engagement–POS relationship is positive and significant (B=.359; p<.001). However, the MMM index indicates that the model has a negative and zero probability between the ranges (B=−0.001, bootstrap SE=0.003, [−0.018, 0.038]). Therefore, the model is not robust.

Table 5.13 Alternative scenarios (Model 3)

| Variables | Alternative assumption Model 3 | Hypothesised model |
|---|---|---|
| Independent variable | *Employee creativity* | *POS* |
| Mediator variable | Work engagement | Work engagement |
| First-stage moderator | Intrinsic motivation | Intrinsic motivation |
| Second-stage moderator | Extrinsic rewards | Extrinsic rewards |
| Dependent variable | *POS* | *Employee creativity* |

The aim of this section was to provide additional rationale for the conceptualised framework by first justifying the hypotheses theoretically and then empirically. As a result, the ideal first-stage moderator (intrinsic motivation) is related to POS and work engagement, and the ideal second-stage moderator (extrinsic rewards) is related to work engagement and employee creativity. Consequently, the hypothesised model is the best-fit model in terms of CFA and compared with the above three alternative models.

## 5.8 Supplementary analysis

**Part 1:** POS might be more likely to lead to employee creativity when intrinsic motivation is high and/or extrinsic rewards are high. Therefore, the following interactions had been be tested for predicting employee creativity. Table 5.14 explains the three proposed different models. More specifically, model 1 explains the moderating role of intrinsic motivation in relationship between POS and employee creativity, while model 2 explains the moderating role of extrinsic rewards in the relationship between POS and employee creativity. Finally, model 3 which

explores the moderating roles of intrinsic motivation and extrinsic rewards simultaneously in the relationship between POS and employee creativity.

The results have been incorporated in (Table 5.14), which shows that intrinsic motivation moderates the relationship between POS and employee creativity positively and significantly ($B$ =0.212, $t$=4.680, $p < 0.001$). Secondly, extrinsic rewards positively and significantly moderate the relationship between POS and employee creativity ($B$ =0.264, $t$=5.359, $p < 0.001$). finally, when we test the intrinsic motivation and extrinsic rewards simultaneously in the relationship between POS and employee creativity, the results show the extrinsic rewards moderate the relationship between POS and employee creativity positively and significantly ($B$ =0.216, $t$=3.957, $p < 0.001$), while intrinsic motivation failed to moderate the relationship between POS and employee creativity ($B$ =0.038, $t$=0.778, $p = 0.437$).

As a result, POS is more likely to lead to employee creativity separately when intrinsic motivation or extrinsic rewards are high. While simultaneously (when we put intrinsic motivation and extrinsic rewards in the same model, intrinsic motivation failed to moderate the relationship between POS and employee creativity, while extrinsic rewards succeed to moderate the relationship between POS and employee creativity.

Table 5.14   Regression results (3 models)

| | | Employee Creativity (EC) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Models | Variables | Coeff. | se | t | p | LLCI | ULCI | $R^2$ |
| Model 1 | POS | 0.284 | 0.062 | 4.556 | 0.000 | 0.162 | 0.407 | 0.333 |
| | IM | 0.386 | 0.058 | 6.656 | 0.000 | 0.272 | 0.499 | |
| | POS x IM | 0.212 | 0.045 | 4.680 | 0.000 | 0.123 | 0.301 | |
| Model 2 | POS | 0.322 | 0.054 | 5.952 | 0.000 | 0.216 | 0.429 | 0.404 |
| | ER | 0.363 | 0.048 | 7.542 | 0.000 | 0.268 | 0.458 | |
| | POS x ER | 0.264 | 0.049 | 5.359 | 0.000 | 0.167 | 0.361 | |
| Model 3 | POS | 0.18 | 0.066 | 2.747 | 0.006 | 0.051 | 0.309 | 0.428 |
| | IM | 0.223 | 0.058 | 3.828 | 0.000 | 0.108 | 0.337 | |
| | POS x IM | 0.038 | 0.049 | 0.778 | *0.437* | -0.058 | 0.135 | |
| | ER | 0.325 | 0.049 | 6.562 | 0.000 | 0.227 | 0.422 | |
| | POS x ER | 0.216 | 0.055 | 3.957 | 0.000 | 0.109 | 0.324 | |

**Part 2:** Table 5.15 explains the four proposed different models. More specifically, model 1 explains the moderating role of extrinsic rewards in relationship between POS and work engagement, while model 2 explains the moderating role of intrinsic motivation and extrinsic rewards in the relationship between POS and work engagement. Model 3 examines the moderating role of intrinsic motivation in relationship between work engagement and employee creativity. Finally, model 4 which explores the moderating roles of intrinsic motivation and extrinsic rewards simultaneously in the relationship between work engagement and employee creativity.

The results have been incorporated in (Table 5.15), which shows firstly that extrinsic rewards moderate the relationship between POS and work engagement positively and significantly ($B$ =0.397, $t$=8.349, $p < 0.001$). Secondly, both intrinsic motivation ($B$ =0.048, $t$=1.241, $p > 0.05$) and extrinsic rewards ($B$ =0.024, $t$=0.556, $p > 0.05$) failed to moderate the relationship between POS and work engagement.   Thirdly, intrinsic motivation positively and significantly moderates the relationship between work engagement and employee creativity ($B$ =0.173, $t$=4.251, $p < 0.001$). Finally, when intrinsic motivation and extrinsic rewards had been tested

simultaneously in the relationship between work engagement and employee creativity, the results show that both intrinsic motivation ($B = 0.093$, $t=1.942$, $p >0.05$) and extrinsic rewards ($B = 0.097$, $t=1.681$, $p > 0.05$) failed to moderate the relationship between work engagement and employee creativity.

As a result, POS is more likely to lead to work engagement when extrinsic rewards are high. While simultaneously (when we placed intrinsic motivation and extrinsic rewards in the same model), intrinsic motivation and extrinsic rewards failed to moderate the relationship between POS and work engagement. Moreover, work engagement is more likely to lead to employee creativity when intrinsic motivation is high. While simultaneously (when we placed intrinsic motivation and extrinsic rewards in the same model), intrinsic motivation and extrinsic rewards failed to moderate the relationship between work engagement and employee creativity.

Table 5.15   Regression results (4 models)

| | | Work Engagement (WE) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Models | Variables | Coeff. | se | t | p | LLCI | ULCI | $R^2$ |
| Model 1 | POS | 0.397 | 0.048 | 8.349 | 0.000 | 0.303 | 0.490 | 0.439 |
| | ER | 0.282 | 0.042 | 6.668 | 0.000 | 0.199 | 0.365 | |
| | POS x ER | 0.108 | 0.043 | 2.493 | 0.013 | 0.023 | 0.193 | |
| Model 2 | POS | 0.100 | 0.052 | 1.917 | 0.056 | -0.003 | 0.202 | 0.560 |
| | IM | 0.448 | 0.046 | 9.705 | 0.000 | 0.357 | 0.539 | |
| | POS x IM | 0.048 | 0.039 | 1.241 | *0.215* | -0.028 | 0.125 | |
| | ER | 0.210 | 0.039 | 5.354 | 0.000 | 0.133 | 0.287 | |
| | POS x ER | 0.024 | 0.043 | 0.556 | *0.579* | -0.061 | 0.109 | |
| | | Employee Creativity (EC) | | | | | | |
| Model 3 | WE | 0.708 | 0.058 | 12.186 | 0.000 | 0.594 | 0.822 | 0.486 |
| | IM | 0.124 | 0.051 | 2.419 | 0.016 | 0.023 | 0.224 | |
| | WE x IM | 0.173 | 0.041 | 4.251 | 0.000 | 0.093 | 0.254 | |
| Model 4 | WE | 0.598 | 0.060 | 9.933 | 0.000 | 0.480 | 0.717 | 0.524 |
| | IM | 0.061 | 0.051 | 1.199 | 0.231 | -0.039 | 0.161 | |
| | WE x IM | 0.093 | 0.048 | 1.942 | *0.053* | -0.001 | 0.187 | |
| | ER | 0.210 | 0.044 | 4.723 | 0.000 | 0.122 | 0.297 | |
| | WE x ER | 0.097 | 0.058 | 1.681 | *0.094* | -0.016 | 0.210 | |

**Part 3:** In this part extrinsic rewards scale (8 items) has been divided into two dimensions: dimension 1: extrinsic tangible rewards includes 5 items as follow:

- When I perform creatively, I receive financial rewards, such as incentives or bonuses.

- When I perform creative work, it affects my promotion.

- If I suggest new ideas for tasks, this approach influences my performance evaluation.

- When an employee exhibits creative performance, my company offers some treats such as a celebration dinner.

- When I perform creatively at work, my company offers corresponding benefits in return.

While, dimension 2: extrinsic intangible rewards include 3 items as follow:

- I get recognized by my supervisor when I suggest new ideas for the task.

- My coworkers recognize me when I perform creatively at work.

- When I perform creatively at work, my manager or the top management compliments me publicly.

The question which is raised here. Does it matter if extrinsic rewards are tangible versus intangible in the relationship between work engagement and employee creativity?

Based on Table 5.16. the results show that extrinsic tangible rewards positively and significantly moderate the relationship between work engagement and employee creativity ($B$ =0.136, $t$=3.249, $p < 0.01$). Moreover, extrinsic intangible rewards positively and significantly moderate the relationship between work engagement and employee creativity ($B$ =0.134, $t$=3.361, $p < 0.01$). The conclusion that both extrinsic tangible rewards and extrinsic intangible rewards has an effect positively and significantly in the relationship between work engagement

and employee creativity. More specifically, the extrinsic intangible rewards (52.2%) in terms of variance has slight effect rather than extrinsic tangible rewards (51%).

Table 5.16   Regression results (2 models)

| Employee Creativity (EC) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Models** | **Variables** | **Coeff.** | **se** | **t** | **p** | **LLCI** | **ULCI** | **$R^2$** |
| **Model 1** | WE | 0.640 | 0.049 | 13.022 | 0.000 | 0.543 | 0.736 | 0.510 |
| | Extrinsic tangible rewards | 0.163 | 0.037 | 4.436 | 0.000 | 0.091 | 0.235 | |
| | WE x extrinsic tangible rewards | 0.136 | 0.042 | 3.249 | 0.001 | 0.054 | 0.219 | |
| **Model 2** | WE | 0.609 | 0.049 | 12.339 | 0.000 | 0.512 | 0.706 | 0.522 |
| | Extrinsic intangible rewards | 0.203 | 0.036 | 5.595 | 0.000 | 0.132 | 0.274 | |
| | WE x extrinsic intangible rewards | 0.134 | 0.040 | 3.361 | 0.001 | 0.056 | 0.213 | |

**Part 4:** The aim of this part to analyse each dimension of work engagement (vigour, dedication, and absorption.) by exploring how each dimension behaves in the relationship between the three dimensions and employee creativity. To do so, three steps had been followed.

Step 1: conduct exploratory factor analysis for work engagement construct by conducting Varimax as a rotation method with Kaiser Normalization. To examine work engagement multidimensionality the study considered 0.50 as a cut-off point (Kaiser's 1974).

Table 5.17 Exploratory factor analysis for work engagement

| Work engagement scale | Component |
|---|---|
| | 1 |
| 1.Vigour: At my work, I feel bursting with energy. | 0.670 |
| 2.Vigour: At my job, I feel strong and vigorous. | 0.804 |
| 3.Vigour: I am enthusiastic about my job. | 0.816 |
| 4. Dedication: My job inspires me. | 0.828 |
| 5. Dedication: When I get up in the morning, I feel like going to work. | 0.790 |
| 6. Dedication: I feel happy when I am working intensely. | 0.779 |
| 7. Absorption: I am proud of the work that I do. | 0.771 |
| 8. Absorption: I am immersed in my work. | 0.765 |
| 9. Absorption: I get carried away when I am working. | 0.580 |

The findings that all items have been loaded above .50. The average loading ranges from .580 to .828.

Then moved to step 2: confirmatory factor analysis on the work engagement scale and report the fit statistics for a three-dimensional model and a unidimensional model. Table 5.18. shows that *vigour* is the best fit model in terms of indexes, followed by work engagement as a unidimensional model, then followed by Absorption, then Dedication as the lowest fit model compared with the others.

Table 5.18 Model fit indexes for work engagement and employee creativity

| Model | X2 | Df | CFI | TLI | SRMR | RMSEA |
|---|---|---|---|---|---|---|
| Vigour | 73.245 | 19 | 0.966 | 0.950 | 0.032 | 0.088 |
| Dedication | 100.86 | 19 | 0.951 | 0.928 | 0.035 | 0.108 |
| Absorption | 82.82 | 19 | 0.957 | 0.937 | 0.034 | 0.095 |
| Work engagement scale | 279.112 | 76 | 0.934 | 0.921 | 0.043 | 0.085 |

Step 3: after conducting EFA and CFA becomes crucial to know what dimension is the strongest predictor of employee creativity? And how much variance do all three dimensions explain in employee creativity and what dimensions are significant?

Table 5.19 shows that work engagement as a unidimensional scale is the most predictor for employee creativity in terms of regression coefficient, followed by vigour, absorption, dedication. While in terms of variance it was finding that the three dimensions (.459) is slightly higher than a unidimensional (.457).

Table 5.19 work engagement (three dimensions and a unidimensional)

| Employee Creativity (EC) | | | | | |
|---|---|---|---|---|---|
| **Variables** | **Coeff.** | **se** | **t** | **p** | **R-sq** |
| Vigour (3 items) | .284 | .049 | 4.790 | .000 | |
| Dedication (3 items) | .217 | .051 | 3.504 | .001 | .459 |
| Absorption (3 items) | .259 | .045 | 4.707 | .000 | |
| Work engagement scale (9 items) | .676 | .028 | 17.663 | .000 | .457 |

## 5.9 Chapter summary

The descriptive statistics for all study variables, including control variables, as well as Cronbach alpha and convergent and discriminant validity tests, were provided in this chapter. After that, all of the study's hypotheses are examined. The findings show that there is no direct link between POS and employee creativity; however, POS has a positive and significant relationship with work engagement. In addition, work engagement has a positive and significant relationship with employee creativity. Based on the aforementioned results, find that POS indirectly relates to employee creativity through work engagement.

Moreover, the results indicate the positive and significant association between POS and work engagement through moderating role of intrinsic motivation. Also, the positive and significant relationship between work engagement and employee creativity through moderating role of extrinsic rewards. Furthermore, the results indicate the positive and significant association between POS and employee creativity through the MMM model (intrinsic motivation, extrinsic rewards and work engagement). Ending the chapter, three alternative models for the hypothesised model were presented, with the findings revealing that the hypothesised model / conceptual framework is more rigorous than the three alternative models.

# Chapter 6: Discussion

This chapter is subdivided into five main sections. Section one contains a general discussion of the seven main hypotheses. Section two contains a theoretical contribution that discusses the research questions. Section three contains a methodological contribution. Section four contains empirical implications. Finally, the chapter concludes with a summary.

## 6.1 General discussion

The current thesis investigated the relationship between POS, work engagement, intrinsic motivation, extrinsic rewards, and employee creativity. This survey questioned a sample of employees working in the banking, IT and hospital industries in the UAE.

**Hypothesis 1: Perceived organisational support relates positively to employee creativity.**

In the first hypothesis the aim is to investigate the direct relationship between POS and employee creativity. The findings reveal that POS has insignificant impact on employee creativity. However, several studies are consistent with the findings that have found no significant relationship between POS and employee creativity (Akgunduz, Alkan & Gök 2018; Agarwal 2014a; Suifan, Abdallah & Al Janini 2018; Zaitouni & Ouakouak 2018). From another perspective the result is inconsistent with some other empirical studies stating a positive and significant relationship between POS and employee creativity (Duan et al. 2020; Tang et al. 2017; Zhang, Bu & Wee 2016).

In reviewing the literature only a few studies were found to examine the relationship between POS and employee creativity, and it was clear that four studies confirmed the current study results while three studies were inconsistent with the current study. However, it is crucial to understand the factors affecting these contradictory results. Shalley and Gilson (2004) noted that supportive management can have differing consequences related to personality and cognitive individual differences. Moreover, the support may have to be linked with organisational objectives, for example if the organisation manager values the hard work and commitment of the employees, it would give different results, thus, the manager has to consider the activities are related to creativity to be appreciated and valued. Organisational support may provide different signals, for example potential controlling signal, such as duties and responsibilities resulting from obligation which may benefit the task performance while hindering creativity (Yu & Frenkel 2013). Furthermore, the notice that three studies out of five including the current study find an insignificant relation between perceived organisational support and employee creativity had been conducted in the Arab countries (Jordan, Kuwait and UAE). Suifan, Abdallah and Al Janini (2018) stated that Arab managers are playing autorotative roles, rather than that of supportive leaders, and creating a culture of support for employees may be threatening for the managerial position and diminish creativity.

Furthermore, explanations of these conflicting findings require more knowledge on the role of individual differences about personality, disposition, understanding and skills in creativity. Contrary findings might be further explained by factors related to the internal environment of the organisation, for example organisation culture and its capacity to motivate high employee trust (Zaitouni & Ouakouak 2018), as well as co-worker and team member support (Tsachouridi & Nikandrou 2018). If the organisation culture or management style establishes low individual work autonomy and fails to form sufficient POS, then employee creativity

behaviours will be less likely to be supported (Pinnington & Haslop 1995; Suifan, Abdallah & Al Janini 2018). Moreover, the culture in these organisations plays a crucial role. Therefore, based on a meta-analytic study regarding cross-cultural effects of POS for 827 independent variables across 54 countries, findings reveal that, based on SET, that POS influences are greater in Western cultures because employees in these nations probably see themselves as independent and realise their relationship with the employer is in line with the reciprocity approach (Rockstuhl et al. 2020). Since the current study is in the Middle East, mainly in Arab countries, employees perceived less support from their employer, which may answer and justify that there is no direct relationships between POS and employee creativity. Thus, the management should support staff discussion of current and potential applications to enhance performance and creativity (Yu & Frenkel 2013), since individuals perceive high HR practices as a sign of organisational support and react with creative behaviour based on SET (Tang et al. 2017). Thus, strong support perception doesn't come from a vacuum, but needs the direct supervisor or HR management practices to communicate and signal to employees about the organisational care and values, and to reward the employees who engage in the creative process. Therefore, a recent conceptual study categorises HR management practices as an independent variable and comes before organisational care about employees (Saks 2021). Since human resource policies and practices have an impact on the level of care and support offered from organisations.

In summary, the current study finds an insignificant direct relationship between POS and employee creativity, which means that such a relationship can't be explained without considering the mediating effect of work engagement. The same logic has been applied to the following studies in which the relationship can't be explained without intrinsic motivation according to Zaitouni & Ouakouak (2018), and the meaning of work according to Akgunduz,

Alkan and Gök (2018). The same has been applied in the relationship between POS and IWB, such that the relationship can't be explained without the mediating effect of work engagement (Agarwal 2014a). These findings are very crucial for POS and employee creativity literature, and suggest introducing mediation (e.g. work engagement, intrinsic motivation) to explain these relationships. Thus, there is the argument that the organisation should not rely only on supporting employees in order to foster employee creativity, but also that they need to motivate other psychological factors to enhance such relations (e.g. work engagement and/or intrinsic motivation). Moreover, employees should be able to feel and practice that their organisation supports them and cares about their well-being. This can be attained by creating environmental support in the organisation and by rewarding the employees who participate in creative activities. Otherwise, the employee may have creative ideas and keep it for him- or herself since (s)he knows from previous experience that there will not be any benefit or value given from the organisation. In line with the employer–-employee relationship, the quality of the relationship between two parties will be reduced and will not lead to the desired outcomes for the same employee (e.g. not productive; not committed; quit from the organisation) and for the organisation (e.g. low performance).

Regardless of the non-significant relationship between POS and employee creativity, still the current study is one from among few studies that examine the relationship between POS and employee creativity; this aids in developing and understanding the current conceptual framework and helps in improving the impact of POS on creativity. Moreover, the present study is considered as the first study in the UAE context to investigate this direct and indirect relationship between POS and employee creativity. Moreover, the support may be extended, such as to avail the needed tools and knowledge for employees through continuous training and regular meetings with the employees, and to offer them structured feedback; all these elements

contribute positively towards creativity. To create a creative organisation, the first step is that the individual employees must be equipped with the needed tools and psychological support and care that enable them to perform the tasks creatively. As a result, the output of a creative task may be found in the form of one of these creative outputs, such as new products, services, methods, and ideas (Woodman et al. 1993).

**Hypothesis 2: Perceived organisational support relates positively to work engagement.**

In the second hypothesis, the aim is to investigate the direct relationship between POS and work engagement, as well as the findings in the current study that POS is related to work engagement, consistent with the literature that provides empirical evidence supporting the assumption that POS influences work engagement. The hypothesis is consistent with many studies indicating that there is a positive and significant relationship between POS and work engagement (Chevalier et al. 2019; Gillet et al. 2013; Imran et al., 2020; Khodakarami & Dirani 2020; Meira & Hancer 2021; Musenze et al. 2021; Rich, Lepine & Crawford 2010; Saks 2006; Xanthopoulou et al. 2009). Individuals with a higher POS may become more involved in their work as part of the reciprocity standard of SET, to assist the company in achieving its objectives (Imran et al. 2020). Thus, POS represents the antecedent factor for work engagement, and work engagement plays an outcome role in these relationships between employee and organisation, which is incorporated through SET, since SET offers the necessary framework for investigating the effect of antecedent factors on employee engagement in various job situations (Khodakarami & Dirani 2020). Moreover, employees perceive psychological, social, and well-being as they feel respected and completely supported by their organisations, and this condition contributes to strong commitment and engagement in their jobs (Imran et al. 2020). From another perspective, employee involvement will be decreased as a result of low perceived

support, resulting in worse care and even lower POS (Eisenberger, Fasolo & Davis-LaMastro 1990). Consequently, the results suggest that employees become more engaged in the workplace when they get support from their organisations in the form of valuing their contribution and caring about their well-being.

It is evident from the previous study that there is a positive and significant relationship of POS on work engagement, in line with the current study that examines this relationship for the service sector in the UAE context. The findings in this hypothesis are consistent with a meta-analysis study conducted by Ahmed et al. (2015), from which it can be inferred that an employer who values its subordinates produces a positive attitude and behaviour effects, such as work satisfaction, commitment, and engagement. In line with organisational support theory, employees may perceive support and care from their organisation or line managers, and the employees may repay that through their vigour, dedication and absorption as obligations towards their organisation. Thus, this research contributes to the knowledge of how organisational support theory (e.g. POS) may integrate with the JD-R model (e.g. work engagement) through social exchange theory. Simply stated, organisations offer the care, appreciation, and act of valuing employees' engagement, and, as per the reciprocity norm, the employees return that in the form of work engagement. Thus, Imran et al. (2020) stated that POS is a significant contributor to employee job engagement, similar to the findings of the current study. More specifically, the empirical results support this hypothesis, since the organisation provides care and value to employees through signalling a message that more dedication and energy in the work would be much appreciated from the organisation. As such, the employees return that, based on obligation ideology, to be more engaged towards organisation objectives. Thus, it is supposed that both parties are satisfied with the results, which, consequently, will enhance the quality of the employee–organisation relationship.

Continuing such a good relationship between organisation and employee will lead positively to enhancing the trust that results in organisation growth and success. As a result, Ahmed et al. (2015) find in their meta-analysis that the variance that comes from POS to explain work engagement is the higher variance, compared with satisfaction and commitment, which gives additional support to the current hypothesis. Therefore, POS is considered as crucial to the antecedents' factor for three dimensions of work engagement (vigour, dedication and absorption).

In the literature review, only one study was found to be inconsistent with findings of the current study. An empirical study conducted by Lan et al. (2020)[4] for 744 police officers in China found that the direct relationship between POS and work engagement is not significant, while indirectly the relationship is significant through job satisfaction. It is based on the argument that, once employees perceive support from their organisation, that will create positive intention towards their organisation, leading those employees to be more involved and engaged with the work. Moreover, the current study sample was focused on professional employees who are working in banking, IT and hospital industries, therefore, Khodakarami and Dirani (2020) stated that professional employees are more engaged once they perceive support from their superiors, compared to other groups of employees (e.g. sales employees). This may explain the non-significance relationships that have occurred due to the high job demand that police officers have perceived, rather than job resources as per JD-R. However, the organisation has to make a balance among resources and ensure the highest level of job resources and reduce the effect of job demands to influence the desired outcomes (e.g. work engagement). According

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[4] In the Lan et al. study (2020), the authors used two models of Hayes (macro-Process), and the regression results of model 4 stated that the relationship between POS and work engagement is not significant. Also, model 59 stated the non-significant relationship between the two variables. The authors claim the significance of these relationships is based on correlation results and they discuss this relation as a significant relation. In the same time the current study considered this relationship is insignificant based on regression results.

to SET, when individuals sense they are positively treated by the management, they respond with predicted behaviours (Kuvaas & Dysvik 2009). In line with the employee–organisation relationship, this suggests that, as the POS decreases, the degree of engagement decreases respectively (Khodakarami & Dirani 2020). Finally, the current study contributes to the literature, with findings similar to those by Ahmed et al. (2015): if a company requires happy, dedicated, and engaged individuals, all of which comes as a consequence of POS, then the firm has to offer fairness and a supportive environment in the workplace as determined by POS. Therefore, it may be explained that the organisation may motivate engagement in the workplace if the individuals find that they are appropriately cared for, appreciated and valued by their organisation or through the direct supervisor as an agent for the organisation.

**Hypothesis 3: Work engagement relates positively to employee creativity.**

The intention of the third hypothesis is to investigate that direct relationship between work engagement and employee creativity. The findings are consistent with many recent studies with the literature that provide evidence supporting the positive and significant relationship between work engagement and employee creativity (Al-Ajlouni 2020; Asif et al. 2019; Bakker et al. 2020; Garcia Martinez 2015; Hui et al. 2020; Islam & Tariq 2018; Ismail, Iqbal & Nasr 2019). The positive relationship between work engagement and employee creativity has been realised from the previous literature and studies showing that work engagement is an optimal concept to be linked with creativity. When the work engagement is empowered and equipped with vigour, dedication and absorption, such a combination of the three dimensions contributes positively towards employee creativity. This may give an interpretation of why the coefficient between work engagement and employee creativity is the highest between the two mentioned concepts, compared with other relationships. In addition, as mentioned earlier, the power of

such a concept is to be linked with many outcomes such as in role, extra role performance, and creativity. In the relationship between employee and employer, this relationship may determine how individual's engagement is encouraged to increase employee creativity (Asif et al. 2019). That means a tendency towards a positive relationship between work engagement and employee creativity was evident. By affording employees support and valuing employees' contributions, the employees are encouraged to perform work tasks in productive and creative ways. Therefore, a supporting intention and care from the organisation and engaging professional employees can enhance employee creativity in the workplace. Since they are emotionally engaged with the competition, contestants who have more feedback and problem-solving abilities are more creative (Garcia Martinez 2015).

Individuals who proactively decide to be engaged in the events (during or after their work), as such provide positive, impact, energy, and more resources, as such resources will enhance the work engagement towards creativity (Bakker et al. 2020). When employees are engaged in their workplace, this in turn leads to employee creativity. The creativity literature concerns the driving factors that affect employee creativity. Thus, the current results suggest that work engagement leads to employee creativity in the service sector, including three different industries (banks, IT, hospitals). As such, the current findings are in line with the work engagement literature that has been documented as a key factor for employee creativity. The argument is that work engagement may create a sense of responsibility for the individual employee towards organisation objectives, which in turn influences employee creativity.

As stated earlier in the current study, few studies discuss the relationship between work engagement and creativity (Chaudhary & Akhouri 2018; Ismail, Iqbal & Nasr 2019). This relationship based on the current study findings is considered very crucial towards POB

resulting in achieving the organisation goals and objectives. However, the work engagement has been linked with innovation behaviour, an empirical study conducted for 323 managers working in the pharmaceutical and manufacturing industries in India, finding that the relationship is positive and significant (Agarwal 2014b). A recent study for 585 employees working in different hotels in India finds the positive and significant relationship between work engagement and innovation behaviour (Nazir & Islam 2020). These studies between work engagement and employee creativity offer evidence that the sample of the service sector in the current study has an impact on work engagement, resulting in affecting employee creativity positively and significantly. In line with SET, when the individual employee expects that engaging with creativity activities will be repaid by their organisation, the employee will spend extra working hours and be more dedicated towards creative activities. If they are not repaid, such experience may lead the individual employee not to spend extra efforts or absorption towards creativity. Thus, combining vigour, dedication and absorption together in one construct may foster employee creativity in the service sector. Engagement is an influential concept affecting employee creativity in the workplace. Thus, the findings explain that creativity would be boosted if the employees find the motivation from the organisation towards work engagement, which would offer evidence that engagement with the combined dimensions has a positive and significant effect on employee creativity.

Previous studies that have employed role theory when examining employees in so-called boundary-spanning has mainly focused on the negative aspects of the work role (Slåtten & Mehmetoglu 2011). The argument is that positivity will enhance the relationships between employer-employee relationships, and hence this feeling will make the individual employee be more engaged in the workplace, leading to positive outcomes (e.g. employee creativity). Physical engagement was not associated with creativity. However, engaged employees are

more likely to engage themselves in their work and show passion while executing their tasks that tend towards creative dynamism (Ismail, Iqbal & Nasr 2019). The findings identified that job resources (e.g. POS), leadership style, and job characteristics will motivate the professional employees to be engaged in creative activities and will assist them to overcome the work demands, such as emotional stress, that will definitely enhance the employee's engagement towards creative activities. It may also be that not only the contextual factors have an effect on employee creativity, but employees with a high level of creative process engagement may motivate employees to put in more effort to detect problems, search for the right information, and discuss the alternative options, thus more are expected to come up with novel and useful solutions (Tan et al. 2019). Moreover, they find in their empirical study that the employee who practices a high level of openness to experience is positively related to engagement in creative activity. Similarly, for those employees who have high psychological capital, such as flexibility, optimism, effectiveness and hope, an empirical study for 899 employees in the USA found that the four components have a positive and significant relationship with creative performance (Sweetman et al. 2011). The previous studies are in line with the current study findings that work engagement contains positive psychological attributes relating positively to employee creativity. Engaged employees in the task and workplace may be entitled to generate new suggestions and ideas that lead to creative behaviour. In essence, being engaged will enable the individual employee to be engaged in more creative activities in the workplace, leading to desired outcomes (e.g. employee creativity).

**Hypothesis 4: Work engagement mediates the positive relationship between perceived organisational support and employee creativity.**

The purpose of the fourth hypothesis is to examine the relationship between POS and employee creativity through the mediating role of work engagement. Nonexperimental study is used, which limits the findings of the current study. However, the results are similar to those of the time-lag survey design from which POS is predicting creativity through work unit identification and success expectancy (Yu & Frenkel 2013). The study result is similar to those of some recent studies in the literature that support the importance of the work engagement as a mechanism between leadership and creativity (Vila-Vázquez et al. 2020; Sengupta, Sharma & Singh 2021), organisational support and creativity (Tsai et al. 2015), corporate social responsibility perception and creativity (Chaudhary & Akhouri 2018; Chaudhary & Akhouri 2019). Both the supervisor and co-worker's support are considered crucial factors for job resources (Bakker & Demerouti 2007). Truong, Nguyen and Phan (2021) find the mediating role of work engagement in the relationship between job resources, co-workers' support and employee creativity. Based on the above study, they assumed that employees with such organisational support and care may be expected to have high levels of energy and engagement towards creativity. In addition, the successful mediating mechanism of work engagement has been found in the relationship between job crafting and employee creativity (Tian, Wang & Rispens 2021). Moreover, the relationship between both employee empowerment and training from one side has related positively and significantly with employee creativity through the mediating role of work engagement (Nawaz et al. 2014). Thus, based on the aforementioned empirical studies, it is possible to confirm the current study results that work engagement works perfectly between different concepts with a focus on contextual factors such as leadership, organisation support, social responsibility, job resources, job crafting, training, empowerment and employee creativity. Also, it's important to state that, from previous studies, that management or leadership style, organisation or supervisor or co-workers support, corporate responsibility, training, empowerment, job crafting have been considered in all the mentioned

studies as antecedents to enhance and foster work engagement, which offers further evidence supported by the current study results that job resources (e.g. POS) constitute one of the crucial antecedents for work engagement.

The results recognised that, once employees experienced work engagement and directly enhanced their creativity, they perceived their organisational support. The argument in this mediation approach is that when employees get supported from their direct supervisor or organisations, this support will lead to making the employees motivated and internally energetic and enthusiasm to do their work and to be more engaged with the work activities, and these motivational factors will foster their creativity. Work engagement is described in the literature as a high level of employee involvement and commitment to the employer, thus engaged employees' having pride about their work. This will lead to be more willing towards organisation success, as the feeling may create a sense of responsibility of sharing the knowledge among peers and taking risk steps that will foster employee creativity. A recent empirical study conducted by Bakker et al. (2020) finds that work engagement mediates the relationship between proactive vitality management and creativity on a weekly[5] basis, since the authors conducted the survey over five weeks, which may give it more rigourous resulting as the change has been considered. Moreover, work engagement mediates the relationship between the perceived learning environment and employee creativity (Islam & Tariq 2018). Thus, the framework, including the mutual relationships between resources and engagement, produce the best empirical support; also, the relationships between different forms of resources and work engagement are better explained as all possible impacts are jointly taken into account (Xanthopoulou et al. 2009). However, this study is one from few studies that investigate the associations among work engagement determinants and employee creativity. Thus, this study

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[5] Example of last week items: 'Last week, I was enthusiastic about my work' (Bakker et al. 2020).

advances the perception of the roles of POS in affecting professional employees in three industries in the UAE context, and how POS can function as a job resource in affecting work engagement and employee creativity.

*Although* the direct relationship between POS and employee creativity is insignificant in the current study, when the work engagement as a mediator produced in the current conceptual framework, the relationship between POS and the employee creativity becomes significant with work engagement presence. As such, this provides more evidence to the crucial role of work engagement between job resources and its consequences. From a statistical point of view, that relationship between the independent variable (POS) and the dependent variable (employee creativity) will not occur without the mediating mechanism of work engagement, considering the relationship between POS and employee creativity is fully mediated by work engagement. To put it differently, the relationship between POS and employee creativity can't be achieved indirectly without work engagement. However, the current study findings demonstrate that, when individuals are supported from their organisation, a high level of engagement facilitates and creates new processes or workflow to foster employee creativity. Moreover, supported employees may create a new environment that contributes to reduced work demands and to performing creative tasks smoothly. To put it simply, organisations that spend extra efforts and resources to enhance employee creativity may see beneficial results. Specifically, an organisation or direct manager that concentrates on psychological and contextual factors of creativity creates a climate of employees' appreciation, caring, and well-being. All these factors will play roles as antecedents for work engagement and employee creativity; meanwhile, work engagement plays a crucial mediation role in the relationship between these antecedents (e.g. support) and creativity.

The current study findings indicate that an employee's well-being, as one of OST objectives, relates to make the employee more engaged in creative tasks and activities in the workplace. Work engagement and employee creativity from the perspective of the current study depends on the employees' sense of being. Moreover, this indicates the important role of work engagement in the relationship between POS and employee creativity. As such, this gives additional evidence that a high level of POS can't be achieved without linking the support with work engagement, including the three dimensions of engagement (vigour, dedication, and absorption), resulting in employee creativity in the workplace. Finally, energetic employees may encourage organisation to continue to support its employees that would affect employee engagement and creativity. Alternatively, employee concerns for the organisation may have arisen as a result of an organisational climate that cares its employees, resulting in desirable outcomes (Saks 2021). As such, the climate will enhance employee creativity over the time, when organisation focuses its support towards engaging employees in the creative process. From the individualistic perspective, previous creative behaviour is considered as a reflection by the self, and as such will lead to creative activity, since the employee pursues to make her distinctiveness steady with the previous role and aspects of behaviour (Farmer, Tierney & Kung-Mcintyre 2003).

**Hypothesis 5: Intrinsic motivation moderates the relationship between POS and work engagement, such that this relationship is stronger in employees with higher intrinsic motivation.**

The purpose of the fifth hypothesis is to investigate the moderating role of intrinsic motivation in the relationship between POS and work engagement. The results shed light on the important role that intrinsic motivation plays in the relationship of POS on work engagement. The concept

on motivation has been extended by proposing a moderating effect of intrinsic motivation, since there is a call in the literature to study the moderating role of intrinsic motivation. Due to inconsistent results of the intrinsic motivation role, researchers call for further interpretation studies (Shafi et al. 2020). However, the results of the current study are consistent with the significant and positive relationships between POS and intrinsic motivation from one side (Babakus et al. 1996; Gillet et al. 2013; Hong, Jeong & Downward 2019; Mitchell et al. 2012; Rich, Lepine & Crawford 2010; Zaitouni & Ouakouak 2018), and between intrinsic motivation and work engagement from the other (Gillet et al. 2013; Putra, Cho & Liu 2017). These results are in line with the hypothetical model that expects organisations to incorporate signals to support employees' sense of importance and engagement in the workplace, and these signals may enhance employee autonomy, as resulted in enhancing employee intrinsic motivation. Thus, a high level of intrinsic motivation contributes positively to enhancing the relationship between POS and the work engagement. Since intrinsic motivation centres on the meaning of the work itself, there is potential for it to be associated with employee work engagement and organisational commitment (Chalofsky & Krishna 2009). The argument is that work engagement is expected to be eased by POS in dealing with tasks, specifically when intrinsic motivation is high. As such, the integration between POS and intrinsic motivation will have an influence on work engagement. Since POS produces psychological factors that affect the individual employee to likely be more engaged in workplace activities, it may lead to such support and care enhancing employee intrinsic motivation about the work, resulting in work engagement.

The finding is similar to that of the only one study, to the best of the researcher's knowledge, indicating that intrinsic motivation moderates the relationship between POS and work engagement. Gillet (2017) conducted an empirical study for two samples for French Air Force

soldiers, finding that the highest intrinsic motivation scores have shown the highest levels of POS and work engagement. Moreover, the results are consistent with other studies that placed intrinsic motivation as a moderator between predicators (such as, e.g. leadership, meaning of work) and its consequential work engagement. Intrinsic motivation moderates the relationship between ethical leadership and self-efficacy (Tu & Lu 2016). Another empirical study conducted for 350 employees from different firms in Taiwan found that intrinsic motivation enhances the association between authentic leadership and work engagement (Shu 2015). Moreover, intrinsic motivation moderates the relationship between the meaning of the work and work engagement, as an empirical study conducted by Yasin-Ghadi, Fernando and Caputi (2013) for 530 employees working in Australia has found that the relationship between meaning in work and work engagement is positive and significant. Other studies used intrinsic motivation as a moderator in the relationship between transformational leadership and employee creativity, for an empirical study conducted for 164 employees working in software firms in Pakistan (Shafi et al. 2020). Similar findings have also been reported between perceived job autonomy and work performance through moderating role of intrinsic motivation (Dysvik & Kuvaas 2011). The results of the aforementioned studies confirm the positive role of intrinsic motivation in the relationships between antecedents (e.g. POS, leadership style, meaning of work, job autonomy) and its consequences (e.g. work engagement, creativity). Thus, the findings demonstrate the influence of POS on work engagement. Therefore, this relationship would be strengthened after interaction between POS and intrinsic motivation, leading more likely towards work engagement.

Very limited studies in the literature show the moderating role of intrinsic motivation in the relationship between POS and work engagement. The current study assessed how the relationship between POS and work engagement in UAE organisations will be stronger when

the intrinsic motivation level is high. If the intrinsic motivation factor is high, the relationship between POS and work engagement will be boosted. This multiplication is important for UAE organisations and it reflects how POS and intrinsic motivation are both resources needed to make the employee engaged in their work. Since POS has a positive effect on the willingness of employees to work, it strengthens the inherent involvement of employees in their roles and assignments (Imran et al. 2020). Specifically, when the level of POS is high, it may promote the relationship between intrinsic motivation and work engagement in the workplace (Gillet 2017). Therefore, job resources (e.g. POS) are supposed to play an intrinsic motivational role by enhancing individual's growth, learning, and improvement (Bakker 2011). A recent empirical study conducted for 1,020 employees in Poland proposed autonomous, controlled impersonal as moderators between job resources and work engagement. The finding was that autonomous and impersonal orientations were moderating the association between job resources and work engagement, while the multiplication of controlled orientation and job resources on work engagement was insignificant (Malinowska & Tokarz 2020). Thus, supportive management may lead employees to feel self-determining in the given task (Meng, Tan and Li's 2017). Such signals from management may be expected to support employees' autonomy because managers in the service sector have the role to empower their employees to be dedicated and energetic while executing the tasks, which may motivate them to be more engaged in the workplace.

POS and intrinsic motivation are crucial factors for work engagement and success. Thus, the current study suggests moderating the role of intrinsic motivation in the relationship between POS and work engagement. This argument is supported by the study findings, which specifically relied on the statistical results ($R^2 = 0.739$)[6] of the variance, which is considered

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[6] $R^2$ values are described as: 0.75 substantial; 0.50 moderate; 0.25 weak (Hair, Ringle & Sarstedt 2011).

close to substantial and has occurred from the multiplications of POS and the intrinsic motivation on work engagement. This confirms the important variables POS and intrinsic motivation on work engagement. Therefore, improving the POS level influences work engagement, and employees with high levels of intrinsic motivation will be more engaged in their work activities. Consequently, the present findings support the hypothesis that a high level of intrinsic motivation strengthens the relationship between POS and work engagement.

**Hypothesis 6: Extrinsic rewards moderate the relationship between work engagement and employee creativity, such that this relationship is stronger in employees with higher extrinsic rewards.**

The purpose of the sixth hypothesis is to investigate the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity. The results are consistent with the other empirical study of the important moderating role of extrinsic rewards in the relationship between openness to experience and creativity (Sung & Choi 2009). Moreover, the relationship between extrinsic regards and creative performance has been found such that the relationships are enhanced when the importance of rewards for the individual is high (Malik, Butt & Choi 2015). A recent empirical study targeting taxi drivers found the positive and significant relationship between monetary rewards and work engagement (Hua et al. 2020). It may be that the rewards can have several positive motivational orientations, specifically in cases in which behaviour is not intrinsically motivating (Ryan & Deci 2017). Much of the activities that individuals participate in are not, in nature, fascinating and enjoyable; therefore, extrinsic motivation is either desired or necessary (Gilal et al. 2019). However, in reviewing the literature, the lack of studies discussing the moderating role of extrinsic rewards between work engagement and employee creativity is evident. Moreover, the

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aforementioned studies are consistent with the main findings of the current study, of the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity. However, this study comes as a result of the scholars calling for more studies, which are needed to understand the effect of extrinsic rewards in creativity and innovation behaviour (Anderson, Potočnik and Zhou 2014; Fischer, Malycha, & Schafmann 2019).

It was assumed previously that employees differ in welcoming the extrinsic rewards from each other. Specifically, employees who are motivated and energetic in their work may create expectations from other employees to receive extrinsic rewards, based on previous experiences. This takes into consideration that the rewards–creativity association differs between individuals relying on their differences (Malik, Butt & Choi 2015). Individuals who are extrinsically motivated and concerned with the external objective to be achieved will thus not be as intensely involved in the work activity (Amabile, Goldfarb & Brackfield 1990). Thus, extrinsic reward, once used properly, has much influence on task interest and creativity (Eisenberger & Cameron 1996). An empirical study conducted by Jiang, Wang and Zhao (2012), for 106 organisations obtaining 754 respondents in China, found that rewards, as one of HR practices, has a positive effect on employee creativity. As such, the employee will be encouraged to be more creative because the employees who experience engagement as well as a high degree of extrinsic rewards will have greater effects on employee creativity than employees who are engaged but have low extrinsic rewards. Consequently, once people are rewarded for creativity by their company, they recognise that they need to communicate both novelty and future usefulness. In such cases, they will be more expected to apply their creative ideas to areas that fulfil organisational goals (Sue-Chan & Hempel 2016). The current study results are aligned with those of the mixed method study conducted in the same context (e.g.

UAE), showing that generation 'Y' is motivated by extrinsic rewards (Lim 2012). Also, the relationship between extrinsic rewards and incremental creativity is more positive for individuals with greater performance orientation (Malik, Choi & Butt 2019). This also confirms the current study results that work engagement is closely related somehow with goal performance, that is, high goal performance orientations enhance the relationship between extrinsic rewards and incremental creativity.

The findings suggest that the effects of work engagement on employee creativity were moderated by extrinsic rewards. Thus, work engagement as seen in the current study enhances employees' creativity in the three industries in the UAE because the professional employees expect to receive extrinsic rewards when they are engaged with creative activities as reciprocated from their organisation. Yin (2018) stated that individuals believe that investing high levels of work engagement in the work will result in high organisational rewards according to SET. The use of creativity incentives will enhance the probability that, for example, the novelty produced from a brainstorming or suggestion programme is potentially beneficial (Sue-Chan & Hempel 2016). From another perspective, the lower effect of extrinsic rewards in relationship between work engagement and employee creativity is likely to be weakened. Workers who are expected to be creative but do not realise that they will obtain any compensation for doing so may generate solutions and ideas that may not actually be of benefit to organisation (Sue-Chan & Hempel 2016). Saks (2006, 2019), in line with JD-R, assumes that POS, recognition and rewards are antecedents for employee engagement and has its consequences in extra-role performance. More specifically, the current study suggests that POS, recognition and rewards are considered as job resources that may affect work engagement and creativity. However, getting a promotion, monetary incentive and other physical rewards may enhance the work engagement–employee creativity relationship. More specifically, once

the employees perceive support, this will lead to facilitating their engagement, as such a perception increases the expectations levels from professional employees in the current sample to expect that their efforts will be rewarded, which will motivate the employees to be engaged in work creativity, as reciprocity to their organisation's support leads to employee creativity.

The findings suggest that employees with strong extrinsic rewards scores would strengthen the association between work engagement and employee creativity, and specifically, extrinsic rewards directed towards creative behaviour in the workplace. As such, it has been confirmed with statistical results that, when intrinsic motivation and extrinsic rewards are exchanged, the alternative model produces slightly lower index results rather than those of the hypothesised model. (For more details, see chapter 5, section 5.4). Thus, the present findings support the hypothesis that a high level of extrinsic rewards strengthen that relationship between work engagement and employee creativity. Although the work engagement is supposed to place the employee in a position to start thinking differently and come up with new creative ideas, employees expect that their engagement in creative tasks in the workplace would be rewarded. As such, being rewarded will make the employee spend extra efforts and absorptive capacity in the process and activities, leading to the fostering of employee creativity. The argument has been supported empirically, in which a high score of extrinsic rewards would strengthen the relationship between work engagement and employee creativity.

**Hypothesis 7: Intrinsic motivation and extrinsic rewards moderate the indirect effect of POS on employee creativity through work engagement, such that this indirect relationship is stronger when employees have higher intrinsic motivation and extrinsic rewards.**

The purpose of the last hypothesis is to examine the relationship between POS and employee creativity through multiple moderators (intrinsic motivation and extrinsic rewards) via mediation (work engagement). This hypothesis is the most critical hypothesis, since it explains the integrative model with all studied variables. The study result clearly shows a mediating effect of work engagement on the relationship between POS and employee creativity. Moreover, the effect is significantly dependent on the first stage of moderation effect of intrinsic motivation, demonstrated by the results of moderated effect between POS and work engagement that is different at different values of the moderator, intrinsic motivation; similarly, on the second stage of moderation effect of extrinsic rewards demonstrated by the results of moderated effect between work engagement and employee creativity that is different at different values of the moderator, extrinsic rewards.

The current study results are consistent with other empirical studies in the literature. There is an indirect effect between the following studies: organisational support and employee creativity through motivation (Tsai et al. 2015); openness and creativity through intrinsic motivation (Tan et al. 2019); extrinsic rewards and creative performance through intrinsic motivation (Shaheen, Waheed & Hashmi 2020). The results in line with Kuvaas and Dysvik (2009) stated that intrinsic and extrinsic motivation leads to employee creativity. However, the current study finds that intrinsic motivation and extrinsic rewards are potential moderators in determining the relationship between POS and employee creativity. Intrinsic motivation and extrinsic rewards can influence the indirect relationship between POS and employee creativity through work engagement. The theoretical background for such a model is that job resources are supposed to play either an intrinsic motivational or an extrinsic motivational role because they are influential in achieving work goals (Bakker & Demerouti 2008). Malik, Choi and Butt (2019) find that intrinsic motivation and extrinsic rewards influence radical and incremental creativity.

The current conceptual framework findings suggest that the relationship between POS and employee creativity is hard to explain with only one mediator, thus the argument for MMM consequently, that may lead to employee creativity. Specifically, this research study examined the moderating role of intrinsic motivation (first stage), extrinsic rewards (second stage) and the mediating process of work engagement in the relationship between POS and employee creativity. Thus, it becomes important to shed light on the relationship between the three intermediaries accordingly, as motivation factors are considered a key characteristic of employee engagement (Delaney & Royal 2017). Bakker, Albrecht and Leiter (2011) argued that, when workers perceive that their employer offers a supportive, caring, involving and challenging environment, satisfying their basic psychological needs, it is more probable they will be engaged, and will invest time and energy due to emotional involvement in their work. Therefore, people who are intrinsically motivated may seek work tasks enabling them to develop their skills and creativity and to be intensely involved in their work (Amabile et al. 1994). Intrinsic motivation concerns engagement with tasks that people find interesting for their own sake (Deci & Ryan 2000). However, the study finds that POS indirectly influences employee creativity through work engagement; intrinsic motivation significantly and positively moderates the relationship between POS and work engagement. Also, extrinsic rewards moderate the relationship between work engagement and employee creativity. Altogether, intrinsic motivation and extrinsic rewards moderate the relationship indirectly between POS and employee creativity through work engagement.

The positive effect between POS and work engagement was found to increase with high intrinsic motivation, but the effect was relatively weaker for low intrinsic motivation. Moreover, the positive effect of work engagement on employee creativity was stronger with high extrinsic rewards. The effect was relatively weaker for low extrinsic rewards. Thus, the

main finding is that the indirect relationship between POS and employee creativity has been influenced by boundary conditions (intrinsic motivation and extrinsic rewards) through the mechanism of work engagement. Employees' creativity is affected by supervisor support, which includes direct project assistance and enhances employees' skills, as well as enhances employee's intrinsic motivation (Amabile et al. 2004).

Results also showed that intrinsic motivation and extrinsic rewards moderate the link between POS and employee creativity through work engagement, and the index of MMM model results of these relations are positive and significant, at 5% ($B$ =0.018, bootstrap SE=0.009, [0.002, 0.037]). Thus, the employees should feel supported, appreciated, valued and motivated by their organisation to facilitate their engagement in work in ways that encourage employee creativity through rewarded employees' engagement in creative tasks.

The current study contributes to the OST, that employees are expected to participate in creative work activities, when their ideas or contributions are supported and valued by their organisation or direct supervisors through the proposed multiple moderated mediation model. Based on the above, POS indirectly leads to employee creativity through work engagement, and intrinsic motivation moderates the effects of POS on work engagement from one side, and extrinsic rewards moderate the relationship between work engagement and employee creativity from the other. The current study contributes to the literature that POS has its own capacity to signal organisation support. Thus, when it is high, this positive perception creates an appropriate orientation toward work in general, which leads more specifically to interest in the work itself and more enjoyable individual work experience, leading the employee to be more productive, engaged and creative in the workplace, specifically, if the employees are informed or expect that such engagement in creative activities would be rewarded by their organisations. Such

perceptions of support lead to empowerment of employees and make them participate and engage in achieving the organisational objectives based on the OST and social exchange principle. The main finding arising from the current study is that, once management encourages and supports their employees, this type of support and appreciation based on OST will build a positive social interactions environment between management and employees that may lead them to be motivated and engaged in creative tasks in return, in the form of employee creativity based on SET. Moreover, employee–employer exchange relationships can be a source of an employee's perceived self-determination.

Both the emotion and SDT agree on one thing: persistence is a key factor in encouraging intrinsically motivated workers to be more creative (Zaitouni & Ouakouak 2018). Hence, POS has its power to affect employees' intrinsic motivation, and such internal motivation will encourage employees to be involved in creative behaviours (Khazanchi & Masterson 2011). The current study findings that employee creativity is likely to be influenced by POS, work engagement, intrinsic motivation and extrinsic rewards. To put it differently, employees who perceive support from the organisation will lead the employees to be more engaged when they have a high score of intrinsic motivation, because of the type of support related to enjoying the work itself, which may lead to fostering employee creativity, specifically when employees have a high score of extrinsic rewards. The next section discusses the theoretical contribution.

## 6.2 Theoretical contribution

In this section, theoretical contribution will be separated into four parts. Part one discusses the mechanism role of work engagement in the relationship between POS and employee creativity. Part two discusses the moderating role of intrinsic motivation in the relationship between POS

and work engagement. Part three discusses the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity. Part four discusses the roles of work engagement, intrinsic motivation and extrinsic rewards in the relationship between POS and employee creativity.

**The first research question was: Does POS influence the level of employee creativity when mediated by work engagement?**

The study primarily contributes to the employee creativity literature in several ways, e.g. how POS enhances employee creativity, since the researchers know about how POS effects employees' commitment, productivity, satisfaction and turnover intention; they know less about how POS leads to employee creativity. Moreover, the previous studies examined factors that affect employees' creativity, with the dominant concentration focused on the role of personality and intelligence (Williams et al. 2016). Further, in reviewing the literature, it was evident that only a few studies have investigated the indirect relationship between POS and employee creativity. The current study and, specifically, the first research question, aim to bridge this gap in the literature and provide new insight into these relationships.

To address the aforementioned gaps, this doctoral thesis adds to the JD-R model (work engagement) by introducing a predictor related to organisational support theory (POS) as well as the consequence effect on the componential theory of creativity (employee creativity). The study also adds to the existing body of employee creativity literature by introducing new antecedents such as POS and work engagement, by considering SET as the main theory of this thesis. As mentioned earlier, the impact of exchange ideology on employee creativity has been ignored in the literature (Song & Gu 2020). Thus, the results propose that POS empowers

individual employees to become more engaged in their work, as one combined concept (vigour, dedication, and absorption), which eases novelty and creativity. Moreover, more job resources are available (e.g. POS) to professional employees in the study sample that would foster employee creativity, because of cognitive and emotional capabilities that work engagement provides towards achieving the organisation's success and growth. Furthermore, as stated in the research gap at the beginning of this study, the research on creativity is plenty, while the efforts to identify concepts that impact this association are fairly limited (Malik & Butt 2017). Thus, the current study findings contribute the result that POS and work engagement have a positive influence on employee creativity.

The significant effect of POS on employee creativity was consistent with the past findings of Khazanchi and Masterson (2011), who proposed that POS and supervisor fairness (organisational and supervisory are realised as resources) will flourish in a positive climate, occurring via advanced levels of trust and quality social exchange associations, which in turn will offer a supportive climate for creative behaviours and ease creativity. The study showed that POS is a crucial factor that fosters employee creativity indirectly. Consequently, the results confirm that work engagement plays a mechanism variable between groups of antecedents and outcomes (Saks 2019). Hence, this thesis constructs work engagement as a mediator. As a result, the findings indicate that POS allows individuals to be more engaged in their jobs, which makes it easier for them to come up with new ideas and perform creatively. Furthermore, this research offers an answer to the question of which mechanism is there in the relationship between POS and employee creativity. Thus, the current thesis contributes the finding that work engagement is an appropriate intervening and mechanism factor in the relationship between POS and employee creativity.

The empirical research that has been discussed in the same chapter, mainly in section 6.1 (H4), showed that POS is a powerful concept for work engagement, and work engagement is a powerful concept towards employee creativity which has been validated by the previously mentioned studies, along with the current study results. Thus, the current study empirically revealed that POS is the key indicator of work engagement in the organisational environment. Moreover, the findings confirm the linkage between POS and employee creativity through work engagement. Therefore, this study contributes to knowledge of organisational behaviour through integrating work engagement as a mechanism between POS and employee creativity. In details, the mediating role of work engagement was supported indirectly, since there is no direct relationship between POS and employee creativity. Thus, the knowledge of how and by which mechanism POS can influence employee creativity is extended. However, the findings in the current study confirmed the positive association between POS and work engagement from one side, and work engagement and employee creativity from the other. This mechanism role of work engagement suggests that individual perceptions about their organisational support are a crucial antecedent of creativity in the service sector (banks, IT and hospitals). Furthermore, these findings simply read as 'support me, I will be engaged, engage me, I will be creative'.

The six organisations in the current study supported the employees for their engagement and performance, for instance. The insignificant relationship between POS and employee creativity can be interpreted as indicating that these organisations may not value directly how the work relates to creativity. To put it differently, Farmer, Tierney and Kung-Mcintyre (2003) find in their empirical study in Taiwan that the relationship between role identity and employee creativity is strengthened when the employees perceived organisational value regarding their creativity. It may be that the mangers in the current sample have not recognised the initial

phases of creativity (e.g. idea generation) until the employees are engaged and demonstrate strong dedication and absorption capabilities towards the creative process; until then such work may be recognised and valued by the organisation. From a statistical point of view, this is why the current study results demonstrate that work engagement is a full mediator process between POS and creativity. Researchers may propose a new concept or scale (e.g. POS for creativity), in the same manner as extrinsic rewards for the creativity scale. If they do so, the above quota will be 'modified to 'support me for creativity, I will be more engaged in creative activities' '.

**The second research question in this thesis stated that 'Does intrinsic motivation moderate the relationship between POS and work engagement?'**

The moderating role of intrinsic motivation offers key theoretical insights in several dimensions. First, it was clear from the literature that there is a lack of studies between POS and work engagement, and this is one of few studies that explores these relationships to bridge this gap in the literature. The significance of this research question is to respond to the calls in the literature to study the intermediation role of motivation in the relationship between POS and work engagement (Gillet et al. 2013). Moreover, as stated earlier about the linkage between POS and intrinsic motivation, this would be a new direction in the future studies (Eisenberger, Shanock & Wen 2020). The fundamental mechanisms regarding when it becomes operative for enhancing work engagement has not been made clear. The current study advances this line of investigation by proposing that the influence of POS on work engagement depends on the levels of intrinsic motivation. Since OST cares about the employee's well-being, as such signals positively affect the employee's perception that may be crucial for maintaining intrinsic motivation, resulting in more engagement in the tasks to be more interesting and energetic. Thus, this study provides a better understanding of these relationships and the boundary

conditions under which resources (contextual and psychological) can promote employees' work engagement.

Second, the current study suggests that intrinsic motivation not only enhances the positive relationship between POS and work engagement, but also decreases the job stress and demands that will contribute to enhancing the employee's well-being, resulting in organisation growth and success. Employees who experience support and care from their organisation as well as a high degree of intrinsic motivation will have greater effects on employee work engagement than employees who have POS but low intrinsic motivation. Employees differ in their personal characteristics from each other (e.g. intrinsic motivation). Therefore, multiplication of POS and intrinsic motivation is important to enhance the employee autonomy, specifically for those who have a low score of intrinsic motivation. Consequently, for employees who perceive support and that the organisation values their contribution, this type of appreciation may create internal motivation from the employees themselves towards more engagement. As such, it will encourage the employee to be more engaged, specially in the activities that have high job demands and stress. Thus, the current study contributes to the literature in that the multiplications of POS and intrinsic motivation has a positive effect on work engagement, and as such hindering the job demands. It may be that the aforementioned argument responds to the scholars' calls for more research that is required for factors that hinder and challenge job demands on work engagement (Lesener, Gusy & Wolter 2019).

Third, as stated in the current literature, intrinsic motivation and trust are crucial factors for SET and SDT (Aryee et al. 2015). However, the current findings contribute to social exchange and self-determination theories, that not only motivation and trust are important concepts for SET and SDT. POS has a key role for the two mentioned theories. When employees feel that

their engagement in the tasks at the workplace would be valued and appreciated by their organisations, such a perception would positively enhance and boost their intrinsic motivation. In return, when intrinsic motivation is high, the relationship between POS and work engagement would be strengthened. Fourth, it has been learned from the JD-R model in the literature that POB factors such as optimism, self-efficacy, resilience, self-esteem, and hope are considered personal and psychological resources (Bakker & Schaufeli 2008; Luthans 2002a). In agreement with the previous statement, the current findings contribute the result that intrinsic motivation is a crucial factor for enhancing job resources and decreasing job demands, resulting in the fostering of work engagement.

The second research question stated in which conditions the relationship between POS and work engagement would be strengthened. Thus, the current study examines the moderating role of intrinsic motivation in the relationship between POS and work engagement. The finding suggest that POS was more significantly associated with work engagement when intrinsic motivation is high, which is in line with the hypothesis (H5). The results confirmed that POS and the work engagement relationship would be strengthened when employees have a high degree of intrinsic motivation, and weakened when they have a low degree of intrinsic motivation. Since intrinsic motivation reflects the individual's interest in the work task, that's why the association between POS and work engagement would be strengthened when intrinsic motivation is high (Gagné & Deci 2005).

**The third research question of this study, 'Do extrinsic rewards for creativity moderate the relationship between work engagement and employee creativity?'**

To put it simply, under what conditions is work engagement more positively and significantly associated with employee creativity. The study proposed that the influence of work engagement on employee creativity depends on the levels of extrinsic rewards. Thus, this study provides a better understanding of this condition, under which motivational behaviour (e.g. work engagement) promotes employee creativity. However, it was clear from the literature that there is a lack of studies between work engagement and employee creativity. More specifically, there are limited studies that examine the role of extrinsic rewards between work engagement and employee creativity. No study in the literature has been found that discusses the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity. As stated earlier by Kuvaas et al. (2017) that extrinsic motivation is rarely measured. Moreover, the scholars considered and debated the effectiveness and influences of extrinsic rewards on creativity, which has two sides (Cai et al. 2020; Malik & Butt 2017).

In addition to bridging the gap in the literature by demonstrating the moderating role of extrinsic regards, this study offers theoretical insights in three dimensions. First, this study contributes to JD-R the result that employees are rewarded extrinsically because of their work engagement towards idea generations and creativity, as such rewards would motivate them to more likely be dedicated and energetic in creative tasks for a long time without being bored. The employees expect that they will be rewarded for their efforts, hard time and engagement in the creative process, as such will keep the morale of employees up and enthusiasm towards creativity events that will contribute to a decrease in job stress and pressure, as employees may spend extra working hours to pursue their engagement in creativity tasks. The findings consist of the suggestion of Revilla and Rodríguez-Prado (2018) that there is a benefit linked to companies that provide extrinsic rewards towards creativity at the individual level, because it affords motivation to professional employees to show domain-relevant skills via creative

behaviour. Also, the findings are consistent with empirical studies suggesting that extrinsic rewards (financial and non-financial rewards) play a moderated role between leadership styles and employee creativity. However, from an empirical study conducted for 260 employees with entrepreneurial experience in China, the results demonstrated the moderating role of financial rewards between transformational leadership and employee creativity through empowerment, and the moderating role of transactional leadership between non-financial rewards and employee creativity through empowerment (Ma & Jiang 2018).

Second, the current study contributes to SET the results that a positive relationship between the organisation and employee will be continued for a long time, since the employees know that such engagement in creative activities will be rewarded from the organisation. This is consistent with the statement of evidence of Eisenberger and Rhoades (2003), that rewards enhance creativity when the employee assumes that creativity will generate rewards. Thus, individuals can produce different desired outcomes depending on their psychological perception that work engagement will result in organisational rewards (Yin 2018). The individual employee learns that the efforts will be rewarded, which will create an obligation for employees to reciprocate with more engagement in new ideas and problem solving and in being creative. The results are consistent with SET, that individual employee objectives aim to maximise benefits compared with the cost (Attridge 2009; Yin 2018).

Finally, this study contributes to the body of knowledge by filling the gaps, theoretically and empirically, of testing these relationships. Moreover, extrinsic rewards may diminish creativity, but this can't be generalised across diverse conditions and individuals (Malik & Butt 2017). However, the reinforcement of creativity by physical and socioemotional rewards increases creative motivational direction (Eisenberger & Rhoades 2003). Thus, the current

study contributes findings on extrinsic rewards based in the service sector, mainly the three industries (banks, IT, hospitals) in the UAE context. Extrinsic rewards strengthen the relationship between engagement and creativity. The findings state that work engagement is more positively and significantly associated with employee creativity when extrinsic rewards are high, which is in line with the hypothesis (H6), giving an answer for the third research question.

**The fourth research question, 'Do intrinsic motivation and extrinsic rewards mutually influence the relationship between perceived organisational support on employee creativity through work engagement?'**

This study answers the fourth research question, whether the effect of POS on employee creativity is moderated by intrinsic motivation and/or extrinsic rewards, simultaneously through work engagement. The findings demonstrate that both boundary conditions of intrinsic motivation and extrinsic rewards moderate the relationship between POS and employee creativity simultaneously in the presence of the mediator (work engagement). As stated earlier, it's evident in the literature that there are three schools of thought. *The first school* considered that extrinsic rewards diminish the intrinsic motivation if operating simultaneously. There are theoretical and empirical studies that confirm school of thought 1. SDT assumes that both autonomous and controlled motivations vary from regulatory processes and associated experiences, and it further indicates that behaviours can be described in terms of their degree of autonomy versus control. Extrinsic motivation is often contrasted with intrinsic motivation since extrinsic motivation concerns doing things for a reason rather than for their inherent fulfilment (Ryan & Deci 2020). An empirical study conducted for 238 individuals of 64 product development teams in the high-tech industry found that monetary rewards have a negative

association with intrinsic motivation, while recognition and social rewards have a positive effect from one side, further finding that intrinsic motivation has a positive and significant relationship with creative performance (innovation and its quality) (Malek, Sarin & Haon 2020). Moreover, expected assessment and rewards, competitiveness, and restricted preference are all extrinsic motivators that can diminish intrinsic motivation and innovation (Hennessey & Amabile 2010). Contextual factors that are informational will stimulate creativity, and contextual factors that are controlled will limit creativity, according to the motivational approach to creativity (Zhou & Shalley 2010). The results clearly show that strategies that rely solely on the use of extrinsic rewards have a high risk of reducing rather than increasing intrinsic motivation (Deci, Koestner & Ryan 1999). Many extrinsic motivators undermine intrinsic motivation and creativity (Amabile 2012). However, both autonomous and controlled motivation are deliberate, and together they stand in contrast to amotivation, which includes a lack of motivation (Gagné & Deci 2005). It may combine the motivational processes and together create amotivation. The third type of motivation is amotivation which describes the ineffective feeling for the person that leads to resistance toward an action (Ryan & Deci, 2017). The theoretical possibility of motivation crowding has been the main subject of discussion among economists. Frey and Jegen (2001) described the monetary incentives crowding out intrinsic motivation under different distinguishable conditions.

*The second school of thought*, opposite school one, considered that extrinsic rewards do not diminish intrinsic motivation. There is theoretical and empirical evidence for such arguments. Chua and Ayoko (2019) conducted an empirical study for 155 employees working in finance and an event management organisation in Singapore, finding that three types of motivation (intrinsic, autonomous, and controlled) mediate the relationship between transformational leadership and work engagement. Moreover, Liu et al. (2016) stated that few studies are related

to extrinsic rewards and intrinsic motivation. The results of the research over a quarter of a century offer little evidence that reward decreases intrinsic work interest (Eisenberger & Cameron 1996). Expecting employees to engage in activities exclusively on the basis of intrinsic motivation, without relying on external rewards, seems unrealistic (Yoon et al. 2015). From another side, Yoon et al. (2015) find that extrinsic motivation positively and significantly impacts employee creativity, but no relationship is found between intrinsic motivation and employee creativity. However, Yoon, Sung and Choi (2015) emphasised on a consensus amongst researchers that intrinsic rewards and intrinsic task motivation are positive for creative performance. Similarly, Hammond et al. (2011) stated that empirical research has mixed results in the relationship between extrinsic rewards and intrinsic motivation on creativity. However, based on a meta-analysis, Hammond and her colleagues found that both intrinsic and extrinsic motivation had positive effects on innovation; meanwhile, intrinsic is slightly stronger than extrinsic.

*The third school considered that such* topics need more exploration and investigation and considered debatable topics in the literature. As stated earlier, Cerasoli, Nicklin and Ford (2014) specified that the relationship between extrinsic rewards and intrinsic motivation has been debated in the literature for more than 40 years. Amabile and Pratt (2016) wonder if intrinsic and extrinsic significations are considered the best mechanism by which to think about the motivation for creativity. Monetary rewards, considered an external measure, may weaken or strengthen intrinsic motivation (Hua et al. 2020). There are contradictions in the results in the relationship between intrinsic motivation and employee creativity (Shalley & Perry-Smith 2001). Moreover, Grant and Berry (2011) stressed that the relationship between intrinsic motivation and employee creativity is equivocal.

It is evident from the above three different schools of thought that the arguments are complicated, since there is no one line of agreement between scholars. Consequently, some scholars have stated that "there has been surprisingly little research about whether intrinsic and extrinsic motivations are substitutes or complements" (Kuvaas et al. 2017, p. 246). This research contributes to the literature of what matters more to employee creativity: intrinsic motivation or extrinsic rewards, or simultaneously to be examined. The current findings of the study confirm that intrinsic motivation and extrinsic rewards have to be studied simultaneously in any related study. Even if there is interest in intrinsic motivation, for instance, extrinsic rewards should be controlled, and vice versa, as such will decrease the dilemma and give rigourous findings. However, the current study findings contribute to the knowledge by aligning the results with school of thought number 2, that intrinsic motivation and extrinsic rewards can work parallel without affecting extrinsic rewards on intrinsic motivation negatively. Such contributions, mainly on SDT, OST, and the componential theory of creativity, suggest that extrinsic rewards can simulate the intrinsic motivation rather than diminish it. Further, this research contributes the finding that, when the professional employees are intrinsically motivated and extrinsically rewarded, they are also more expected to be engaged and creative.

As learned earlier, OST assumed that employees, when they feel valued and cared about by their organisation, will reciprocate in the form of commitment and performance. The current study contributes to the OST, since POS is an important concept for organisations that can simultaneously increase and enhance work engagement and employee creativity. It has captured theoretical and empirical underpinnings of the POS–employee creativity link in three different industries (banks, IT, hospitals) in the UAE context. Thus, the POS is not only limited to performance and commitment, but it may extend to creativity through the mechanism of

work engagement and motivational conditions, intrinsic motivation and extrinsic rewards. Even the call from Amabile and her colleagues, before almost 16 years, about the lack of literature, has recorded the value of perceived leader support for the employee's creativity (Amabile et al. 2004). And there are still few studies concerned with this relationship until this time, which was one of the motivational reasons behind the current study.

That interpretation of the personal resources (intrinsic motivation) and job resources (extrinsic rewards) as two conditional moderators has an indirect relationship between POS and employee creativity. It extended the job demands-resources theory of suggesting an integrative model in the current study rather than available in the work engagement literature. Therefore, in order to foster the engagement of employees it is crucial to organisations to support, motivate and reward its employees to be engaged in creative events. In line with the reciprocity norm, individuals who gain valued support (e.g. pay increment, training development) will feel obligated towards their organisation (Aselage & Eisenberger 2003).

The main findings of the creativity literature are that intrinsic motivation and extrinsic rewards influence employee creativity, after understanding the employee needs to be motivated in order to be engaged in creative activities. Therefore, extrinsic rewards have to simulate intrinsic motivation and foster the creativity, not diminish intrinsic motivation or employee creativity. SET is an appropriate theoretical framework for explaining why valuable events for one party (e.g. organisations) might result in a desired outcome for the other party (e.g. employees' creativity). This research is from a very limited number of studies or may be the only study that examines the relationship between intrinsic motivation and extrinsic rewards simultaneously, in the relationship between POS and employee creativity through work engagement in the UAE context. Kuvaas et al. (2017) stated that there are few studies that have examined how extrinsic

motivation and intrinsic motivation relate to each other. Thus, the integrative model has contributed to the body of knowledge by offering an answer for *how* and *when* the relationship between POS and creativity is possible to occur, based on social exchange relationships. And it also contributes to the organisations operating in the UAE context, as this is the only study investigating the relationships between POS, work engagement, intrinsic motivation, extrinsic rewards and employee creativity, to the best of the researcher's knowledge. The results are consistent with the statement of the higher value perceived by employees from tangible and intangible resources, the higher quality relationship between the leader and employee (Settoon, Bennett & Liden 1996).

Finally, the current study integrated SET with other four relevant theories, namely (OST, JD-R, SDT, and componential theory), providing a comprehensive and deep understanding of the formation of individual–organisation association. Consequently, the integrative conceptual framework offers propositions that may not follow from one theory alone. Such advances and contributions (of how POS, work engagement, intrinsic motivation, extrinsic rewards, and employee creativity) can be integrated in one conceptual framework, which ensures the important relationship between employee–employer in the organisation. Thus, this study considered the first study to propose a comprehensive theoretical background and conceptual framework of different theories and concepts by incorporating SET. The next section discusses the methodological contribution.

## 6.3 Methodological contribution

This study offers a methodological contribution to organisational behaviour literature, in that the integrative model has been examined simultaneously in all the relationships, including the

stages of moderators (intrinsic motivation and extrinsic rewards), which provides robustness results, validity, and reliability, similar to some studies that used the MMM model by using rigours methodology (See, Li, Shaffer & Bagger 2015; Van Esch & Mente 2018). While other studies separated the model, they are relying on the correlations results rather than on the results that come from the regression (e.g. Lan et al. 2020).

As stated in the literature, Putra, Cho and Liu (2017) find positive and significant relationships between intrinsic motivation and three dimensions of work engagement (vigour, dedication, absorption), from one side, and extrinsic motivation and the three dimensions of work engagement from the other. The positive and significant relationship was when they run each model separately. However, when they combined the intrinsic motivation and extrinsic motivation in one model and direct these paths to work engagement, they find that intrinsic motivation is positive and significant related to work engagement, but no significant relationship between extrinsic motivation and work engagement is found. The current results contribute to the methodological literature for the studies concerning the motivational factors to be studied simultaneously. Otherwise, if the research interests are in one of these concepts, either intrinsic motivation or extrinsic rewards, the other construct has to be controlled, similar to the rigourous empirical study conducted by (Malik, Choi & Butt 2019).

This study is from the few studies that measure the MMM model framed by theoretical and conceptual frameworks. Although, some scholars have used the same model empirically, still the reader expects a theorisation base for such hypotheses (e.g. Bai et al. 2020; Raggiotto &Scarpi 2020). Therefore, this research has contributed to the methodological literature and specifically for MMM by producing a theoretical background for '*how and when*' POS can foster employee creativity. However, consolidative concepts have been taken together at the

same time as POS, intrinsic motivation, work engagement, extrinsic rewards, and employee creativity to bridge the methodological gap, by statistically examining the constructs, which are grounded in a theoretical and conceptual basis. The next section discusses the empirical implications.

## 6.4 Chapter summary

This chapter discuss generally the seven thesis hypotheses along with theoretical and empirical study support. Then a section is allocated for theoretical contribution, from which the researcher's aim is to answer the four research questions. Then, there is a brief section for methodological contribution. Afterward, empirical contribution has been discussed in a separate section to offer suggestions and recommendations for organisations and practitioners in the service sector, mainly in the three industries (banks, IT, hospitals), by demonstrating how they can benefit from the current study, and the chapter ends with the brief summary. The next section discusses the conclusions, recommendations, limitations, and future studies.

# Chapter 7: Conclusions, recommendations, limitations, and future studies

This chapter has been divided into five main sections: first, conclusions; second, recommendations for practitioners; third, limitations; fourth, proposed future studies; finally, a summary of the chapter.

## 7.1 Conclusions

The present doctoral thesis examined the direct and indirect effects of POS on employee creativity through work engagement. Moreover, it examined the moderating roles of intrinsic motivation in the relationship between POS and work engagement from one side, and examined the moderating role of extrinsic rewards in the relationship between work engagement and employee creativity from the other, in six organisations operating in the service sector, specifically in three different industries (banks, IT, hospitals) in the UAE. To put it differently, the multiple moderated mediation study sheds light on the effect of POS on employee creativity through different roles of intrinsic motivation, extrinsic rewards and work engagement in the workplace, making a significant contribution to the POS and employee creativity literature by offering insights on *how* and *when* work engagement, intrinsic motivation and extrinsic rewards enhance employee creativity. The findings reveal that POS can encourage employees to feel engaged in their workplace based on the support and care gained from their organisation. POS indirectly influences employee creativity through work engagement. Moreover, intrinsic motivation moderates the relationship between POS and work engagement, and extrinsic rewards succeed, too, to moderate the relationship between work engagement and employee

creativity. The main conclusion is that both boundary conditions, intrinsic motivation and extrinsic rewards, have an effect of the POS-employee creativity relationships through work engagement.

The conclusion revealed that the link between POS and employee creativity cannot be explained without a mechanism process (work engagement) and conditional boundary (intrinsic motivation and extrinsic rewards). In addition, the importance of intrinsic motivation and extrinsic rewards found that it has effect on the relationship between POS and employee creativity when mediated by work engagement. Further, extrinsic rewards do not diminish the intrinsic motivation. The fact that rewards can, under well-specified conditions, yield detrimental effects on intrinsic motivation does not mean that SDT is against all rewards, as some claim (Ryan & Deci 2017). Based on the conclusion of Ryan and Deci, the results of this thesis confirm that extrinsic rewards once defined its objective and direction such as to be directed towards creativity, in the same manner as the current study, which of course can work simultaneously. Such extrinsic rewards can simulate intrinsic motivation instead of diminishing intrinsic motivation.

Based on SET, the interpretation of this relationship encourages employees to participate in creative work activities. POS, work engagement, intrinsic motivation, and extrinsic rewards in the conceptual framework are antecedents of employee creativity, which is an outcome that many organisations aim to achieve. Therefore, it must be concluded that work engagement is a key mediator in explaining the relationship of POS and employee creativity. Further, intrinsic motivation is another key moderator explaining when the intrinsic motivation enhances the relationship between POS and work engagement. Moreover, extrinsic rewards are another key moderator explaining when the extrinsic rewards enhance the relationship between work

engagement and employee creativity. To put it together, once the organisation provides the employees with jobs, and personal resources including the support, value of their contribution, care about their well-being, and rewards, these resources definitely will enhance the employee's motivation and engagement, and the employees will reciprocate for all these supportive resources and care from their organisation in the form of creativity (e.g. employee creativity). Thus, social exchange theory for the professional employees in the sample of three mentioned industries in the UAE context confirms its power to promote and generate more work engagement and employee creativity. Last, creativity is a beneficial product in every kind of human effort (Gough 1979). Next, discusses the recommendations for practitioners.

## 7.2 Recommendations

This doctoral thesis empirically examines the fundamental boundary conditions of intrinsic motivation and extrinsic rewards through the mechanism of work engagement, by investigating the effect of perception of organisational support on employee creativity, and thus contributing to the POB and organisational behaviour fields in numerous ways, with applied implications for management and organisations. Therefore, this section is divided into four parts. Part one discusses the implications of POS. Part two discusses the implications of work engagement. Part three discusses the implications of intrinsic motivation and extrinsic rewards. Part four discusses the implications for the integrative model (e.g. employee creativity).

**First**, POS is advocated as a base pillar for job resources and decreasing job demands (e.g. stress), considered as an effective tool for enhancing employees' engagement and creativity. Moreover, managers may want to support employees by adjusting their job resources and demands to enhance their creativeness. Furthermore, Eisenberger, Malone and Presson (2016)

suggest eight human resources (HR) tactics to enhance POS, such as: create supportive and flexible workforce services, promote a culture of fairness among employees, provide attainable objectives, propose personalised benefits based on the employee's needs, support the first line managers (supervisors) to enhance POS in their subordinates, provide training programs for employees to be supportive, create social network between employees, and be organisational support before starting employment process. Hence, organisations should attempt to create a fair and flexible work environment to enhance employees' perception levels of support. The study recommends firstly that organisation managers (e.g. CEO, HR) can encourage direct managers to support their employees, in many aspects such as creating environmental support, a supportive culture and offering regular orientations about the importance of employee support (value their contribution, care about their well-beings, create a climate of POS between employees). Similarly, Kremer, Villamor and Aguinis (2019) stated that the organisation should motivate common support practices for managers and employees through the entire organisation. Second, the organisation has to consider employees' objectives, goals and values, and thus create a sense for the employees that their organisations care about them. The best recommended way to achieve the previous point is regularly to ask employees about their suggestions and feedback (Kremer, Villamor & Aguinis 2019). Third, the supervisor or direct manager should always offer a hand for the employees when needed. For example, if the employee faces an issue with a specific role in her/his work, the employee should be able to see that the supervisor is trying to help sort out the issue. Fourth, employees have to feel that well-being and health is very important for the organisation. For example, employees who practice working from home through the Covid-19 pandemic and their companies care about the workplace sanitisation and give them the quarantine in case any of them has been affected. All these mechanisms contribute toward employee well-being and the company is caring about that, as such means a lot for the employees' loyalty and commitment. Thus, the supervisor in

the organisation has to control the stress that comes from work environments or even from external factors by proposing the right tools for the employee's well-being. Individual stressors' existence to situations can be managed by the supervisor, and to a lack of care or assistance from the supervisor, suggesting that the impact of work stress on burnout can be minimised by influencing individuals' cognition (Xu & Yang 2021), or, in case the employee faces mental health problems, counselling service are needed (Wang 2021). Fifth, that the job fits the employees' capabilities, skills and qualifications is very crucial for employees. In case the job does not fit the individual employees, Kremer, Villamor and Aguinis (2019) recommend that the organisation has to enhance autonomy and redesign job roles, as such is considered crucial steps for enhancing personal control and organisation identification. Sixth, conducted quarterly, half-yearly or at least once a year, about employee satisfaction, the organisations have to measure this important factor and make adjustments based on the results. Altogether, organisations should use POS as a tool by which to improve a variety of job results, since it will be returned by workers based on the reciprocity norm (Eisenberger, Shanock & Wen 2020). Seventh, employees have to feel that their organisation is proud of them if they achieve the project at hand or solve problems creatively or enhance the product or increase the sales volume and profit for the organisation, and thus the employees will feel supported and valued. Eighth, if the employees want to think creatively, such behaviour will lead them to take some risks, if they know or feel that their organisations or supervisor will forgive failures and let the employees take a lesson from failure, as such will motive the employees to be either a risk maker or taker, and let them feel supported. Reducing such risk initially with creative activities will boost the creative behaviour (Eisenberger, Shanock & Wen 2020). Ninth, when the organisation provides all needed tools for employees, as such will let the employees feel supported and that they are doing something important for themselves, and for the organisation. Tenth, the employee voice is important, and the organisation has to respect and listen for the

employee's feedback and opinions. Such can be achieved through promoting structures that enable and allow upward communication (Kremer, Villamor & Aguinis 2019). Finally, organisations may encourage referral recruitment, which makes the relationships between employer and employees more personal and friendly, to enhance the organisational support perceptions for the employees (Chernyak-Hai & Rabenu 2018).

In line with COVID-19, the organisation could preserve a supportive environment to keep employees' morale high and encourage them to face the challenges positively, such as provide the employees more support towards well-being through counselling sessions to relieve their fear, job insecurity, and emotional exhaustion (Chen & Eyoun 2021). Individuals with a high POS are more likely to raise concerns about safety issues (Eisenberger, Shanock & Wen 2020). It's crucial in COVID-19 timings that employees inform the direct manager about any symptoms to prevent also transferring the virus to other employees, resulting from close proximity in the department or the firm. But when the employee feels that they can be supported and understood by their organisation, this motivates the employees to be more transparent about issues that can affect their safety and well-being.

Moreover, the three industries (banks, IT, hospitals) in UAE report that 24% from the sample is highly supported by their organisations, while 50% is moderately supported, and 26% is almost not supported. And to enhance the POS, Akgunduz, Alkan and Gök (2018) suggested that successful employees should be rewarded, and POS can be enhanced in this case when the work is meaningful and employee creativity would be increased, too. More specifically, POS would be enhanced by the receiving of appreciation and approval, and also by symbolic and physical rewards (Eisenberger et al. 1986). Moreover, organisations should acknowledge the employee's contribution and execute their suggestions (Kremer, Villamor & Aguinis 2019). A recent conceptual study categorised a list of HR management practices that may influence the

organisational climate of care, such as job design, training, health and safety programs, among others (see, Saks, 2021).

**Second,** the present research demonstrates how organisations offer support and assistance to their employees regarding caring for their well-being and socio-emotional needs. This type of support and care produces positive results, such as work engagement. Thus, the research indicates that organisations need to improve the human resource policies that help their employees feel supported, to enhance their engagement level and achieve the organisation objectives. The sample for three industries (banks, IT, hospitals) in UAE exposed that employees experience work engagement, which specifies that engagement stimulates their socio-emotional state towards a desired outcome. Thus, senior management endorsement is required for employee engagement, which is best accomplished by recognising engagement as a core value for the organisation (Bakker, Albrecht & Leiter 2011). Work engagement can be improved through better job design, training programs and job rotation that may result in higher levels of engagement (Schaufeli 2012). Thus, the organisation has to provide supportive programs to affect the employees who are more involved and to make the employees more dedicated to their work, by understanding their needs and personal differences in order to reach the desired outcomes (e.g. work engagement). Organisations are also advised to focus on work engagement at the individual level, rather than the macro levels of different occupation circumstances (Gruman & Saks 2011).

Managers in these industries studied in the current study have to take specific steps to enhance work engagement, such as, first, work closely with employees to ensure that employees are working with passion, enthusiasm, dedication, and energy in executing creativity tasks. Second, develop programs to motive employees, to let them feel that they are important not

only for the organisation but also that they are strong and dynamic in order to achieve organisation objectives and goals. Moreover, these programmes (orientation, coaching, and training development) will lead to a positive impact, emotional intelligence, and adaptive behaviour capabilities (Bakker, Albrecht & Leiter 2011). Third, managers have to let the employees feel that their job is inspiring. For the routine jobs (e.g. bank teller) the work itself is repeated and routine, leading to high turnover in the banking industry in the UAE context; therefore, rotations between employees in this type of job will have very positive outcomes. Schaufeli (2012), suggest that changing work and rotation may lead to higher engagement. Or in the case of high job demands in the workplace, the manager has to avail the required resources among employees to encourage work engagement (Bakker, Albrecht & Leiter 2011). Five, the supervisor has not just to see that the employees are coming exactly on time if their work conditions do not require full adherence to the roster, but also has to monitor their feeling, whether they are happy to come or not and advised to discuss this issue with the employee (e.g. one to one meeting). The employee' emotional state of engagement is better measured with work engagement surveys (Gruman & Saks 2011).

When the managers implement all or some of the aforementioned steps, this will lead employees to be more engaged in their work, proud about themselves, proud of their supervisor and organisation as well; moreover, the employees will not count the time and efforts that they are spending in their work, because they are fully engaged and this is what organisations or manager attend to. However, these psychological and behavioural matters will lead to employee engagement and let employees forget themselves while doing their work. The proposed framework in this study does apply to a specific sample of professional employees in the UAE, thus, there is much to be gained by the field, from an extensive investigation of the mediation role of work engagement. Managers in these organisations have to be aware that

work engagement can help organisations to understand why POS is linked with employee creativity through the work engagement. The researcher stressed the point that the practical implications of the mediator role in this study are that supervisors or HR managers should pursue employee engagement with taking the mechanism role of work engagement into account for its strength to achieve organisation goals and competitive advantage. Schaufeli (2017) suggests for different types of organisations; the JD-R paradigm can be commonly extended to a wide variety of work and personal attributes, as well as results can be used. Moreover, the flexibility of the model may also allow customisation to the specific environment in which it can be applied. Programmes in work engagement can be focused on constructing personal resources at the individual employee level, such as resilience, hope, efficacy and optimism (Bakker, Albrecht & Leiter 2011).

More studies are needed to determine the scope of work engagement (e.g. at the national or occupational level) (Schaufeli 2012). However, based on the current study, the average score for the three industries (banks, IT, hospitals) was 77% in terms of work engagement, thus, IT and hospitals are above the average as benchmark for three industries while banks are located under average. It may be recommended that the banking industry in the UAE has to provide more attention to programmes (such as coaching and training) to foster employee engagement for the benefits of the bank and banking industry in general in the UAE. Moreover, the three industries (banks, IT, hospitals) in the UAE report that 26% from the sample is highly engaged, while 47% is moderately engaged, and 27% is almost disengaged. Meanwhile, the global employee engagement reports 68% as the average engagement; while the Middle East and North Africa (MENA) report 72% (Adair 2020). That means that the UAE is still greater than the global average employee engagement score. HR management has to create a policy concern about engagement measurement among all workers and based on this measurement the HR can

assess employees at the individual, workgroup, or departmental level for the score of engagement (e.g. low, moderate, high). Relying on these results, then HR can do the interventions and correction plans (Bakker 2011; Schaufeli 2012). An engagement strategy should be developed in which the main drivers of engagement are, for instance, POS and motivational factors, which should be established and incorporated into a framework of HR management policies that work collectively to create an engaged workforce and, eventually, an engagement culture (Saks 2017).

**Third,** intrinsic motivation and extrinsic rewards: since the doctoral thesis examines both intrinsic and extrinsic motivation simultaneously, the idea is all about balance between both of them. Thus, the discussion for this point will be covered through three scenarios in line with the *intrinsic motivation* concept. In the first scenario, the manager has to understand employee needs, and ask what can motive this employee or the other one. The manager may be concerned and make sure that employees are motivated intrinsically, as the manger has to strengthen such feelings for this employee and focus on the work environment, more specifically by creating an enjoyable atmosphere to make the work more enjoyable, especially for the work that has routine and repeated tasks every day; the manager may apply the rotation as per the example in the second point of empirical implications. Second, the manger has to ensure that employees keep good relationships among co-workers, including support, trust and respect; fun at work concentrates primarily on the work environment and is constructed based on the level of job demands (Gu et al. 2020). In case of high job demands in the organisation, it is suggested that the manager focus on creating a fun environment especially for the tasks that produce pressure and stress. Thus, the manager must not only create a fun environment but also must maintain such an environment properly for great advantages to the organisation (Gu et al. 2020). Finally, to let the employees enjoy this environment, common hobbies and common area of interests

should be created. However, Olynick and Li (2020) conducted an empirical study for 193 employees in a university in Canada, finding that clan culture and family-oriented organisations have the highest level of enjoyment at work (compared with adhocracy, hierarchy, and market culture).

In line with *extrinsic rewards–tangible rewards,* the literature is very rich with the methods and tools that can be the reason for enhancing employee motivation through extrinsic rewards. There are only a few empirical studies of the impact of creativity-contingent rewards in the workplace (Yoon et al. 2015). However, the manager has to know the reason behind extrinsic rewards, for example, this study is concerned with the extrinsic rewards directed for employee creativity. In this scenario, the manager has to reward employees extrinsically through using the best property for rewards. For monetary rewards, such as financial rewards, incentive programs are based on the number and quality of creative ideas by focusing on the quality of ideas. The manger has to understand types of extrinsic rewards (such as monetary, recognition, and social) before utilising and combining them to encourage creativity (Malek, Sarin & Haon 2020). Yoon et al. (2015) considered pay and promotions as examples of tangible rewards, because they are clear and easily measurable. Moreover, the manager in coordination with the HR department must have, for example, a systematic promotion and career path relying on the quality of idea generation, and the ability to solve the problem that faced the organisation. Also, the manager must welcome the feedback and suggestions from employees, their intentions or behaviour towards creativity, and thus the manager has recognised these suggestions and enhancements. Further, contemporary firms are becoming more flexible in their recruitment and rewarding policies, therefore, they suggested flexibility in the recruitment process, rewards programs, and compensation policies (Chernyak-Hai & Rabenu 2018). In the HR management essence, rewards are an important feature of payment schemes and signal the actions and results

desired in the company, thus incentivising workers for successful performance (e.g. creativity) (Cai et al. 2020). The rewards program may have a substantial influence on employee creativity, as it is crucial that leaders in the organisation communicate and make it obvious to employees how performers will be rewarded (Shalley& Gilson 2004). Management has to provide extrinsic rewards (e.g. money directly or indirectly) to improve employee engagement (Hua et al. 2020). Or, as suggested by Jiang, Wang and Zhao (2012), some rewards, (e.g. sharing profit) can promote individual creativity by relating profits to novel ideas.

In the case of *extrinsic rewards–intangible rewards*, the organisation manager in this scenario relies on intangible rewards, such as social acceptance, verbal appreciation, and recognition by colleagues or management, all of which are examples of intangible rewards (Yoon et al. 2015). However, the manager can use the nonmonetary policy for motivating and rewarding the employees extrinsically, such as a thanks letter from the head of organisations in a yearly gathering, as such will enhance the motivation of employees once (s)he get recognised by top management in their organisation, in front of organisation employees or customers in specific cases. As a result, the manager has to understand employee needs and the nature of the work, based on that to decide which method is more beneficial for employees and the organisation. Therefore, directed rewards for creativity is a convenient method to minimise the social challenges and risks that come with creative activities (Yoon et al. 2015).

After suggesting different scenarios about how the manager can motivate the employees intrinsically or extrinsically, the findings suggest that the HR manager or the direct manager in some cases make rigourous analysing for the job role, characteristics, and for the personality of the employees through understanding their needs. For example, in the sample study of this research it could be the recognition and thanks letter that are considered a lot for senior

positions in the bank, for example, while the same can't be applied for the bank teller, for whom rewards or career progression may affect the individual employee towards creativity. Moreover, to be aware of the three conditions for the rewards-creativity relationship (outlined by Eisenberger & Rhoades 2003). First, when there is promise that creative performance will be rewarded; second, when rewards come as a result of training related to creative tasks, and even without the promise of rewards, based on the previous experience that rewards followed the assignment of creative tasks. However, it is about balance between both, tasks that demands a lot of absorption, sophistication, and quality should be related to intrinsic motivation, while extrinsic rewards can be more closely related to tasks that are easy, repetitive, and even less intrinsically pleasant (Cerasoli, Nicklin & Ford 2014).

**Fourth,** the ultimate objectives for the above three empirical implications namely, POS, work engagement, and motivation (intrinsic and extrinsic rewards) are to foster employee creativity. Creativity has been defined in the literature of this study as idea generation, thus, the manager has to focus the aforementioned programs toward creativity. Moreover, to enable the employee to think creatively, knowledge and information plays a crucial role in generating new ideas, thus the manager has to motivate knowledge sharing among employees. Aldabbas, Pinnington and Lahrech (2021) find in their empirical study in the UAE that 23% of the variation for innovation behaviour comes from empowerment and knowledge sharing. Second, the manager has to develop integrations and diversifications between ideas; it may be specific training courses that may help in this regard. Third, the manager must educate the employees who have in reality many ways to solve the problem, as there is not a standard solutions for specific problems that may face the organisation, thus, the manager has to motivate creative thinking in the organisations. Especially, creative thinking must be emphasised as a specialised skill in today's innovation driven economy (Puccio 2017). Thus, the doctoral thesis may be without

meaning if the researcher does not integrate the theories with empirical results to come up with solid theoretical and empirical implications. Thus, the manager has to motivate the systematic approach and logical thinking for presenting the ideas and coming up with creative solutions for the problems that face the organisation. Agarwal (2014b) stated a very straightforward strategy that organisations hope to be innovative, just to motivate employees to be innovative. Altogether, the suggestion that organisations provide robust support for creativity will develop a greater sense of desired psychological powers, such as autonomy and confidence, thus enabling them to explore new ideas and concepts to participate in individual creativity (Zaitouni & Ouakouak 2018). Therefore, they stated that employees who perceived support and care will be likely to obtain feedback from their direct supervisors, and in return this will give them more opportunity to be motivated towards creative work activities. Feedback is a crucial process, specifically for new employees to understand that job results and positive outputs are the consequence of their intrinsic motivation and efforts (Gruman & Saks 2013). Thus, to strengthen employee creativity in organisations operating in the UAE, and possibly elsewhere, there is the recommendation that organisations provide employees with the requisite job resources (e.g. support, care, rewards, feedback). Such forms of support nurture positive emotions and give employees worthwhile reasons to be more motivated and engaged in their creative work. Consequently, organisations have to support their employees and motivate them to be more engaged in their work and creative tasks, which will enhance employee creativity. Increased employee creativity can be a source of innovation and competitive advantage. Thus, the HR manager in the service sector has to give more attention to the organisation–employee relationships, suggesting equal exchange on the one hand, while also acknowledging the changing needs of individuals on the other (Chernyak-Hai & Rabenu 2018). Also, other scholars have stated that the organisation has to consider individual differences according to Malik, Butt and Choi (2015) and job types, according to Baer, Oldham and Cummings (2003).

When the manager understands employees' needs, this will more likely be understood when to use monetary or non-monetary rewards that reflects positively on the employee–employer relationship.

The current study has emphasised that SET presents a well-defined explanation for why organisations should spread high quality relationships among employees to enhance their exchange benefits for employees and employers. Therefore, management has to be aware of the importance of organisational support and its effect on work engagement and employee creativity. The organisation helps its employees to excel in their tasks and respects their opinion and contribution to fuel their engagement and creativity. One practical implication then is for employers to design and implement human resource policies leading to POS, according to Loi, Lin and Tan (2019), and an organisational climate of care, according to Saks (2021). For POS to create opportunities for employee creativity to arise, there is the argument that increasing work engagement is a significant area deserving greater consideration from managers. Furthermore, management has to understand and apply appropriate support for employee creativity (Shalley & Gilson 2004). Finally, all positive results come from the current study, and mainly from the five main concepts or constructs used in the current study, confirming that the current framework is related to positive orientation and would have a positive outcome on employees and towards organisation success. POB is merely attempting to consider and highlight the increasingly untapped potential of positivity in today's and future workplaces (Luthans, Youssef & Avolio 2007). Next, discusses the study limitations.

## 7.3 Limitations

The doctoral thesis has several limitations. First, the survey was issued in only six companies in the UAE, mainly from three different industries which limits the generalisability of the current main findings. Although the sample of the study was from the service sector, it was from three different industries (banks, IT, and hospitals), which are not purely homogeneous.

Second, the current research is a cross-sectional survey, with all data collected and measured during the same time period. Similar to many other studies on creativity, cross-sectional data do not permit drawing conclusions about causality. Findings do not provide a valid basis for making causal interpretations about relations among variables (Stone-Romero & Rosopa 2008). Also, the study is nonexperimental, it could not confirm the causal relationship between the five variables studied in the current doctoral thesis.

Three, the framework is built on the multiple moderated mediation model and the data were collected from the same source at a single point of time that may make the results suffer from endogeneity. However, Hughes et al. (2018) stressed that researchers must use in their future studies specific designs that are rigourous to endogeneity, to examine the moderation effect accurately. Therefore, five demographics variables have been controlled in the current study (gender, age, educational level, job tenure, and their industry type) that are likely to affect employee creativity.

Four, while the common method variance is not a problem in the current study, self-report measures raise concerns about possible CMV. Therefore, demonstrated construct validity of

the measures and all results confirmed that CMV is not an issue in the current study (Conway & Lance 2010).

Five, the framework in the current study discusses only the positive effects of support, engagement and motivational factors on employee creativity without considering any of the job demands (e.g. stress, burnout), or any other factors that have negative outcomes (e.g. turnover intention, absenteeism).

Six, Sarstedt et al. (2020) stated two limitations for PROCESS-macro, which are: first, limit to estimating singular model systems in isolation. Second, do not take into account the diluting impact of measurement error. Thus, the second point is considered one of the limitations of the current study, while in the first limitation, the researcher tests and examines the entire framework with all hypotheses jointly, without, for example, separating the model into two models such as other researchers have done. For example, the (model 21) which is utilised in the study has been incorporated one time without separating it into two models (e.g. model 7 and model 14). The standardised coefficients are not available for models with moderators (Hayes 2018b). Therefore, to override such a limitation, the researcher relies on the 'Z' score that is already standardised figures before computing it in the SPSS.

Lastly, the average loading for work engagement is .465 below .50, even though it has not be eliminated from the study (e.g. item 1 and 9). The scale was well designed and the researcher investigates many assumptions to ensure the validity of the findings, such as; multicollinearity was below 3.0, which is not an issue in the current study. Moreover, the main five constructs used in the current study are distinguished from each other theoretically; CFA results indicate a good fit for the current hypothesised/conceptualised model; convergent validity is established

in the study and the highest correlation reached in the main variables are (r=.70). based on the above five assumptions; all items have been accepted without any omission. However, the aforementioned limitations in the current study may lead to opportunities to be used in future studies (Li, Shaffer & Bagger 2015), which will be discussed in the next section.

## 7.4 Future studies

A time-lag or longitudinal study design would be useful for future research examining the same constructs to test how the five main variables in the current study examined associations disclosed over time. Future studies could collect data from more sources, thus providing an even stronger test of the examined model. Supervisor rating, peers rating, and third-party rating for employee creativity, will benefit the creativity literature. Such a rating will be extended to the perspectives of supervisors, peers, and third parties since this might contribute to knowledge on employee creativity and creativity literature in general.

Studies are recommended to link POS and employee creativity and to be tested in different context. To see the findings if similar to the current study which has been conducted in the emerging markets context (e.g. UAE). The same framework can be tested in different contexts that will add to the body of knowledge, whether extrinsic rewards diminish intrinsic motivation or not; in addition, if POS relates to employee creativity. Even with the crucial role of POS, still there is a need for a better understanding of the variables that enhance the level of POS. It may be the same model being examined through considered leadership style or HR practices as antecedents for POS.

The current analysis is at the individual level and future studies could conduct multilevel analyses for the identical constructs. Baran, Shanock and Miller (2012) suggested studies connecting POS in countries outside the USA would constitute an advance in knowledge on the internationalisation of management. Furthermore, to generate insights and enhanced understanding of the POS and employee creativity relationship, Ahmed et al. (2015) argued that the type of organisation plays a significant role in explaining the association of POS and attitudinal outcomes. Future studies may explore potential industry or organisational experiences that may modify the role of rewards in enhancing employee creativity (Malik, Butt & Choi 2015). Moreover, there is a need for more empirical studies that concentrate on employee work engagement in diverse sectors and more theoretical academic research in general (Slåtten & Mehmetoglu 2011).

The dataset in the current study had been collected and analysed before the COVID-19 pandemic became a serious global warning (Wang 2021). Future studies have to take into consideration the COVID-19 impact and influences on the concepts; if the researcher had not placed the COVID-19 scale as a construct in their study, at least to control it to get robust findings by controlling any impact or affect that may have been generated by COVID-19. Also, it may be useful to include some variables related to job characteristic in future studies, that may affect the framework (e.g. skills, tasks, feedback).

Since the current framework discusses only the positive effects of support, engagement and motivational factors by linking them as antecedents with employee creativity as a consequence variable, a future study may consider the same model by adding job demands (e.g. stress, burnout), that may have an effect on employee creativity. Zhou and Hoever (2014) noted that the majority of studies on workplace creativity have concentrated on potentially positive

variables rather than those that which reduce creativity in their research review. Moreover, the current study focuses on rewards directed to creativity. It may be beneficial to study different types of rewards–creativity relationships (Malik & Butt 2017). Likewise, the current study examines the rewards for the service sector; it may research and explore different sectors (e.g. manufacturing; education).

Self-determination has only been studied as a moderator variable in the work demands-control model in one published research (Parker, Jimmieson & Amiot 2010). Future studies should start focusing on the boundary conditions factors that may affect the research backgrounds (e.g. intrinsic motivation, extrinsic rewards) and recommended to be studied simultaneously. Studies on quality motivation and related topics will assist in understanding how extrinsic rewards affect performance and creativity, as well as the motivational role and other psychological mechanisms play in this process (Gerhart & Fang 2015).

Future studies may look at concepts other than those constructs in this study as mediators in the association between POS and employee creativity. They may use sequential mediator's employee resilience and engagement in the relationship between POS and employee creativity, or they may use multiple mediators such as engagement, empowerment, and resilience in the relationship between POS and employee creativity. Moreover, the current study relies solely on quantitative technique; it may be a qualitative study that seeks to understand the reality of employees' perception about their organisation and employee creativity by exploring the roles of work engagement, intrinsic motivation, and extrinsic rewards. Furthermore, the current study focuses on organisational contextual factors of how employees perceived support and rewards that will enhance their motivation and behaviours toward engagement and creativity.

Thus, it may be a future study that focuses on what steps individuals should take to improve their own creativity (e.g. job crafting) (Tian, Wang & Rispens 2021).

Still, there is a call in the literature to study the role of intrinsic motivation related to risk taking and creativity leftovers mostly unexamined in practical contexts (Dewett 2007). Calls for future research could investigate the role of expectations of rewards, especially for creative performance in the relationship between the POS–creativity relationship (Eisenberger, Shanock & Wen 2020). There is the recommendation that either intrinsic motivation or extrinsic rewards be included in these relationships with creativity. In case the researcher focusses on one of these concepts (e.g. extrinsic rewards), in this case it has to consider (e.g. intrinsic motivation as a control variable). Also, it would be beneficial if rewards related to creativity have been classified into different types, to understand which one has more effect on creativity. It's vital to find out what kinds of benefits inspire individual creativity so it can expose the processes by which rewards influence creative performance (Yoon et al. 2015).

In the following paragraphs, the researcher presents some of the main research problems that are crucial for theorising creativity in the future.

1. Creativity research must be identified from the beginning, whether it is related to creative performance, creative product, creative process, creative self-efficacy, or creative behaviour (e.g. employee creativity). As such, it informs the reader about the study's aim and sequence rather than using generic term (e.g. creativity). Moreover, the observation through reviewing the studies related to creativity that the majority of studies are concentrated on (e.g. services, manufacturing, education) fields, with just a few studies focusing on profession. It becomes crucial to see how different profession

can lead to creativity. Furthermore, conducting studies on the effect of antecedents on creativity at different levels at the same time (Zhou & Hoever 2014)

2. There is concrete justifications and benefits for measuring employee creativity depends on employee self-rating by a large number of scholars (e.g. Shalley, Gilson & Blum 2009; Ng & Feldman 2012; Zacher, Robinson & Rosing 2014). Nevertheless, supervisors, co-workers or even a third-party ratings employee creativity at the individual level is standard consensus in elite journals. Due to the consideration of bias, the welcoming desk in these journals does not embrace analysis at the individual level rated by employees themselves. For instance, the first major study to report in depth the well-being, health and work engagement or creativity of employees who have had COVID-19 and those who have not. Even then, major questions will be raised about self-diagnosis and proof of having had/not had COVID-19. Subsequent attempts to replicate or deepen the study will probably be routinely rejected because they are no longer novel or timely findings, and therefore the classic problems of self-report data will be a major reason for rejection. However, in the near future rejection decisions for papers evaluating employee creativity through supervisors or co-workers might similarly increase, since number of papers are increased dramatically. That may lead to accept only papers that creativity assessed by peer blind supervisors or supervisor and the manager, and then the researcher takes the mean for peer assessors and eliminates the outliers. It could be this type of studies will have acceptance by readers and reviewers.

3. SET has been introduced in the current study, and it explains how the antecedents of creativity (e.g. support, motivation, engagement) can be returned in a form of employee creativity. The challenge here is to ensure that the organisation's support and rewards

will be returned equally 'relatively' by increased employee engagement in creative activities. The suggestion to this challenge is to have a psychological contract embedded in such relationships. Consequently, psychological contract is essential for the two parties to have reasonable and realistic expectations. Birtch, Chiang and Van Esch (2016) placed psychological contract as a mediator in the relationship between work characteristics (job demands and resources) and the outcome (job satisfaction and organisational commitment). The prior relationship is critical in employer-employee partnerships because it represents workers' perceptions and expectations on the degree to which contractual commitments will be fulfilled between the two parties. Integrating SET with the JD-R model and psychological contract is generative because it has the ability to shed a new light on the social interaction mechanism that underpins the job characteristics and outcomes relationship (Birtch, Chiang & Van Esch 2016).

4. The negative perspective of Amabile and other creativity scholars on the role of extrinsic motivation in creativity have begun to be reconsidered (Gerhart & Fang 2015). Some of this shift in the way of thinking may be attributed to the fact that both intrinsic and extrinsic rewards seem to play a significant role at 'creative' firms (e.g. Google, Facebook) (Gerhart & Fang 2015). Thus, extrinsic rewards do not necessarily have negative impacts on motivation and creativity; particularly, they may have positive impacts. This may be an opportunity to provide a much-needed stimulus for future research on the relationships between pay, motivation, productivity, and creativity (Gerhart & Fang 2015). In case of researchers conceptualised SDT as a framework to their study, the suggestion that intrinsic and extrinsic motivation have to be studied simultaneously. For instance, if the intrinsic motivation is the interest of the researcher,

the extrinsic motivation has to be controlled and vice versa; in order to have rigourous findings and as such has to be tested simultaneously.

5. Zhou and Hoever (2014) suggested for a new search about new contextual constructs and negative factors that have influence on employee creativity. New concepts may have effect on creativity, and it would be interesting to have an insight whether such a negativity has a positive effect on employee creativity. Thus, Tang (2016) finds in the empirical study that negative turbulence has a greater impact on creativity than positive turbulence. May also workload and pressure have a positive effect on employee creativity through creating new processes that minimised the workload which needs to be theorised and examined in the future research.

6. Linking organisational support and employee creativity has the potential to open up a new line of research until a new scale will be developed and validated that is based on OST and creativity literature (e.g. organisational support for creativity)..

## 7.5 Chapter summary

The last chapter discussed the conclusions, recommendations for practitioners, limitations and offering suggestions for future studies.

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## APPENDIX A    EMPIRICAL STUDIES (INNOVATIVE BEHAVIOUR) IN THE

## UAE CONTEXT

| Study/author (s) | Constructs / variables | Methodology, technique, and sampling | Level of analysis | Respondents | Results |
|---|---|---|---|---|---|
| Suliman and Al-Shaikh, (2007) | Demographic and career variables, emotional intelligence, Readiness to innovate and create, conflict | Used two systems Microfit and SPSS. Multiple techniques (e.g. correlation, regression, t-test). | Emotional intelligence rated by individual employee and supervisor | (421) employees from 19 organisations operating in financial and service sectors in three Emirates in UAE | All hypothesised model was found significant and supported except demographic and carer variables were partially supported. |
| Suliman (2013) | Organisational justice, innovation climate, readiness to innovate | Multiple techniques (e.g. bivariate correlation, regression). | Employees - rated | (829) employees from public and private sectors in three Emirates in UAE | All hypothesised model was found significant and supported |
| Bani-Melhem, Zeffane and Albaity (2018) | Workplace happiness, co-workers support, job stress, innovative behaviour | Multiple regression, Process Macro | Individual – self-rating, convenience sampling | (328) non–managerial employees in UAE | All paths are significant except the path from job stress to innovative behaviour |
| Alhosani, Ahmad and Nawi (2019) | transformational leadership, employees' empowerment and innovation | SEM, (stratified sampling | Individual level, self-rating | (597) employees working in four e-government organizations in the Abu Dhabi-UAE | All paths are significant |
| Hussain, Iren and Rice (2019) | IWB, LMX, Job knowledge, Contextual knowledge, Innovation-reward | Hierarchal regression, process Macro | Individual – self-rating. | (229) expatriates working in three public organisations in Abu Dhabi-UAE | All paths are significant including the moderators. Rewards, job and contextual knowledge |
| Al-Hawari, Bani-Melhem and Shamsudin (2019) | Employee service innovative behaviour, work engagement, workplace happiness, co- | PROCESS macro (Hayes). Purposively sampling. | Individual, self-rating. | (321) employees are working in service sector (UAE) | All paths are significant. |

| | | | | | |
|---|---|---|---|---|---|
| | worker socializing, service climate | | | | |
| Abukhait, Bani-Melhem and Zeffane (2019) | Empowerment, knowledge sharing, innovative behaviour | Smart- PLS | Individual, a self-administered survey | (305) non-managerial employees from service sector in the following emirates (Dubai, Abu Dhabi, Sharjah, and Ajman) (UAE) | All paths are significant. |
| Abukhait, Bani-Melhem and Shamsudin (2020) | curiosity, focus on opportunity, and resilience, career adaptability, innovative behaviour. | Smart-PLS. convenience sample | Individual, two-wave longitudinal, self-ratings | 313 frontline employees working in five-star hotels in Dubai (UAE) | All paths are significant. |
| Nasaj and Badi (2020) | Self-monitoring, network building, IWB (Idea generation, idea promotion, idea realisation) | SEM, random sampling for 10 organisations | Individual level, self-rating | (417) employees from 10 organisations in service sector | Network building is significant with the 3 dimensions of IWB, while self-monitoring is not significant with any of IWB dimensions |
| Hussain, Iren and Rice (2020) | Contextual knowledge, Job knowledge, Perceived innovation-reward, LMX, Innovative behaviour. | Hierarchal regression macro, random sampling | Individual level, self-rating | 229 Self-initiated expatriates for three public organisations in Abu Dhabi (UAE). | All paths are significant. including the moderator |
| Gharama, Khalifa and Al-Shibami (2020) | strategic leadership, knowledge leadership, Knowledge Sharing, innovative behaviour. | SEM-PLS, sampling method is not identified. | Individual level, self-rating | 389 UAE police administrator employees in the UAE | All paths are significant. including the mediator |

| Dulaimi (2021) | Leadership for innovation (LFI), Team Climate for Innovation (TCI), Organisational Culture for Innovation (OCI), Business Performance (BP) | SEM-purposive and snowball | Individuals employees, self-rating | 101 employees working in constructions and services sectors | LFI and TCI is significant with OCI, and OCI is significant with BP. While the direct relations between LFI, TCI from one side and BP from other side is not significant |
|---|---|---|---|---|---|
| Bani-Melhem, Quratulain, and Al-Hawari (2021) | Abusive supervision, self-esteem, resilience, turnover intention, Innovative behaviours | SEM-convenience sampling | Individual, co-workers rate the employee innovative behaviour | 205 employees of hospitality companies in the UAE | All paths are significant, self-esteem mediates between abusive supervision and turnover intention and innovative behaviours. |
| Aldabbas, Pinnington and Lahrech (2021) | Knowledge sharing, psychological empowerment, IWB. | SEM, stratified sampling for 3 large organisations | Individual level, self-rating | 340 employees from 3 different industries (consumer, technology and financial services) in service sector | All paths are significant. including the mediator |

# Linking Perceived Organizational Support and Employee Creativity Survey

**Dear participants,**

You are invited to take part in this web-based online research survey on organizational support and employee creativity conducted by Hazem J. Aldabbas, PhD Candidate in Business Management, Faculty of Business & Law, British University in Dubai (BUiD), (20174178@student.buid.ac.ae) and supervised by Professor Ashly H. Pinnington, (ashly.pinnington@buid.ac.ae). Please feel free to contact either of them if you have any enquiry or concern about this research.

The survey will take only 10 minutes to complete and comprises of 33 questions in five sections. The aim of this research is to investigate the relationship between perceived organizational support and employee creativity. Further, the questionnaire gives you the opportunity to express your views related to the work conditions.

The participation eligibility in this survey is must to be older than 19 years old and have 1-year experience at least as an employee. You are voluntary to complete the survey, or you may withdraw at any time without prior notifications. Your participation will be anonymous and confidential, and information will be used by the researcher only for the purposes of research. In addition, there are no right or wrong answers. There are no expected risks involved in participating in this survey other than those encountered in day-to-day life. Please answer all questions to the best of your knowledge.

Your survey answers will be sent to a link at 'SmartSurvey.co.uk' where data will be stored in a password protected electronic format. Therefore, your responses will remain anonymous. By clicking on the next link below, you confirm that you have read and understand the above information about this survey, and that you understand the aim of the research as well as. In addition, desire of my own free

will to participate in this study. (By clicking **Disagree**, you will be taken to the end of survey and you

can exit. By clicking **Agree** you can continue filling the survey).

☐ Agree

☐ Disagree

**Best regards,**

**Part 1: Perceived organizational support**

This section contains 10 questions. Please read each statement carefully and indicate your degree of agreement with each statement (1= Strongly disagree. 2=Disagree. 3=Somewhat disagree. 4= Neither agree nor disagree. 5= Somewhat agree. 6=Agree. 7 = Strongly agree).

| Statements | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. The organization values my contribution to its well-being. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. The organization strongly considers my goals and values. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Help is available from the organization when I have a problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. The organization really cares about my well-being. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. The organization wishes to give me the best possible job for which I am qualified. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. The organization cares about my general satisfaction at work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. The organization takes pride in my accomplishments at work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. The organization would forgive an honest mistake on my part. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. The organization is willing to extend itself to help me perform my job to the best of my ability. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. The organization cares about my opinions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Part 2: Intrinsic motivation**

This Section contains 4 questions. Please read each statement carefully and indicate your degree of agreement with each statement (1= Strongly disagree. 2=Disagree. 3=Somewhat disagree. 4= Neither agree nor disagree. 5= Somewhat agree. 6=Agree. 7 = Strongly agree).

**'I go to work every day. . .'**

| Statements | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1.Because I enjoy the work itself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Because It's fun. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Because I find the work engaging. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Because I enjoy it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Part 3: Work engagement**

This section contains 9 statements are about how you feel at work. Please read each statement carefully and indicate your degree of agreement with each statement. (0= Never. 1 = Almost never. 2= Rarely. 3= Sometimes. 4= Often. 5= Very often. 6 = Always).

| Statements | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| 1.At my work, I feel bursting with energy. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. At my job, I feel strong and vigorous. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. I am enthusiastic about my job. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. My job inspires me. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. When I get up in the morning, I feel like going to work. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. I feel happy when I am working intensely. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. I am proud of the work that I do. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. I am immersed in my work. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. I get carried away when I am working. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

**Part 4: Employee creativity**

This section contains 5 questions. Please read each statement carefully and indicate your degree of agreement with each statement (1= To an extremely small extent. 2= To a very small extent. 3= To a small extent. 4= To a moderate extent. 5= To a large extent. 6= To a very large extent.7= To an extremely large extent).

**'Creativity is generally defined as the production of novel, useful ideas or problem solutions (Amabile et al. 2005)'.**

| Statements | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1.I try to be as creative as I can in my job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I experiment with new approaches in performing my job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. When new trends develop, I am usually the first to get on board. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. My boss feels that I am creative in performing my job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. On the job I am inventive. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Part 5: Extrinsic rewards for creativity**

This Section contains 8 questions. Please read each statement carefully and indicate your degree of agreement with each statement (1= Not at all. 2= To a small extent. 3= To some extent. 4= To a moderate extent. 5= To a great extent. 6= To a very large extent. 7= To an extremely large extent).

| Statements | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1.When I perform creatively, I receive financial rewards, such as incentives or bonuses. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2.When I perform creative work, it affects my promotion. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3.If I suggest new ideas for tasks, this approach influences my performance evaluation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| 4.I get recognized by my supervisor when I suggest new ideas for the task. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 5.My coworkers recognize me when I perform creatively at work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6.When an employee exhibits creative performance, my company offers some treats such as a celebration dinner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7.When I perform creatively at work, my company offers corresponding benefits in return. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8.When I perform creatively at work, my manager or the top management compliments me publicly | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Part 6: General information**

This section contains 5 questions for descriptive purposes (please select as appropriate).

| Gender | Age | Education | Tenure (in this organization) | Industry Type |
|---|---|---|---|---|
| Female | Under 30 | Primary school | Under 2 years | Information Technology (IT) |
| Male | 31-40 | High school | 2-7 years | Bank |
| | 41-50 | College degree | 8-13 years | Hospital |
| | 51-60 | Bachelor's degree | 14-19 years | |
| | >60 | Masters and above | 20 years and above | |

**Thank you for participating in this research and your contribution is highly appreciated!**

**APPENDIX C RESEARCH ETHICS FORM**

## Research and Grant Office

**Research Ethics Form**

Research Candidate Self-Assessment

Application for Approval of Research Activity involving Human Participants, Human Data, or

Human Material

This application form is to be used by researchers seeking approval from the Research Ethics Committee. All research associated with the British University in Dubai must not begin until ethical approval have been obtained.

Section I is a general research identification table.

Section II is the details of the ethical matters your research might involve and the necessary steps you are planning to take to address them.

Section III is an ethics checklist that will help you identify your research risk level. If you answer 'Yes' to at least any one of the high risk statements, then your research is High Risk. If you answer 'Yes' to at least any one of the medium risk statements, and 'No' to all high risk statements, then your research is Medium Risk. If you answer 'No' to all high risk and medium risk statements, then your research is Low Risk.

If you have documents related to the ethical considerations of the research such as, for example: a consent letter, evidence of external approval, questionnaire samples or interview questions, you can enclose them with this form before submission.

## I.      Research Identification

| | |
|---|---|
| **Research Candidate Name** | Hazem J. Aldabbas |
| **Faculty** | Business & Law |
| **Research Candidate Contact Number** | 0565552992 |
| **Research Candidate Email** | 20174178@student.buid.ac.ae |
| **Research Type** | ☐ Research Project   ☒ Doctoral/Maters Research   ☐ Module Assignment |
| **Research Title** | Linking Perceived Organisational Support and Employee Creativity |
| **Submission Date** | 30-11-2019 |
| **Submitted to (Name)** | ☐ Faculty Nominated Member (Research Projects):<br><br>☒ Director of Studies (Doctoral/Masters Research): Professor Ashly H. Pinnington)<br><br>☐ Module Coordinator (Module Assignment): |

**Research Ethics Details**

**Background and rationale for study** (This should be sufficient to justify the proposed research). Aims and objectives of the research (or the research question/s) and Potential benefits of proposed research:

Review of the literature reveals challenges with determining the relationships between perceived organisational support and employee creativity. A comprehensive model explaining these relations has not yet been published.

This research study argues that perceived organisational support enhances employees' intrinsic motivation and makes them more engaged with their work which will affect the extent of employee creativity and lead to beneficial outcomes for their organisations. The formulation of the research problem and main research questions concentrate on investigating the relationship between perceived organisational support and employee creativity. Informed by debates in the literature, organisational support, social exchange and self-determination theories are considered for their similarities and differences in explaining the hypothesized relationships in the model.

**The main aim of this thesis is to build a theoretical and empirical approach by linking concepts of organisational support, social exchange, self-determination and relevant theories of employee creativity in one comprehensive model by** examining employees' perceptions of organisational support and its influences on their creativity; studied within five different industries in the UAE. This research responds to the call for a more comprehensive model of the relationship between POS and employee creativity (Eisenberger, Rhoades Shanock & Wen 2019; Zhang, Bu & Wee 2016). Taking into consideration the inconsistent results of previous studies it has been argued by some researchers that the relationship between POS and employee creativity is conditional (Zhang, Bu & Wee 2016). Further, the proposed thesis investigates the moderating role of extrinsic rewards for creativity in the relationship between perceived organizational support, work engagement and employee creativity. It has been suggested that future research examines the role of expectations of rewards specifically for creative performance in the POS-creativity relationship (Eisenberger, Rhoades Shanock & Wen 2019). However, the objectives of the thesis are:

1. Present a comprehensive model that explains the relationships between POS, intrinsic motivation, work engagement, extrinsic rewards for creativity and employee creativity.

2. Produce four distinct studies based on the 4 different industries (Health, Banks, Technology and Hotels). To generate insights and enhanced understanding of the POS and employee creativity relationship.

3. Conduct external benchmarking of POS, work engagement and employee creativity related to 5 different industries in the UAE. To-date, no external benchmarks for the POS scale are available (Shanock et al. 2019).

Finally, in the UAE context, public sector employees are often compelled to compare the efficiency (and success) of their organization with that of similar organizations in the private sector (Zeffane & Bani Melhem 2017). Thus, our research context will give practitioners and policy makers in UAE an opportunity to obtain external benchmarks for their POS, work engagement and employee creativity.

| **Main Ethical Consideration(s) of the Research** (The ethical matters your research may involve) |
| --- |
| The student follows the ethical policy that had been stated in 'BUiD' talking in his considerations the following critical points: <br><br>1. Informed consent: <br><br>    ☐ The respondents will be voluntarily contributing in the survey. |

- The respondents will be briefed through written introduction about the title and the objective behind the research.
- The respondent has to tick on the agreement to fill the survey or withdraw.

2. Anonymity and confidentiality: researcher will not ask any personal questions to identify the respondents. Also, all responses and data will be secured through web-link protected by password.

**Methods of data collection:**

Please outline in detail how data will be collected and **attach a copy of any questionnaires, interview schedules or observation guidelines** to be used. Limit = 400 words.

**The method**: The research will use deductive research-A quantitative study relying on cross-sectional survey 'A self-administered questionnaire'.

**Data collection:**  Data will be collected through online survey 'Smart Survey'. The researcher will share the link with the organization manager once agree to circulate the survey to its employees. The researcher will use stratified sampling in the 4 sectors in the UAE (Banks, Technology, Hospitals and Hotels). Targeting 200 ± completed responses (individual employees) from each sector.

Further, the study will focus on two major organizations from each nominated sector located in the UAE and operating in the services sector representing four industries (Banking, Technology, Hospitals and Hotels). In details, the data will be collected from two major organizations from each sector. Firstly, banking, the researcher will target 1 major bank from local banks and the other bank is from foreigners' banks in UAE. Secondly, technology, the researcher will target two major information technology firms; one is related to software and the second one is related to hardware company. Thirdly, hospitals, will be

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targeted two major hospitals: one from public and the other one from private sectors. Finally, hotels, two majors' hotels '5-star' will be targeted.

Based on the above data collection methodology, face-to-face meetings will be held with senior managers in each organization to explain to them the relevance and aim of the survey and undertake to provide an anonymous summary of the aggregated results for the whole study. Based on the meeting we will decide that researcher send the invitation to employees directly 'which is not expected scenario' as a company not preferred to share their employees list of emails. Thus, the researcher will share the link of the survey with the organization manger from each organization. After these meetings, we do expect that each senior manager will send out almost 400 emails randomly for each organizations and survey links to employees in the organization. The data will be collected through the weblink 'Smart Survey' and two features will be activated to ensure that respondents replied to all of the questions so that there was no missing data in the returns. Each question required selection of just one of the response options.

e.g. one of samples are banking; based on the central bank in UAE there is 22 local banks and 29 foreigners' banks. The researcher will search for contacts for the major bank from each category and send invitation for the meeting with banks manger in order to explain the aim, objectives and the

benefits of such these studies to the society and banking sector. Once agree the survey with the cover letter will be circulated to the bank focal point. And the same methodology will be applied for the 3 other industries.

*Please attach a copy of your information sheet(s), draft materials such as interview questions etc. and consent form as well as indication of planned time of issue/use. If you are not using a consent form, please explain why.*

☑ Attached

**Potential adverse effects on participants and steps to deal with them:**

Please outline if you anticipate any potential harm or negative consequences including psychological stress, anxiety or upset which may be induced by the study and the steps to be taken to address them.

Not applicable, since the researcher will target the professional employees from 4 different sectors as clarified previously. Thus, the researcher is not expecting any kind of potential harm or negative consequences including psychological stress, anxiety or upset. However, there are no expected risks involved in participating in this survey other than those encountered in day-to-day life.

**Steps to be taken to ensure confidentiality of data:**

Please outline steps if you are required to ensure confidentiality, privacy and anonymity of data during collection, storage and publication. Please specifically identify any confidential or personal information, and /or any other party's protected intellectual property which you need to use and safeguard.

- No question in the survey had asked about personal information except the general information such as (gender, education, tenure, job position, age and industry).
- All data would be secured and stored in online website.
- The researcher after awarded the PhD certificates. All surveys in weblink will be deleted even it's without any identification for any respondents.

**Steps to be taken to ensure financial and commercial propriety:**

Please specifically identify if any external funding or significant third-party financial involvement with the research.

- The researcher will make subscription in smart survey for 4 months.

**Other plans to address a particular ethical matter not mentioned:**

- All points are covered as best of my knowledge.

## II. Research Ethics Checklist

*If you answer 'Yes' to at least any one of the high risk statements, then your research is High Risk. If you answer 'Yes' to at least any one of the medium risk statements, and 'No' to all high risk statements, then your research is Medium Risk. If you answer 'No' to all high risk and medium risk statements, then your research is Low Risk.*

| **High Risk** | | |
|---|---|---|
| Will consent possibly be coerced out of participants by those whom would likely benefit from the research? | □Yes | ■No |
| Will it be necessary for participants to take part in the study without their knowledge and consent at the time? | □Yes | ■No |
| Will the study involve some form of invasion of privacy? | □Yes | ■No |
| Is discomfort or harmful impact to participants likely to result from the study? | □Yes | ■No |
| Is there a possibility that the safety of the researcher may be in question? | □Yes | ■No |
| Will the research require the researcher to be deceptive or dishonest to the participants? | □Yes | ■No |
| Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants? | □Yes | ■No |
| Will the research have negative intrusive physical or psychological effects on the participants? | □Yes | ■No |
| Will the names of the participants or the institution appear in the research? | □Yes | ■No |
| **Medium Risk** | | |
| Will the research involve governmental institutions or participants such as, for example, the army or the judiciary? | □Yes | ■No |
| Will the study involve discussion of sensitive or potentially sensitive topics and issues? | □Yes | ■No |
| Does the research involve potentially vulnerable participants (for e.g. children, prisoners, or people with disabilities)? | □Yes | ■No |
| Does the research involve participants that are unable to give consent? | □Yes | ■No |
| Will the research involve administrative or secure data that requires permission from the appropriate authorities before use? | □Yes | ■No |
| Will research involve the sharing of data or confidential information beyond the initial consent given? | □Yes | ■No |

| Risk Level Identified | ■ Low | □ Medium | □ High |
|---|---|---|---|

**Declaration by the Researcher:** Having read the University's Research Policy I declare that the information contained herein, is to the best of my knowledge and belief, accurate.

I am satisfied that I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations as researcher and the rights of participants. I am satisfied that all researchers (including myself) working on the project have the appropriate qualifications, experience and facilities to conduct the research set out in the attached document and that I, as the lead researcher take full responsibility for the ethical conduct of the research in accordance with subject-specific and University Ethical Guidelines (Policies and Procedures Manual), as well as any other condition laid down by the BUiD Ethics Committee. I am fully aware of the timelines and content for participant's information and consent.

Print name: Hazem J. Aldabbas

Signature:   Hazem Aldabbas                                                   Date: 30-11 2019

**LOW RISK RESEARCH**

| Staff | | |
|---|---|---|
| **Chair of Ethics Committee**<br><br>Name:    Dr. Khalid Almarri<br><br>Date:    4/12/2019<br><br>Signature: Khalid Almarri | √<br><br>Disapproved | Approved |
| Students | | |
| **Dean of Faculty**<br><br>Name:    Professor Halim Boussabaine<br><br>Date:    4/12/2019<br><br>Signature:**halim** | √<br><br>Disapproved | Approved |

Authorisation for conducting research (only if approval is obtained):

*The Committee has confirmed that this project fits within the University's Policies for Research and*

*I authorise the low risk research proposal on behalf of BUiD's Research Ethics Committee.*

Print name: _ Dr. Khalid Almarri _____

Signature: ___ Khalid Almarri _____   Date: __4/12/2019_____ (Chair of the

Research Ethics Committee)

**MEDIUM RISK RESEARCH**

| Staff and students |
| --- |
| **Endorsement by the Faculty's Research Ethics Committee member after electronic referral to all Research Ethics Committee members**<br><br><br>Name:                                                        ☐ Approved<br><br>Date:                                                          ☐ Disapproved<br><br>Signature: |

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Authorisation for conducting research (only if approval is obtained):

*The Committee has confirmed that this project fits within the University's Policies for Research and I authorise the medium risk proposal on behalf of BUiD's Research Ethics Committee.*

Print name: _____

Signature: _____ Date: _____

(Chair of the Research Ethics Committee)

FOR OFFICE USE ONLY

**HIGH RISK RESEARCH**

| Staff and students |
| --- |

**Endorsement by the Faculty's Research Ethics Committee member after meeting of Research**

**Ethics Committee members**

 Name:                                                    Approved ☐

Date:                                                      Disapproved ☐

Signature:

---

Authorisation for conducting research (only if approval is obtained):

 *The Committee has confirmed that this project fits within the University's Policies for Research and I*

*authorise the high risk proposal on behalf of BUiD's Research Ethics Committee.*


Print name: _____


Signature: _____ Date: _____

(Chair of the Research Ethics Committee)

# APPENDIX D OFFICIAL LETTER

12/15/2019

## To whom it may concern

This is to certify that Mr. Hazem Aldabbas with Student ID number 20174178 is a registered part-time student in the PhD In Business Management offered by The British University in Dubai and supervised by Professor Ashly H. Pinnington since April 2018.

Mr. Aldabbas is currently collecting data for his research (Linking perceived organizational support and employee creativity).

The objective of this letter therefore, is to please ask you to assist and facilitate in carrying out the survey in your organization. A survey is herewith attached for your kind reference.

Responses obtained through this survey will be voluntarily, anonymity and confidentiality. Further, it will be used for academic purposes only. Hence, the respondents are requested not to indicate their names or emails anywhere on the survey. Finally, the researcher will not use the name of your organization in his research.

This letter is issued on Mr. Aldabbas' request.

Yours sincerely,

**Dr. Amer Alaya**

**Head of Student Administration**

PO Box 345015 · Block 11 Dubai International Academic City Dubai U A E · T +971 4 279 1400 · F +971 4 279 1490
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