

Empowering Internal Auditors' Creativity in Jordanian Ministries: The Effect of Knowledge Sharing and Job Satisfaction

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Abstract: *In a broader context, creativity plays a vital role in enabling businesses to adapt and thrive amid the competitive and uncertain landscape of knowledge-based economies. Within the sphere of internal audit, fostering knowledge sharing among auditors and ensuring their job satisfaction form fundamental pillars that foster creativity within organizations. This research aims to explore the impact of job satisfaction and knowledge sharing on the creativity of internal audit managers. The study was conducted across Jordanian Ministries, involving 113 internal audit managers as respondents, and the collected data underwent analysis using SPSS. The results indicate a positive correlation between knowledge sharing, job satisfaction, and the creativity of internal audit managers in Jordanian Ministries. These findings offer empirical evidence underscoring the role of knowledge sharing and job satisfaction in augmenting the creativity of internal audit managers. Moreover, considering the significance of the public sector in the Jordanian economy, these insights hold value for decision-makers and regulators, suggesting potential new regulations and legislation to enhance public sector management.*

Keywords— Internal audit managers' creativity; job satisfaction; knowledge sharing; Jordanian Ministries.

1. INTRODUCTION

Creativity is seen as a crucial factor and decisive enabler of any organization to be developed in the rapid revolution epoch [1, 2, 3, 36], and managers are the main means for implementing the behaviors that sustain organizational creativity [4]. Managers' creativity is a complex combination of generating, promoting, and realizing ideas [5], involving identifying problems, seeking support for implementing solutions to identified problems, and making products or providing services [35]. Therefore, the improvement of managers' creativity performance has become an important aspect of enhancing the ability of organizational creativity [10]. Creativity performance is an important indicator of the success or failure of organizations [6].

However, an internal audit manager's creativity, much like any managerial role, is shaped by numerous influences [7 – 11, 23]. Assessing the creativity of internal audit managers involves various aspects, including their ability to innovate audit methodologies, devise new problem-solving approaches within audits, introduce streamlined processes, and employ critical thinking to tackle intricate audit issues [41]. This evaluation encompasses their aptitude for offering new perspectives, creating innovative solutions, and adapting to evolving environments while upholding the thoroughness and efficacy of the audit function. Previous studies have indicated that creativity is impacted by a range of internal and external factors, such as government policies, regional culture, organizational traits, and employee behavior [12, 11, 13]. Organizations need to modify their approaches to resource

allocation and knowledge sharing to further enhance the development of their internal audit managers [11, 53]. Interestingly, prior research has overlooked the significance of knowledge sharing and job satisfaction as primary sources of creativity. Yet, knowledge and satisfaction stand as crucial resources for creativity, thus playing a pivotal role in advancing the performance of internal audits [7].

Moreover, according to the resource-based theory, organizations sustain their competitive edge by securing valuable strategic resources that are hard to duplicate. Knowledge and job satisfaction stand as foundational elements that foster the creativity of internal auditors within organizations [4]. Knowledge sharing denotes the exchange of experiences and knowledge among internal auditors to generate fresh ideas and develop knowledge [8, 1, 14, 15]. This sharing process creates conducive environments for employee creativity by boosting managers' ability to generate inventive concepts. Job satisfaction, on the other hand, relates to an individual's happiness, sense of achievement, or gratification derived from their professional role [59].

However, there's a consistent observation that public sectors tend to undervalue creativity compared to business organizations operating in competitive environments where increased creativity is essential [2, 16, 11]. This contrast can be attributed to the managerial structures and inherent nature of public sector entities, often emphasizing adherence to formal government mandates rather than customer service, as seen in business organizations [17]. Consequently, in addressing various societal, technological, economic, and political challenges, public sector organizations need to

acknowledge creativity as an integral aspect essential for effectively delivering services to a country.

Furthermore, in knowledge-based economies marked by competitiveness and uncertainty, creativity holds significant importance [18, 9, 19]. Internal audit managers play a pivotal role in fostering behaviors essential for organizational creativity [20, 4, 52]. As managers significantly influence employee behaviors due to their organizational role, their creativity is multifaceted, encompassing the generation, realization, and advocacy of necessary ideas [18, 22]. This includes tasks such as identifying issues, seeking support for implementing solutions, and delivering services or manufacturing products. Encouraging knowledge sharing among internal audit managers can mutually empower them, enhancing their creativity within organizations [23, 60].

Additionally, job satisfaction stands as a pivotal element of work, closely linked to attitudes [24 - 27]. It encompasses individuals' perceptions of various aspects of their work. Robins [28] defines job satisfaction as a manager's overall attitudes and behaviors toward their organization. Elevated job satisfaction among internal audit managers leads to positive perceptions of the organization. Moreover, heightened job satisfaction often correlates with increased job engagement, potentially boosting motivation for generating, disseminating, and actualizing innovative concepts within the organization [29, 26]. Consequently, heightened job satisfaction tends to enhance commitment to organizational goals [30]. Despite numerous studies on job satisfaction, there remains no consensus on its precise definition [25]. Although creativity, as a form of productivity, can be influenced by managers' job satisfaction, there's a paucity of studies exploring this relationship, particularly within the public sector context [2, 16].

However, the majority of previous research on creativity has primarily focused on contexts within developed countries. To the researchers' knowledge, no study has specifically investigated the impact of knowledge sharing on the creativity of internal audit managers, particularly within the public sector setting. Additionally, previous studies have not considered the role of job satisfaction in the domain of creativity. Therefore, this study aims to investigate how knowledge sharing and job satisfaction influence the performance of internal audit managers' creativity within the public sector in Jordan.

This study offers significant insights into the creativity of internal audit managers within the public sector. Firstly, it diverges from the typical focus on developed countries in creativity research by exploring these aspects within a developing nation like Jordan. Secondly, it furnishes empirical evidence highlighting the pivotal roles of knowledge sharing and job satisfaction in enhancing the creativity of internal audit managers. Understanding these factors holds relevance for regulatory bodies within the public sector, such as the Senate, Parliament, and Ministers Board. Lastly, this research expands the existing comprehension of creativity by

shifting the perspective from the individual level (employees) to the organizational level (managers).

This paper is structured into the following sections: Section 2 delves into the theoretical underpinnings of the variable relationships. Section 3 outlines the study's model. Section 4 introduces the research's design. Section 5 conducts an analysis of data utilizing SPSS to validate hypotheses and draw conclusions. Section 6 engages in discussing the conclusions, exploring potential theoretical and practical implications, and highlighting the study's limitations.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Knowledge Sharing and the internal audit Managers' Creativity

Creativity encompasses behaviors at the individual, group, and organizational levels. Sharing knowledge offers organizations a competitive edge by facilitating the reception, organization, reuse, and transfer of experiential information among staff [1, 16, 42, 58]. Numerous researchers have highlighted that knowledge sharing strengthens creativity and minimizes unnecessary efforts (e.g., [32, 11]). For instance, Hu, Horng, and Sun [32] conducted a study with 621 employees in international tourist hotels, revealing the significant impact of knowledge sharing on service creativity performance [37]. Moreover, effective communication channels between internal audit managers and their subordinates contribute to enhanced creativity in their tasks through knowledge sharing [34].

Further, the influence of Knowledge Sharing on the creativity of internal audit managers involves fostering an environment where information and insights are openly exchanged among managers [31, 43]. This sharing of knowledge enables a broader pool of ideas, diverse perspectives, and innovative approaches to problem-solving within the realm of internal audits [44, 45]. As internal audit managers engage in exchanging knowledge, they gain access to varied experiences, methods, and solutions, which in turn sparks new ideas and enhances their ability to innovate within the audit processes [1]. Ultimately, this collaborative exchange facilitates a more creative and dynamic environment for internal audit managers to explore unconventional approaches and implement inventive strategies in their work. Hence, sharing knowledge contributes to the development of more efficient problem-solving methods. Conversely, the utilization of expertise and experience becomes challenging in the absence of knowledge sharing [34]. Based on these findings, this study suggests that fostering knowledge exchange among internal audit managers within a developing society will bolster their creativity. This forms the basis for the next hypothesis, H1: Knowledge sharing has a positive effect on the internal audit managers' creativity in the Jordanian Ministries.

2.2 Job Satisfaction and the internal audit Managers' Creativity

Job satisfaction reflects an individual's response to their work environment, and within the social exchange theory, it's posited that contented employees make significant contributions to their organizations [39]. Consequently, job satisfaction can influence employees' behaviors in terms of organizational citizenship, turnover, and loyalty [46, 57]. Given its positive impact in the workplace, job satisfaction can alleviate the stress associated with generating innovative solutions and is considered a crucial element in improving managerial conduct [18, 38, 46].

Christen et al. [47] discovered that job satisfaction positively influenced managers' creative performance by encouraging positive assessments and motivating employees to set and achieve ambitious goals [40]. Hence, internal audit managers with high job satisfaction tend to generate fresh and valuable ideas [48, 56]. Such individuals exhibit traits like openness, enthusiasm, positivity, confidence, energy, and a focus on accomplishments [11,55, 61]. In essence, the level of job satisfaction among internal audit managers can either strengthen or weaken the impact of self-efficacy and knowledge sharing on creativity performance.

Therefore, job satisfaction significantly shapes the creativity of internal audit managers. When managers are content with their roles, they demonstrate increased motivation and dedication to organizational goals, fostering a greater inclination to explore innovative ideas and solutions. High job satisfaction nurtures an environment where internal audit managers feel more engaged, motivated, and committed to generating and implementing new, creative approaches within their responsibilities. Consequently, this study posits that the job satisfaction of internal audit managers positively influences their creativity within Jordanian ministries. Hence, the second hypothesis is formulated as, H2: job satisfaction has a positive effect on the internal audit managers' creativity in the Jordanian Ministries.

3. RESEARCH MODEL

Building upon previous research assumptions and rationale, this study introduces a research model, illustrated in Figure 1. It encompasses three variables: two independent variables—knowledge sharing and job satisfaction—and one dependent variable—creativity among internal audit managers. Hence, the study posits that both job satisfaction and knowledge sharing impact the creativity of internal audit managers within the Jordanian ministries.

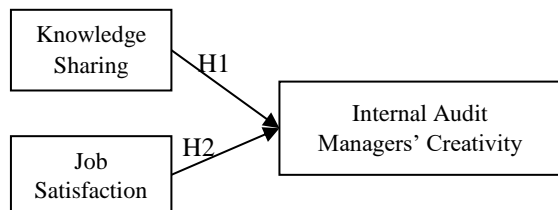


Fig. 1. The research Model

4. RESEARCH DESIGN

4.1 The participants

The study aimed at engaging internal audit managers from the governorates (Jordanian ministries branches) as its target population. These managers were considered the most pertinent respondents due to the study's direct relevance to their roles. An online survey was distributed to 235 government entities, and 113 valid and voluntary responses were collected.

4.2 Measures

The current study utilized previously established measurements for its variables. In particular, the assessment of internal audit managers' creativity was based on six indicators adapted from [5]. For measuring knowledge sharing, six indicators were derived from Chennamaneni [49]. Job satisfaction was evaluated using a six-item scale adopted from Janz et al. [51] and Judge [49]. Respondents rated their answers using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) for all items.

5. DATA ANALYSIS AND RESEARCH FINDINGS

This study employed the “Statistical Package for Social Sciences (SPSS 25)” for data analysis. The data analysis involved the use of descriptive statistics, as well as the performance of simple linear regression tests within the SPSS software. In terms of gathering the demographic profile of the participants, four specific questions were utilized to elicit information about their age, educational background, years of professional experience, and job title. Within the sampled group, about 86 percent were male. On average, the respondents were around 42 years old with an average work experience of 12 years. The majority of participants held a bachelor's degree (73%). Regarding descriptive statistics, the mean values of the variables, surpassed the midpoint of the one-to-five scale. I segmented the five-point scale into three classifications: low, medium, and high, Scores below 2.33 are categorized as low, scores above 3.67 fall into the high category, and scores between 2.33 and 3.67 are considered moderate, aligning with the criteria delineated by Hair, Hult, Ringle, and Sarstedt (2016).

Table 2. Descriptive statistics

Constructs	Items	Mean	Rank	Level
Knowledge sharing	6	3.71	2	High
Job satisfaction	5	3.43	3	Moderate
Internal audit managers' creativity	13	4.09	1	High

As shown in Table 2, the average figures for the study's variables range from 3.43 to 4.09. This suggests that all the study variables demonstrate notably positive mean levels. Specifically, the results suggest that, according to the

perspectives of internal audit managers in Jordanian ministries branches, there exists a significantly high level of internal audit managers' creativity, a moderately robust job satisfaction, and a considerable degree of knowledge sharing within these governorates in Jordan.

Table 3 illustrated the simple regression coefficients for the relationship between knowledge sharing and the internal audit managers' creativity, in the Simple Linear regression test (H1).

Table 3. The Simple Linear Regression Analysis

Constructs	t-value	Sig.	Result of Hypothesis
Knowledge sharing	7.422	0.000	Accepted
Dependent variable: internal audit managers' creativity			
R ² = 0.238			

The outcomes presented in Table 3 display a significant and favorable correlation between knowledge sharing and the internal audit managers' creativity. This assertion is bolstered by a p-value of 0.000, falling below the significance threshold of 0.05, alongside a T-value of 7.422. "In practical terms, knowledge sharing among internal auditors into Jordanian ministries branches correlates with the internal audit managers' creativity. Furthermore, the results indicate that the R-squared value (R²) stands at 0.238, indicating that knowledge sharing explains 23.8% of the observed variability in internal audit managers' creativity, with the remaining 76.2% attributed to other influential factors. Hence, these findings lend support to the initial hypothesis, which suggests that knowledge sharing has a positive effect on the internal audit managers' creativity in the Jordanian Ministries.

Table 4 illustrated the simple regression coefficients for the relationship between knowledge sharing and the internal audit managers' creativity, in the Simple Linear regression test (H2).

Table 4. The Simple Linear Regression Analysis

Constructs	t-value	Sig.	Result of Hypothesis
Job satisfaction	4.274	0.000	Accepted
Dependent variable: internal audit managers' creativity			
R ² = 0.246			

The outcomes presented in Table 4 display a significant and favorable correlation between job satisfaction and the internal audit managers' creativity. This assertion is bolstered by a p-value of 0.000, falling below the significance threshold of 0.05, alongside a T-value of 4.274. In practical terms, job satisfaction among internal auditors into Jordanian ministries branches correlates with the internal audit managers' creativity. Furthermore, the results indicate that the R-squared value (R²) stands at 0.246, indicating that job

satisfaction explains 24.6% of the observed variability in internal audit managers' creativity, with the remaining 75.4% attributed to other influential factors. Hence, these findings lend support to the initial hypothesis, which suggests that job satisfaction has a positive effect on the internal audit managers' creativity in the Jordanian Ministries.

6. DISCUSSION AND CONCLUSION

The study aimed to explore how knowledge sharing and job satisfaction impact the creativity of internal audit managers. Additionally, the study's model was validated based on the Resource-Based Theory (RBT), which posits that effective performance requires ample resources. These resources, encompassing capabilities, support, and assets within organizations, serve to bolster their accomplishments [21]. Consequently, this study suggests that internal audit managers' creativity is bolstered by robust knowledge sharing among managers and job satisfaction as internal resources. Moreover, this finding contributes to the Resource-Based Theory by identifying job satisfaction and knowledge sharing as sources that drive managers' creativity.

The initial hypothesis (H1) aligns with the Resource-Based View (RBV), and the results suggest that knowledge sharing serves as a catalyst for internal audit managers' creativity, highlighting the necessity of adequate internal resources for fostering creativity. When individuals aim to generate novel and valuable ideas, obtaining relevant expertise or knowledge becomes crucial [54]. The process of knowledge sharing plays a pivotal role in fostering creative problem-solving, as it expands the cognitive capacities of internal audit managers [19]. These findings resonate with prior research [1, 33, 54, 11]. For instance, Hu, Horng, and Sun's study [32] highlighted the significant impact of knowledge sharing on service creativity performance within international tourist hotels. Similarly, Singh et al. [33] revealed a substantial relationship between knowledge sharing practices and open creativity in SMEs. Nonetheless, this study's results diverge from some related research [11]. Nevertheless, the current study's findings confirm that knowledge sharing contributes to enhancing the creativity of internal audit managers within the Jordanian ministries.

The second hypothesis (H2) is in line with the Resource-Based View (RBV), and the outcomes indicate that job satisfaction acts as a reservoir for internal audit managers' creativity, emphasizing the significance of ample internal resources in nurturing creativity. When managers find contentment in their roles, they display heightened motivation and dedication to their organization's objectives. This increased job satisfaction often translates into deeper engagement with their work, fostering their willingness to explore fresh and innovative ideas or solutions. Essentially, elevated job satisfaction creates a favorable environment for internal audit managers to channel their creativity, as they become more engaged, motivated, and invested in devising and implementing novel approaches within their responsibilities. These findings are consistent with prior

research [47, 48, 50]. However, this study's results affirm that job satisfaction indeed contributes to boosting the creativity of internal audit managers within the Jordanian ministries. This discovery could augment the understanding of the RBV by incorporating the varied levels of job satisfaction.

The current research holds significance for future scholars in this domain. It highlights the influence of varying job satisfaction levels on the creativity of internal audit managers. Compared to prior works focusing on internal audit managers' creativity in developed countries, the unexpected findings of this study offer insights, particularly considering the context of developing nations. Our results indicate that factors impacting the creativity of internal audit managers are notably affected by the diverse levels of job satisfaction among these managers, particularly within the public sector. Hence, stakeholders and decision-makers concerned with enhancing creativity among internal audit managers in the public sector should consider the differing levels of job satisfaction across various institutions. Moreover, policymakers should prioritize strategies aimed at fostering managerial development and providing resources to facilitate knowledge sharing among them.

Moreover, this study's discoveries have added value to the Resource-Based View (RBV) Theory in multiple aspects. Specifically, this research has focused on knowledge sharing and job satisfaction as internal factors that drive the enhancement of internal audit managers' creativity, aligning with the predictions of the RBV Theory.

However, there are limitations in this research. Firstly, it focused on the public sector's specific context and how job satisfaction and knowledge sharing impact internal audit managers' creativity. Thus, future studies could explore additional factors like organizational culture or other influences on managers' creativity. Moreover, it's important to note that this study's results pertain to the creativity of internal audit managers within Jordanian ministries branches. Therefore, generalizing these findings to other contexts should be done cautiously as outcomes may vary in different sectors or countries. Despite these constraints, this study validates the importance and relevance of scientifically examining the creativity of internal audit managers and its determinants, as supported by the RBV Theory.

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