Assessing creativity training as New Public Management Reforms in public sector organizations

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Abstract

Currently, public sector organizations are implementing creativity training programs with the aim of enhancing employees' creative and innovative behavior. However, there exists a dearth of knowledge regarding creativity training in public sector organizations. Therefore, the present study seeks to investigate the adoption of creativity training programs as a form of reform in the public sector work context, drawing inspiration from the private sector. To gather data for this research, a qualitative approach utilizing one-on-one interviews was employed. Three organizations in the United Arab Emirates (UAE) were selected as the research sites. The sample consisted of nine key decision-makers who were queried about their conceptualization of creativity training, the primary types of creativity training employed, the effectiveness of creativity training at the individual level, and the work context factors that impact the effectiveness of these programs. A thematic analysis was employed to code the collected data. NVivo (version 14) was utilized for data analysis. The interviews successfully achieved the study's objectives and addressed the research questions. The results indicated that the definition of creativity training in the UAE aligns with previous research definitions. Furthermore, the most widely implemented creativity training programs in the public sector included brainstorming, creative problem-solving, the six thinking hats, and courses on creativity and innovation. Moreover, creativity training was found to be an effective tool at the individual level within the public sector. The findings identified eight work context factors that influence the effectiveness of creativity training programs. This study contributes to the existing literature on both the public sector and creativity training. Additionally, it demonstrates the applicability of the Climate for Creativity (KEYS) instrument, developed by Amabile *et al.* (1996) as a means of assessing the climate for creativity and innovation in the work context and evaluating factors that impact the effectiveness of creativity training in public sector organizations. The utilization of qualitative methodology in this field is an additional contribution of this research, as limited studies have employed such an approach. Furthermore, this study lays the foundation for future researchers interested in this field, particularly within a new regional context, such as the UAE.

Keywords: creativity training, public sector, New Public Management Reforms, the United Arab Emirates.
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1. Introduction

Organizations recognize the importance of creativity training as a crucial factor for achieving organizational success (Jones-Chick *et al.* 2022). However, despite its significance, research on creativity training in the workplace is limited compared to the educational field (Basadur *et al.* 1982; Al Balooshi *et al.* 2013). Additionally, while private sector organizations have invested significantly in creativity training programs (Basadur & Finkbeiner 1985; Basadur *et al.* 1986), research on creativity training in the public sector is relatively scarce (Wang & Horng 2002; Birdi 2005, 2007, 2016).

The United Arab Emirates (UAE) is a young country in the Arabian Gulf peninsula, established in 1971 (Badrinath *et al.* 2004). Al Balooshi *et al.* (2013) highlighted that many UAE public sector organizations consider creativity training as a significant tool for achieving organizational goals, leading them to regularly conduct such programs. However, limited research has investigated creativity training programs specifically in UAE public sector organizations, which highlights the need for further studies focusing on creativity training within the context of public sector organizations, particularly in the UAE.

Therefore, this study aims to address these research gaps by exploring the following research questions: 1) What is the conceptualization of creativity training? 2) What are the most prevalent creativity training programs implemented in public sector organizations? 3) Is creativity training an effective tool at the individual level in public sector organizations? 4) What are the work context factors that influence the effectiveness of creativity

training programs in public sector organizations?

To the best of the researcher's knowledge, this study represents one of the first empirical investigations into the aforementioned research questions within a public sector organization.

2.1 Creativity training conceptualization

Creativity training is defined as " group of exercises which are oriented at increasing participants' creative potential, understood both as creative abilities (divergent thinking, imagination, fluency, flexibility and originality of thinking), but also creative attitudes" (Karwowski & Soszynski 2008: p 163).

These training programs are considered a form of formal training and are recognized as a major focus in the field of creativity research (Al Balooshi *et al.* 2013; Basadur *et al.*1982).

According to McKay *et al.* (2016), the primary objective of most creativity training programs is to educate participants on the creative process, including problem formulation, idea generation, idea selection, and idea implementation. Furthermore, these programs employ various strategies to help participants overcome mental fixation and promote associative thinking.

2.2 Types of creativity training programs

Scott *et al* .(2004a) have highlighted that creativity training programs vary in terms of domain specificity, utilization of alternative models, and meta-theoretical assumptions regarding the nature of the creative process. Additionally, other factors like time may also be taken into account. Sio & Lortie-Forgues (2024) have argued that several types of creativity training programs have subsequently emerged. Consequently, the number of available creativity training programs ranges from a minimum of four (Jones-Chick *et al.* 2022) to well over hundreds (Scott *et al.* 2004b). Notable examples of creativity training types include the Six Hats Training (De Bono 1985), brainstorming (Jones-Chick *et al.* 2022), Creative Problem Solving, Six Thinking Hats, Synectics, and TRIZ (Puccio *et al.* 2006), as well as Clear Ideas (Birdi 2016). It is worth noting that the majority of these creativity training programs have been implemented in private sector organizations, such as Creative Problem Solving (Basadur *et al.* 1982), while a limited number have been conducted in public sector organizations (e.g., Birdi 2005). Therefore, there is a need for further research in public sector organizations, particularly in new contexts such as the UAE, to identify the principal types of creativity training programs being implemented in the public sector.

2.3 Creativity training in today's public sector organizations

Broadbent & Guthrie (1992) provided a definition of the public sector as the segment of a country's economic activity traditionally owned and controlled by the government. Hvidman & Andersen (2014) argued that management practices differ between public and private organizations. According to van der Sluis *et al* (2017) the public sector is often characterized as less effective, efficient, and more costly compared to the private sector. In response, policymakers have introduced private-sector concepts and methods into the public sector. Jas & Skelcher (2014) explained that during the 1980s, various private-sector practices and concepts were adopted by public-sector organizations worldwide, collectively known as New Public Management (NPM). The objective of NPM is to improve efficiency, effectiveness, reduce costs, and enhance performance in public sector organizations (Trotta *et al.* 2011).

Creativity is widely practiced in the private sector and is now being introduced as a reform in public sector organizations (Albalooshi 2018). Basadur *et al.* (1982) noted that the literature on creativity research has taken three distinct routes: the identification approach, organizational workplace factors, and creativity training. Basadur *et al.* (2000) stated that creativity training is one of the methods employed in the workplace. There are several reasons for prioritizing creativity training, including its ability to develop participants' creative abilities for innovation (Birdi 2007; Rampa & Agogué 2021) and generate novel ideas to address organizational challenges (Birdi 2016).

Despite the importance of creativity training in the workplace, limited research has examined its implementation, especially in public sector organizations (Al Balooshi *et al.* 2013). While creativity training is prioritized in fields like education (e.g., Wang *et al.* 2011) and the private sector (e.g., Basadur & Finkbeiner 1985; Birdi *et al.* 2012; Hoffmann *et al.* 2018), few studies have focused on the public sector (e.g., Wang & Horng 2002; Birdi 2005, 2007). Berman &Kim (2010) observed a lack of mention of creativity strategies, such as creativity training (Basadur *et al.* 1982), in the current public sector literature. Hon (2012) further argued that despite the need for creative employees in the services sector, there is limited information on how creativity can be fostered and supported.

As creativity is an emerging public sector reform, Alblooshi (2018) demonstrated that public sector organizations have recently adopted private sector principles, including creativity. However, there is a lack of studies examining creativity training programs in public sector organizations. Furthermore, several studies (e.g., Jingjit & Fotaki 2010; Trotta *et al.* 2011) have called for more research to investigate the relationship between key management principles proposed by NPM in the public sector. Therefore, there is a need for additional studies to explore the nature of the public sector in contexts where public reforms such as creativity are prioritized and to generalize the findings from limited research in the public sector context. Consequently, this study focuses on the UAE public sector organization that prioritizes running creativity training programs to address this theoretical and contextual gap.

2.4 Effectiveness of creativity programs at individual level public sector organizations

Training effectiveness refers to the degree to which training produces desired or relevant outcomes (Tannenbaum *et al.* 1993: p 18). Previous studies in workplace settings have aimed to assess the effectiveness of creativity training programs. The findings from these studies have demonstrated the effectiveness of creativity training as a valuable tool (e.g., Scott *et al.* 2004a, 2004b; Puccio *et al.* 2006; Bird 2021; Sio & Lortie-Forgues 2024).

Empirical evidence indicates that creativity training programs have a positive impact at the individual level in the following ways: 1) Enhancing employees' attitudes toward divergent thinking (e.g., Basadur *et al.* 1986; Basadur *et al.*1992; Basadur *et al.* 2002), and 2) Developing employees' behaviors (e.g., Basadur *et al.*1982; Basadur *et al.* 2000; Wang & Horng 2002; Scott *et al.* 2004a, 2004b; Birdi *et al.*, 2012; Rampa & Agogué 2021).

It is worth noting that the majority of empirical studies focusing on the effectiveness of creativity training programs have been conducted in private sector organizations (e.g., Basadur *et al.* 1982; Basadur *et al* 1986; Basadur *et al.*1992; Basadur *et al.* 2000; Birdi *et al.* 2012). Only a limited number of studies have examined the effectiveness of such training in the public sector (Wang & Horng 2002; Rampa & Agogué 2021), and a few studies have included participants from both private and public sectors (Basadur *et al.* 2002). This underscores the need for further research in public sector organizations.

2.5 Work context factors that influence the effectiveness of creativity training programs

Birdi (2007) emphasized the importance of ensuring favorable environmental conditions within an organization prior to implementing any type of creativity training. Despite organizational factors being recognized as a key aspect of creativity in the workplace (Basadur *et al.* 1982), limited research has been conducted to assess the impact of work context factors on employees who have undergone creativity training programs. These studies have revealed that work context factors, such as managerial support (Birdi 2005) and task characteristics (Birdi 2021), as well as barriers to creativity among participants, including fear of risk-taking, physical work environment, time pressure, autonomy or freedom, and organizational obstacles in the form of control and internal conflicts (Walter 2012), influence the effectiveness of creativity training programs.

Furthermore, the existing literature indicates a lack of studies investigating factors that influence the effectiveness of creativity training within the work context of both public sector organizations (Birdi 2005; 2021) and private sector organizations (Walter 2012). Therefore, further research is needed to address this gap in knowledge.

3.Methodology

This study employed a qualitative exploratory methodology, utilizing one-on-one interviews with nine key decision-makers from public sector organizations in the United Arab Emirates (UAE). Qualitative exploratory research was chosen due to the limited number of creativity training studies conducted within public sector organizations. This approach was deemed appropriate to achieve the study's objectives and address the research questions.

Therefore, one-on-one qualitative in-depth interviews were conducted to gather data and gain a comprehensive understanding, based on the participants' experiences, of the phenomenon being investigated. The interviews aimed to explore the following aspects: 1) how creativity training is defined, 2) the most prevalent creativity training programs implemented in public sector organizations, 3) the effectiveness of creativity training programs at the individual level within public sector organizations, and 4) the identification of work context factors that influence the effectiveness of creativity training programs in the public sector.

3.1 Participants, and interview guide and procedures

The sample for this study consisted of nine key decision-makers from three public sector organizations in the United Arab Emirates (UAE). All participants were male and directly involved in creativity programs. Among

the participants, four held leadership positions, while the remaining five held supervisory roles. Five of the participants had obtained a Master's degree. Seven of the participants were UAE nationals, while three were expatriates.

The interview protocol was developed based on key themes identified in the existing literature, including the conceptualization of creativity training (Karwowski & Soszynski, 2008), different types of creativity training (Scott *et al.* 2004a; Jones-Chick *et al.* 2022), and the context of public sector organizations (Broadbent & Guthrie 1992; Hon 2012).

Regarding sample homogeneity, Guest *et al.* (2006) emphasized the importance of a certain level of homogeneity among respondents. In purposive samples, when respondents share similar expertise, researchers can reach data saturation more efficiently. Therefore, the selected respondents were homogeneous in the sense that they were key decision-makers involved in creativity training programs, who are not readily available. Conducting nine interviews, each lasting approximately one hour, ensured data saturation was achieved.

To maintain participant confidentiality, the participants will be referred to by numbers (1 to 9) when discussing the results in the subsequent section.

3.2 Data Analysis Procedure

Upon completion of the interviews, the process of qualitative analysis commenced. The entire text from the nine interviews was carefully examined and coded. The codes used in the analysis were influenced by the data provided by the participants, relevant literature, the study's objectives, and the four research questions. Additionally, it was noted that at times, multiple codes emerged within the same text.

Thematic analysis was employed to code the collected data. A maximum of three layers of nodes were utilized in the coding process to ensure a detailed analysis of the qualitative data. The software NVivo 14 was employed to facilitate the analysis of the qualitative data.

4. Findings and Discussion

The findings were grouped into the following four major themes.

4.1 Creativity training conceptualization

The participants were asked to provide their definitions of creativity training. Two primary themes emerged from their responses. Five participants defined creativity training as a type of training that assists individuals in generating novel ideas. For instance, participant 9 described creativity training as "a practical training program aimed at enhancing participants' abilities to generate new and original ideas and apply them to business development." On the other hand, four respondents defined creativity training as a means to develop the intellectual capacities of trainees and facilitate the production of creative and innovative outcomes. For example, participant 9 elaborated that "Creativity training is a program that aids in the development of participants' capabilities to create something new."

The participants employed these two themes to define the notion of creativity training, which aligns with existing literature (e.g., Scott *et al.* 2004b; Karwowski & Soszynski 2008; Al Balooshi *et al.* 2013; Haase *et al.* 2023). The literature consistently highlights the idea of creativity training as a tool for idea generation (Scott *et al.* 2004b; Birdi 2016) and enhancing participants' creative skills (e.g., Haase *et al.* 2023).

This study is considered one of the pioneering works employing qualitative methodology to gain a deeper understanding of the definition of creativity training in public sector organizations. Furthermore, these findings indicate that public sector organizations recognize the value of such training programs, considering them as organizational enablers to enhance employees' creative abilities, ultimately leading to the fulfillment of organizational goals in providing citizens with new and improved services..

4.2 Types of creativity training programs

Participants were queried about the types of creativity training programs conducted within their organizations. It was unanimously agreed by the participants that public sector organizations implement various types of creativity training programs. Participant 7 elucidated, "Creativity training programs encompass a range of types, differing in terms of duration, subject matter, and practical applications. Therefore, we encourage our employees

to participate in multiple programs."

The participants provided further clarification on four specific types of creativity training programs conducted in their workplaces:

Brainstorming: Eight participants mentioned that regular brainstorming sessions are conducted for employees. Participant 7 stated, "Brainstorming is available to all employees as a form of creativity training program that involves multiple steps aimed at fostering the generation of new ideas."

Creative Problem Solving: Seven participants highlighted the inclusion of creative problem-solving courses as a type of creativity training program available to all employees. Participant 8 explained, "Creative problem-solving is an essential form of creativity training that focuses on enhancing employees' competencies for solving problems in novel ways."

De Bono's Six Hats: Seven participants mentioned the utilization of De Bono's Six Hats methodology in their workplaces. Participant 1 stated, "De Bono's Six Hats is a popular type of creativity training that aids employees in finding new solutions or improving existing work processes."

Creativity and Innovation Course: Six participants indicated that their workplaces organize a training program titled "Creativity and Innovation Course", which aims to enhance participants' creative and innovative abilities. Participant 8 further discussed, "The annual training plan includes the Creativity and Innovation Course, which provides participants with methods to generate and implement new ideas in the workplace."

The results of the study revealed the existence of numerous creativity training programs conducted in the workplace, which aligns with existing literature (e.g., Lau *et al.* 2009; van Broekhoven *et al.* 2020; Byrge 2021). The rationale for having multiple types of creativity training programs lies in various influencing factors such as the employed methods and techniques (Scott *et al.* 2004a) and program design (Lau *et al.* 2009). Additionally, the findings supported the implementation of three well-known creativity training programs in the UAE public sector: brainstorming, De Bono's Six Hats, and creative problem-solving, which have been acknowledged as popular types of creativity training by several authors (e.g., Puccio *et al.* 2006; Birdi 2016). Furthermore, the obtained results are consistent with limited empirical studies (e.g., Birdi 2005; Jones-Chick *et al.* 2022) that demonstrate the feasibility of organizing multiple types of creativity training concurrently, thus extending these findings to a new context such as the UAE.

The participants engaged in discussions regarding the four types of creativity training programs conducted in the UAE's public sector organizations:

Brainstorming: Jones-Chick *et al.* (2022) characterized brainstorming as a well-known approach that enhances idea generation in group settings. The results of the present study support Birdi's (2016) findings, which confirm the implementation of brainstorming in public sector organizations.

Creative Problem Solving: According to Wang & Horng (2002), creative problem-solving programs, as a form of creativity training, positively influence participants' fluency and flexibility of thinking. Hence, organizations show interest in this type of training. Thus, the current findings align with previous studies conducted in both private (e.g., Basadur *et al.* 1982) and public sector organizations (e.g., Wang & Horng 2002), which support creative problem-solving as a means to enhance employees' creative skills.

De Bono's Six Hats: Al Jarrah (2019) explained that the six hats method involves parallel thinking, where different modes of thinking are represented by differently colored hats, facilitating discussions aimed at finding optimal solutions or identifying issues. The results are consistent with limited studies that confirm the utilization of De Bono's (1985) six hats training program in public sector organizations (e.g., Birdi 2005, 2007).

Creativity and Innovation Course: According to Birdi (2021) creativity training aims to foster individuals' creativity and innovation. The current findings align with the literature, as some organizations conduct creativity and innovation training programs as a form of creativity training in both the private sector (e.g., Mihret Dessie & Shumetie Ademe 2017) and public sector (e.g., Rampa & Agogué 2021) to address work-related problems through novel ideas.

It is evident that limited studies have investigated the types of creativity programs conducted in the workplace, highlighting the current study's contribution in overcoming the scarcity of research on creativity training in general (Birdi 2016) and specifically in public sector organizations (Alblooshi 2018).

4.3 Effectiveness of creativity training programs at individual level
Participants were queried about their perception of the effectiveness of creativity training at the individual level and to what extent they believed it to be effective. The participants unanimously agreed that creativity training programs serve as effective tools that lead to positive outcomes at the individual level. They provided specific examples of individual indicators exhibited by employees who have undergone creativity training programs.
All participants emphasized that attending creativity training programs positively influenced participants' attitudes towards divergent thinking. Participant 3 elaborated, stating that " employees became more receptive to others' ideas and were open to considering suggested solutions for work-related problems, even if those solutions did not align with their own opinions".

Furthermore, all participants agreed that there were observable positive changes in employees' behaviors after attending creativity training programs. Participant 5 highlighted that "many of these employees demonstrated the ability to generate initiatives and improve work processes, resulting in enhanced service provision to clients and significant cost savings for the organization".

Creativity training is widely recognized as an effective approach for fostering individual creativity through the acquisition of creative-thinking techniques (Mansfield *et al.* 1978). Therefore, organizations, as indicated by Birdi (2016), express a strong interest in conducting creativity training, leading to a substantial number of employees participating in such programs annually.

The findings of this study affirm that creativity is a valuable tool for public organizations at the individual level. Firstly, the effectiveness of creativity training was evident in the development of employees' attitudes towards divergent thinking. Divergent thinking refers to an individual's thoughts, feelings, and intentions related to generating diverse ideas (Williams 2004: p 74). The results demonstrated that creativity training positively influenced employees' attitudes towards divergent thinking, which is consistent with previous studies conducted in the private sector (e.g., Basadur *et al.* 1986; Basadur *et al.* 1992) and a limited number of studies that encompassed both public and private sector employees (e.g., Basadur *et al.* 2002).

Secondly, the study explored the development of participants' behaviors as a result of attending creativity training. Several examples were presented to illustrate positive changes in participants' behaviors. These changes included the enhancement of accounting negotiation skills (Ogilvie & Simms 2009) and the application of acquired knowledge to generate new innovations (Birdi *et al.* 2012).

The findings indicated that employees' behaviors had indeed been positively transformed. This is supported by a limited number of studies conducted in both public sector organizations (Wang & Horng 2002; Rampa & Agogué 2021) and private sector organizations (e.g., Basadur *et al.*1982; Basadur *et al.* 2000; Birdi *et al.* 2012). These findings contribute to the generalizability of previous studies by demonstrating the effectiveness of creativity training programs at the individual level across both private and public sectors. Importantly, this study fills a gap highlighted by Berman & Kim (2010), who noted the limited mention of creativity in the context of public administration. The results of this study indicate that implementing various types of effective creativity training programs at the individual level can be a viable strategy for the development of public sector organizations.

Furthermore, these results call for further research in public sector organizations to compare the effectiveness of different types of creativity training programs and identify the most beneficial ones. Additionally, future studies should explore the effectiveness of creativity training at the group and organizational levels within public sector organizations, as this study focused solely on the individual level.

4.4 Work context factors that influence on the effectiveness of creativity training programs
Participants were asked " What are work context factors that influence the effectiveness of creativity training programs ?"

Participants agreed that there are eight work context factors that influence the effectiveness of creativity training programs which can be categorized as stimulants and obstacles factors as follows;

4.4.1.Work context stimulants to creativity training programs
First. Supervisory encouragement. All participants agreed that supervisors' encouragement is a vital factor that has positive effectiveness on employees who have attended creativity training programs. Participant 1 argued

"The supervisors support to attend creativity and innovation course is significant beside helping them to implement what he have learnt during the training at real life context"

Second. Organizational encouragement. Eight participants clarified that their organisations have developed several tools, systems and mechanism to positively affect creativity training participants. Participant 9 clarified "Our organization has developed several mechanisms that has positive effectiveness on employees who have attended creativity training programs, like incentive policy that encourages them to apply what they have learnt at work place".

Third. Sufficient resources. Seven participants pointed out that providing all required resources to employees who have undergone creativity training programs have positive impact which lead to generate new ideas at workplace. Participant 4 clarified "All needed resources such as training tools, fund and technologies ,are provided for the employees, not only during the creativity training course, but also even when they go back to work "

Fourth. Work group support. Five participants clarified that the work group support employees to suggest and introduce new ideas as a result of attending creativity training programs. Participant 7 argued "The team members help their colleagues who attended creativity training to think out of the box to improve the provided services or the public "

Fifth. Challenging work. Five participants mentioned that involving the employees to perform new challenged tasks consider as an indicator of the effectiveness of the training. Participant 1 stated " Usually after attending creativity training programs, the employees will be enhanced by giving them challenged tasks and work related to creativity training, such as leading brainstorming session".

Sixth. Freedom. Five participants clarified that the employees are free to decide attending the training programs, if they consider such trainings are significant for their jobs. Participant (6) stated " *The employees have the freedom to participate into creativity training, and suggest to redesign a process to improve the work*"

4.4.2 Work context obstacles to creativity training programs
First. Workload pressure. Eight participants discussed that the workload pressure influences negatively on employees' who have attended creativity training programs. Participant 8 mentioned " Although employees should be out of their comfort zoon, the amount and the quality of the work should be realistic, as workload pressure has negative impact on the employees who have attended creativity training program"

Second. Organizational impediment. Seven participants elaborated working in organizations that hinders employees learnt capabilities besides encourage unhealthy practices lead to negative impact on employees who have attended creativity training programs. Participant 6 stated " Tough competition and unnegotiable process have negative impact on the effectiveness of creativity training "

Participants agreed that work context influence the employees who undergone creativity training programs. One of the contributions of this study is that the findings supported Amabile, *et. al* 's (1996), Climate for Creativity (KEYS) which is acceptable instrument developed in private sector used to measure the climate for creativity and innovation in work context in identifying factors that influence creativity training effectiveness in public sector organizations.

The achieved results showed that there are two type of factors that influence the effectiveness of creativity training programs as follows;

Work context stimulants to creativity training programs.
First. Supervisory encouragement. Rampa & Agogué (2021) argued that managers have a significant role to maintain the effectiveness of creativity training programs. The obtained results are consistent with few studies conducted at both public sector organizations (e.g., Birdi 2005; 2021) and private ones (e.g., Rampa & Agogué 2021) which showed that supervisors have positive impact on the effectiveness of creativity training programs.
Second. Organisational encouragement. Birdi (2005) pointed out that regardless of the amount of creativity training that is has been conducted for workforce, if they do not have enough support back in the work context then the application of their ideas will be seriously restricted. In spite of that, there is shortage in studies that examined the impact of organizational encouragement on the effectiveness of creativity training. Therefore, this research is considered among the first to find the positive relationship at public sector organizations that

prioritize such training such as the UAE context. Indeed the findings was supported with creativity literature in both public (Alblooshi 2018) and private sector (e.g., Ayinaddis 2023) which resulted that organizational encouragement is one of factors that influence employees creativity,

Third: Work group support. According to Birdi (2016) colleagues are among the factors that enhance transfer of creativity training programs. The findings supported limited studies have examined the influence of work group on employees who have attended creativity training at both public sector organizations (e.g., Birdi 2021) and private sector organizations (e.g., Rampa & Agogué 2021) .

Fourth: Sufficient resources. According to Broekhoven *et al.* (2020), many organizations conduct creativity training programs and allocate time and resources to develop employees creative and innovative competencies. The positive impact of sufficient resources on the effectiveness of creativity training is supported with few studies in both public sector literature (e.g., Wang *et al.* 2011) and private sector (e.g., Ayinaddis 2023).

Fifth. Challenges work. Amabile (1997), declared that a positive sense of challenge in organization is one of the most significant predictors of creativity at workplace. This study showed that participating in challenging work after attending creativity training is an indicator of the effectiveness of the creativity training at public sector organizations. In spite of that very few studies this relationship in public sector (Birdi 2021) has reached the same result.

Sixth Freedom. Alblooshi (2018) stated that freedom is considered as one of core values required for employees at public sector to perform their tasks .The study revealed that freedom is among factors that stimulates the effectiveness of creativity training programs. While no creativity training studies in both public and private sector have examined this relationship, the achieved results is agreed with few creativity studies (e.g., Alblooshi 2018) that resulted that freedom is among the factors that influence employees creativity at public sector organizations, which enhances the applicability of creativity studies in public sector studies in creativity training in order to achieve better results and empirically support that creativity training is one of main themes in creativity literature (Basadur *et al.* 1982).

Work context obstacles to creativity training programs
First. Workload pressure. ElMelegy *et al.* (2016) recommended that top management should lighten employees' workload pressure to enhance the degree of their creative performance. The negative impact of workload pressure on the effectiveness of creativity training, as found in the current study, is consistent with that of limited studies such as Walter's (2012) study that have been conducted in private sector. It was observed that there was shortage creativity training studies examined this relationship in public sector. Moreover, the findings are supported by creativity literature that have been conducted in private sector organizations (e.g. Amabile *et al.* 1996). Thus there is a need for additional studies in public sector organizations that conduct creativity training to generalize the achieved results.

Second. organizational impediments. According to Bridi (2007) creativity training have little long-term impact if employees go back to work environment that is not open to new ideas. The achieved results showed that organisational impediments have negative impact creativity training programs is supported with Walter's (2012) that showed organizational impediments in form of control and internal strife had negative impact on those who had attended creativity training in private sector organizations. Indeed this result is also aligned with creativity studies in private sector organizations (e.g., Amabile *et al.* 1996).

It is remarkable that the finding are supported with majority of creativity training studies that have been conducted in private sector organizations (e.g., Basadur *et al.* 1982; Birdi *et al.* 2012; Walter 2012; Mihret Dessie & Shumetie Ademe 2017; Rampa & Agogué 2021; Ayinaddis 2023) this means that The UAE public sector organisations are increasingly being driven by private-sector practices such as conducting creativity training programs.Thus, the current study extended public sector literature because it is among the first to explore creativity training programs in a context (The UAE public sector) characterized by public reform defined by new public management, which helped to answered the calls for further research (e.g., Jingjit & Fotaki 2010; Trotta *et al.* 2011) to examine if the key management principles, as proposed by NPM principles, is evident in public sector. That's why, this result is against some studies (e.g., Hvidman & Andersen 2014; van der Sluis *et al.* 2017) study that showed management matters are different in public and private organizations, since implementing reform in public organization could help reducing the differences to a great extent.

Concerning creativity literature, this study helped to fill in the gap discussed by Hon (2010) that there is need to

additional public sector studies to explore how creativity is encouraged and supported, as this study empirically proved that combining creativity literature main themes such as creativity training and organizational factors (Basadur *et al.* 1982), would lead to providing more understanding how creativity can be used to encourage and support employees to develop new ideas to fulfill the organizational objectives. Thus , this result assist managers must realize that their role does not end with hiring employees who possess creative capabilities, as without adequate institutional support for creativity training programmes, employee creativity cannot be enhanced.

5. Conclusion

Creativity has been recognized as a practice borrowed from the private sector to enhance the performance of the public sector (Alblooshi 2018). Consequently, the majority of research on creativity training has focused on the private sector (e.g., Birdi *et al.* 2012; Byrge 2021), with limited studies examining public sector organizations (e.g., Birdi 2021).

Given this limitation, the present study aimed to explore creativity training in the public sector within the context of the United Arab Emirates (UAE). This was achieved by conducting one-on-one interviews with nine key decision-makers from UAE public sector organizations. The collected data were analyzed using NVivo Software (version 14).

The objectives of the study were successfully addressed through the interviews, leading to several major findings. First, creativity training was conceptualized as a form of training that assists employees in generating new ideas and enhancing their capabilities to produce creative and innovative outcomes. Second, the public sector organizations in the UAE conducted various types of creativity training programs, including creativity and innovation courses, brainstorming sessions, creative problem-solving, and the six thinking hats. Third, creativity training was found to be an effective tool for improving individuals' attitudes toward divergent thinking and their behaviors. Fourth, eight work context factors were identified as influencing the effectiveness of creativity training, such as supervisory encouragement and work group support.

The present study makes theoretical, contextual, methodological, and practical contributions. Firstly, it adds to the limited body of research on creativity training in public sector organizations, as most previous studies have focused on the private sector. Additionally, the study's findings align with prior limited research conducted in private sector organizations (Basadur *et al.* 1982; Byrge 2021), which categorizes the nature of the UAE public sector as New Public Management (NPM), emphasizing the adoption of private sector principles to develop public sector organizations. Secondly, the results confirm the applicability of Amabile *et al* 's (1996) Climate for Creativity (KEYS) framework, which measures the climate for creativity and innovation in the work context, in identifying factors that influence the effectiveness of creativity training in the public sector. Thirdly, the study contributes empirically to addressing the call for further research to provide more insights into how creativity and creativity training are managed in public sector organizations (Hon 2012; Alblooshi 2018). Fourthly, the study fills a contextual gap by being among the first to investigate creativity training in UAE public sector organizations. Lastly, the utilization of a qualitative research approach to address the research questions is an additional contribution of this study. While previous studies on creativity training have primarily employed quantitative methodologies (e.g., Wang & Horng 2002; Birdi 2007; Al Jarrah 2019; Gu *et al.* 2022) or mixed methods (e.g. Steffens 2022), only a limited number of studies have employed qualitative methodologies in the field of creativity training (e.g. Rampa & Agogué 2021).

6. Limitations and directions for future research

The current study has several limitations that should be acknowledged. Firstly, the findings are solely based on the perspectives of key decision-makers, neglecting the viewpoints of employees who have participated in creativity training programs. Consequently, it is imperative to conduct additional research that encompasses the opinions of these employees to provide a more comprehensive understanding. Secondly, although the study explored various types of creativity training programs, future investigations should focus on evaluating the effectiveness of specific training programs, such as brainstorming sessions, on employees' creative outcomes. Thirdly, the study exclusively examined the UAE public sector organizations, warranting further empirical studies in other public sector organizations that employ principles of new public management. This would enable the generalization of the findings beyond the specific context of the UAE. Finally, the study primarily examined work context factors that influence the effectiveness of creativity training programs. To advance future research, it is advisable to explore the impact of additional factors, such as individual characteristics, on employees who have undergone creativity training programs, as highlighted in previous studies on creativity training (Steffens 2022).

References

Amabile, T. M., 1997. Motivating creativity in organisations; on doing what you love and loving what you do. California Management Review, 40(1), pp. 39-58.

Ayinaddis, Samuel Godadaw. "Workplace factors that influence creativity and innovation in micro and small scale enterprises: Enterprise level analysis." African Journal of Science, Technology, Innovation and Development 15, no. 6 (2023): 767-778.

Al Balooshi, M. Jayashree, P. & Fargher, S. 2013. 'Creativity training in the UAE government sector: Lessons from the literature', 27th Annual Australian and New Zealand Academy of Management Conference (ANZAM): Managing on the Edge, 4–6 December, Hobart, Tasmania.

Alblooshi, Mardeya, Assessing factors that influence employees' creativity in public-sector organizations The case of Dubai government organizations, Doctor of Philosophy thesis, University of Wollongong, 2018.

Al Jarrah, H. Y. (2019). Six thinking hats: An analysis of the skill level of Jordanian vocational education teachers and the extent of skill application. Space and Culture, India, 7(1), 170-185.

Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M., 1996. Assessing the work environment for creativity. Academy of management journal, 39(5), pp.1154-1184.

Basadur, M.Graen, G. B. &Scandura T. A. (1986). Training Effects on Attitudes Toward Divergent Thinking Among Manufacturing Engineers.Journal of Applied Psychology, 71, (4), 612-617.

Basadur, M., Wakabayashi, M.&Takai, J. (I992).Training Effects on the Divergent Thinking Attitudes of Japanese Managers.International Journal of Intercultural Relations, 16, 329-345.

Basadur, M., Pringle, P. & Kirkland, D. (2002).Crossing Cultures: Training Effects on the Divergent Thinking Attitudes of Spanish-Speaking South American Managers. Creativity Research Journal, 14(3-4), 395-408.

Basadur, M., Graen, G. B.& Green S. G. (1982). Training in Creative Problem Solving: Effects on Ideation and Problem Finding and Solving in an Industrial Research Organization. Organizational Behavior and Human Performance, 30, 41-70.

Basadur, M., Runco, M. & Vega, L. (2000).Understanding How Creative Thinking Skills, Attitudes and Behaviors Work Together: A Causal ProcessModel.Journal of Creative Behavior, 34(2), 77-100.

Basadur, M.&Finkbeiner, C. T. (1985).Measuring Preference for Ideation in Creative Problem-Solving Training.Journal of Applied Behavioral Science, 21(37), 37-49.

Badrinath, P., Ghazal-Aswad, S., Osman, N., Deemas, E. and McIlvenny, S., 2004. A study of knowledge, attitude, and practice of cervical screening among female primary care physicians in the United Arab Emirates. Health care for women international, 25(7), pp.663-670.

Berman, E M. and Kim, C., 2010. Creativity Management in Public Organisations Jump-Starting Innovation', Public Performance & Management Review, 33 (4), pp. 619-652.

Birdi, K., Leach, D. &Magadley, W. (2012).Evaluating the Impact of TRIZ Creativity Training: an organizational field study.R& D Management, 42(4), 315-326.

Birdi, K. S. (2005).No Idea?Evaluating the Effectiveness of Creativity Training.Journal of European Industrial Training, 29(2), 102-111.

Birdi, K.(2007).A Lighthouse in the Desert? Evaluating the effects of creativity training on employees' innovation.Journal of Creative Behavior, 41(4), 294-270.

Birdi, Kamal. "Creativity training." In Human resource management, innovation and performance, pp. 298-312. London: Palgrave Macmillan UK, 2016.

Birdi, K. (2021). Insights on impact from the development, delivery, and evaluation of the CLEAR IDEAS innovation training model. European Journal of Work and Organizational Psychology, 30(3), 414-404.

Broadbent, J. and Guthrie, J., 1992. Changes in the public sector: A review of recent "alternative" accounting research. Accounting, Auditing & Accountability Journal,5(2).

Byrge, C. (2021). A Corporate Fitness Centre for Innovative Capabilities: New Insights on how Creativity Training can Develop Creative Competencies, Creative Confidence and a Creative Team Culture. Innovation, 7, 111- 120.

De Bono, E. (1985).Six Thinking Hats.Little Brown, Boston.

ElMelegy, A.R., Mohiuddin, Q., Boronico, J. and Maasher, A.A., 2016. Fostering creativity in creative environments: An empirical study of Saudi Architectural Firms. Contemporary Management Research, 12(1), p.89- 120.

Gu, X., Ritter, S. M., Delfmann, L. R., & Dijksterhuis, A. (2022). Stimulating creativity: examining the effectiveness of four cognitive-based creativity training techniques. The Journal of Creative Behavior, 56(3), 312-327.

Guest, G., Bunce, A. and Johnson, L., 2006. How many interviews are enough? An experiment with data saturation and variability. Field methods, 18(1), pp.59-82.

Hvidman, U. and Andersen, S.C., 2013. Impact of performance management in public and private organizations. Journal of Public Administration Research and Theory,24 (1), pp.35-58.

Haase, J., Hanel, P. H., & Gronau, N. (2023). Creativity enhancement methods for adults: A meta-analysis. Psychology of Aesthetics, Creativity, and the Arts.

Hon, A. (2012).Shaping Environments Conductive to Creativity: The Role of Intrinsic Motivation', Cornell Hospitality Quarterly, 53(1), 53–64

Jas, P. and Skelcher, C., 2014. Different regulatory regimes in different parts of the UK? A comparison of narrative and practice in relation to poor performance in local government. Local Government Studies, 40(1), pp.121-140.

Jingjit, R. and Fotaki, M., 2010. Confucian ethics and the limited impact of the new public management reform in Thailand. Journal of business ethics, 97(1), pp.61-73.

Jones-Chick, R., Kelloway, E. K., & Birdi, K. (2022). CLEAR IDEAS: Can Idea Implementation Training Enhance the Development of New Ideas Beyond Idea Generation Training?. The Journal of Creative Behavior, 56(1), 79-91.

Karwowski, M., & Soszynski, M. (2008). How to develop creative imagination?: Assumptions, aims and effectiveness of Role Play Training in Creativity (RPTC). Thinking Skills and Creativity, 3(2), 163-171.

Lau, K., Ng, M. & Lee, P.(2009) Rethinking the creativity training in design education: a study of creative thinking tools for facilitating creativity development of design students, Art, Design & Communication in Higher Education, 8(1), 71-84.

Mihret Dessie, W., & Shumetie Ademe, A. (2017). Training for creativity and innovation in small enterprises in Ethiopia. International Journal of Training and Development, 21(3), 224-234. doi: 10.1111/ijtd.12107

McKay, Alexander S., Roni Reiter-Palmon, Susan MT Coombes, and Joseph E. Coombs. "A meta-analysis of creativity training in organizational settings." Creativity and Innovation Management (2016).

Ogilvie, D.& Simms, S. (2009).The Impact of Creativity Training on an AccountingNegotiation.Group DecisNegot, 18, 75-87.

Puccio, G, Firestien, R, Coyle, C & Masucci, C. (2006). A Review of the Effectiveness of CPS Training: A Focus on Workplace Issues', Creativity and innovation management, 15(1) 19- 33.

Rampa, R. and Agogué, M., 2021. Developing radical innovation capabilities: Exploring the effects of training employees for creativity and innovation. Creativity and Innovation Management, 30(1), pp.211-227.

Sio, U. N., & Lortie-Forgues, H. (2024). The impact of creativity training on creative performance: a meta-analytic review and critical evaluation of five decades of creativity training studies. Psychological bulletin.

Steffens, K. R. (2022). Examining Relationships among Creativity Skills Training, Domain-Specific Creativity, and Creative Self-Efficacy: A Mixed Methods Study (Doctoral dissertation, University of Denver).

Scott, G., Leritz, L. E.& Mumford, M. D. (2004a). The Effectiveness of Creativity Training: A quantitative review. Creativity Research Journal, 16(4), 361-388.

Scott, G., Leritz, L. E.& Mumford, M. D. (2004b). Simms, S. (2009). The impact of creativity training on an accounting negotiation. Group Decision and Negotiation, 18(1), 75-87.

Trotta, M., Scarozza, D., Hinna, A. and Gnan, L., 2011. Can information systems facilitate the integration of New Public Management and Public governance? Evidence from an Italian public organization. Information Polity, 16(1), pp.23-34.

Tannenbaum, SI, Cannon-Bowers, J. A., Salas, E., & Mathieu, J. E. (1993). Factors that influence training effectiveness: A conceptual model and longitudinal analysis (Technical Rep. No. 93- 011). Orlando, FL: Naval Training Systems Center.

van der Sluis, M. E., Reezigt, G. J., & Borghans, L. (2017). Implementing new public management in educational policy. Educational Policy, 31(3), 303-329.

van Broekhoven, Kim, Barbara Belfi, Ian Hocking, and Rolf van der Velden. "Fostering university students' idea generation and idea evaluation skills with a cognitive-based creativity training." Creativity. Theories–Research-Applications 7, no. 2 (2020): 284-308

Walter, C. (2012). Work environment barriers prohibiting creativity. Procedia-Social and Behavioral Sciences, 40, 642-648.

Wang, C. W., & Horng, R. Y. (2002). The effects of creative problem solving training on creativity, cognitive type and R&D performance. R&D Management, 32(1), 35-45.

Wang, H. C., Fussell, S. R., & Cosley, D. (2011). From diversity to creativity: Stimulating group brainstorming with cultural differences and conversationally-retrieved pictures. In Proceedings of the ACM 2011 conference on Computer supported cooperative work (pp. 265-274).

Williams, S. D. 2004. Personality, attitude, and leader influences on divergent thinking and creativity in organizations. European Journal of Innovation Management, 7(3), pp.187-204.