

The Mediating Role of Psychological Well-being in the Impact of Autonomy on Loyalty and Innovative Work behavior of Fresh Graduates

Khleef A. Alkhawaldeh¹, Reem Issa² and Saleh Hamdan³

ABSTRACT

Qualified and promising fresh graduates are increasingly in demand, as they play an essential role in contributing to the future of institutions. This study aimed to investigate the impact of the autonomy of fresh graduates on their loyalty and innovative work behavior when mediated by the effect of their psychological well-being. The population of the study consisted of employed fresh graduates in Jordan. More specifically, the study population consisted of those who have graduated strictly two years ago or less. The variables of the study were measured by a questionnaire. Data was collected and analyzed and hypotheses were tested using correlation, linear regression and mediation analysis. The study found that the autonomy of fresh graduates has a significant positive impact on their psychological well-being. Additionally, the findings indicated that the psychological well-being of fresh graduates has a significant positive impact on their loyalty towards their employers, along with their innovative work behavior. Psychological well-being was found to have a mediating impact in the relationship between autonomy and loyalty and no mediating impact was found between autonomy and innovative work behavior. This study contributes to the literature by showing the mediating role of psychological well-being in the relationship between autonomy and loyalty.

Keywords: Autonomy, Psychological well-being, Loyalty, Innovative work behavior, Fresh graduates, Jordan.

- 1 Associate Professor, Dept. of Business Administration, Princess Sumaya University for Technology PSUT, Amman, Jordan. Khleef.k@gmail.com.
- 2 Master Student in Business Entrepreneurship at Princess Sumaya University for Technology, Amman, Jordan.
- 3 Master Student in Business Entrepreneurship at Princess Sumaya University for Technology, Amman, Jordan.

Received on 18/4/2022 and Accepted for Publication on 28/9/2022.

الدور الوسيط للرفاه النفسي في تأثير الاستقلالية على الولاء وسلوك العمل الإبداعي لدى الخريجين الجدد

خليفة أحمد الخوالدة¹، ريم عيسى²، صالح حمدان³

ملخص

يزداد الطلب على الخريجين الجدد المؤهلين والواعدين، حيث يلعبون دورًا أساسيًا في المساهمة في مستقبل المؤسسات. هدفت هذه الدراسة إلى دراسة تأثير استقلالية الخريجين الجدد على ولائهم وسلوك العمل الإبداعي لديهم عندما يتوسط ذلك تأثير رفاههم النفسي. يتكون مجتمع الدراسة من الخريجين الجدد العاملين في الأردن، وبشكل أكثر تحديدًا، أولئك الذين تخرجوا قبل عامين أو أقل. وقد تم قياس متغيرات الدراسة بواسطة استبيان، وتم جمع وتحليل البيانات واختبار الفرضيات عن طريق تحليل الارتباط والانحدار الخطي والتأثير الوسيط. ووجدت الدراسة أن استقلالية الخريجين الجدد لها تأثير إيجابي له دلالة إحصائية على رفاههم النفسي. بالإضافة إلى ذلك، أشارت النتائج إلى أن الرفاه النفسي للخريجين الجدد له تأثير إيجابي له دلالة إحصائية على ولائهم لمؤسساتهم، إلى جانب سلوك العمل الإبداعي لديهم. كما وجدت الدراسة أن الرفاه النفسي له تأثير وسيط في العلاقة بين الاستقلالية والولاء، بينما لا يوجد تأثير وسيط للرفاه النفسي في العلاقة بين الاستقلالية وسلوك العمل الإبداعي. وتساهم هذه الدراسة في الأدبيات من خلال إظهار الدور الوسيط للرفاه النفسي في العلاقة بين الاستقلالية والولاء.

الكلمات الدالة: الاستقلالية، الرفاه النفسي، الولاء، سلوك العمل الإبداعي، الخريجون الجدد، الأردن.

1 أستاذ مشارك، قسم إدارة الأعمال، جامعة الأميرة سمية للتكنولوجيا، عمان، الأردن. khleef.k@gmail.com

2 طالبة ماجستير ريادة الأعمال، جامعة الأميرة سمية للتكنولوجيا، عمان، الأردن.

3 طالب ماجستير ريادة الأعمال، جامعة الأميرة سمية للتكنولوجيا، عمان، الأردن.

تاريخ استلام البحث 2022/4/18 وتاريخ قبوله 2022/9/28.

1. INTRODUCTION

The success and continuity of an organization depend on several pillars, one of the most important pillars being the employees. Meanwhile, scholars have urged companies to exploit and enhance the strengths, value and capabilities of the younger generation of the work force (Pang et al., 2019). The demand for competent and promising fresh graduates is growing, as they are a key subject of matter that plays an essential role in contributing to the future of an organization; therefore, it is essential to configure the elements that could sway their performance towards the benefit of a company (Pang et al., 2019). By maintaining a staff consisting of innovative and loyal individuals, companies will be one-step closer to reaching their goals and visions. Therefore, this study investigates the impact of the autonomy of fresh graduates on their loyalty and innovative work behavior when mediated by the effect of their psychological well-being. The level of autonomy given to fresh graduates varies from one company to another (van Hoorn, 2018), especially considering that these employees are newly starting the journey of their career, with many lacking prior work experiences. Accordingly, understanding the effects that autonomy has on fresh graduates is a major motive in this study.

According to the study of Antoncic and Antoncic (2011), the loyalty of workers can serve great importance towards the growth of an organization, without regard to its age or size. Moreover, Tomic et al. (2018) found that there is a positive and favorable relationship between the loyalty of staff and the quality of service, as well as the reduction of costs in an organization. Therefore, multiple past studies have proved the importance of securing a loyal work force and its benefits, magnifying the importance and relevance of understanding what employers can do to secure such loyalty.

Furthermore, through the generation of new ideas, capabilities, processes and skills, innovative work behavior also plays an essential role in leveraging organizational success, as it is positively correlated with the profitability

and efficiency of a firm. Innovative employees can add significant value to the company by finding ways to differentiate it from competitors, along with assisting the company in adapting to environmental and market changes (Ali et al., 2020). This study contributes to the literature by focusing on fresh graduates, with a limited coverage in previous studies. According to Grund & Rubin (2021), job autonomy can affect different age groups differently. Therefore, fresh graduates were examined separately from older employees with more years of experience, providing the literature with a more focused understanding.

Conducting this study contributes to the innovative work behavior literature by focusing on fresh graduates, as there are limited studies relating to this category and the topic at hand, as well as examining innovative work behavior's relationship with psychological well-being, along with its indirect relationship with autonomy. Moreover, the results of the current study will assist in advancing the knowledge relating to proving the importance of maintaining a happier staff and incorporating autonomy in management styles in order to achieve higher levels of innovative work behavior.

This study contributes to the job autonomy literature by answering the calls of Preenen et al. (2016), in which it is insisted that future researchers investigate the consequences of job autonomy on the employees of the firm, which this study achieves by investigating job autonomy's relationship with the employees' psychological well-being, loyalty and innovative work behavior, filling a gap in the literature. Additionally, this study advances the knowledge in this field by adding a mediating variable in the relationship between autonomy and innovative behavior, which was recommended by Al-Mamary and Alshallaqi (2022).

Previous researchers have provided plenty of evidence that employee loyalty and innovative work

behavior have a major impact on organizational success (Antoncic & Antoncic, 2011; Ali et al., 2020; Tomic et al., 2018). With Jordan having such a large percentage of youth in its population, amounting to approximately 50,000 fresh graduates annually (Allouzi, 2021), it is essential that Jordanian firms maintain and utilize such human capital in a way that encourages innovative work behavior and loyalty, as this will translate to successful results. To solve this problem, this study strived to identify the relationship between autonomy and innovative work behavior, as well as employee loyalty, when mediated by psychological well-being, to understand whether such management tactics and consideration of fresh graduate well-being will play a role in the goal of maintaining an innovative and loyal staff.

This study aimed to investigate:

1. The impact of autonomy on the psychological well-being of fresh graduates.
2. The impact of the psychological well-being of fresh graduates on their loyalty towards their employers.
3. The impact of the psychological well-being of fresh graduates on their innovative work behavior.
4. The impact of autonomy on the loyalty of fresh graduates.
5. The impact of autonomy on the innovative work behavior of fresh graduates.
6. The mediating impact of the psychological well-being of fresh graduates between their autonomy and loyalty.
7. The mediating impact of the psychological well-being of fresh graduates between their autonomy and innovative work behavior.

2. Literature Review

In accordance with the aim and objectives of this study, this section extensively reviews the work, findings and theories of previous researchers in relation to the research topic and the relationships of interest. This provides a foundation relating to the development of the hypotheses of this study.

2.1 Autonomy

Autonomy is defined as the discretion and freedom granted to employees relating to the methods, schedules and criteria of work used in performing their responsibilities and tasks (Lin & Ping, 2016). Similarly, Khoshnaw and Alavi (2020) identified the three main dimensions of job autonomy as the freedom regarding work criteria, procedures and schedules. They further described autonomy as an essential factor that contributes to the enhancement of the performance of a given employee, as it increases and improves stress mitigation, satisfaction and efficiency. Moreover, it can lead to other potential benefits, including commitment, motivation, employee engagement and trust.

2.2 Psychological Well-being

Arnold (2017) asserts that the definition of psychological well-being in research is broad. Moreover, it involves psychosomatic symptoms, along with mental health and emotions. According to Wright and Cropanzano (2000), the term “psychological well-being” is associated with “happiness.” It can be defined as the mental satisfaction of a person. Psychological well-being has three defining characteristics. The first is that it refers to an individual’s life, rather than being tied to a specific situation. The second characterizes psychological well-being as a phenomenological event. The third is that it involves some emotional aspects and conditions.

2.3 Employee Loyalty

Getchell (1975) described employee loyalty through the employment history of a given employee, based on the amount of time he or she has been working for a specific employer. Meanwhile, multiple researchers in the field elaborated further on the definition, asserting that employees’ loyalty has been defined as the state at which employees are holding

commitment to their organizations, with the willingness to remain within it and contributing to the factors of success to reach the organizational goals. Moreover, employee loyalty involves the belief that working for a given organization is aligned with their best opportunities and options, which facilitates retention possibilities and feelings of having no intention to leave, searching for alternatives. Generally, loyalty has been viewed as an attitude, along with a worker's attachment towards a company and its values and objectives. Employee loyalty has been described by multiple past studies as organizational commitment, which highlights the employees' relationship and binding with their organizations, reducing turnover (Uzair et al., 2017; Aristana et al., 2021; Sazkaya & Dede, 2018; Aggarwal-Gupta et al., 2021).

2.4 Innovative Work Behavior

According to Hashim (2021), innovative work behavior is defined in multiple ways in the literature. Janssen (2000) defined it as an intentional form of generating, promoting and realizing new ideas in the setting of a work group, job or company. Similarly, Hughes et al. (2018) stated that there are five different markers of innovative work behavior at the workplace, which involve recognizing, introducing, modifying, promoting and implementing new ideas. They continued to describe innovative work behavior as both developing as well as introducing new and enhanced ways for carrying things out, leading to novel ideas and organizational benefits. Meanwhile, Xerri and Brunetto (2013) refer to innovative work behavior as a process that intends to improve the effectiveness and efficiency correlated with problem solving in a work environment.

2.5 Autonomy and Psychological Well-being

According to Clausen et al. (2021) the concept of autonomy, as it relates to employees, holds an important place in core theories regarding organizational and work psychology. Moreover, the autonomy of workers is emphasized as an essential determinant of their well-being.

This is supported by the findings of various studies that found evidence highlighting that those with low levels of job autonomy can lead to risk in both mental and somatic health (Clausen et al., 2021; Hamdi, 2019; Madsen et al., 2017; Theorell et al., 2015; Theorell et al., 2016). Clausen et al. (2021) investigated the impact of autonomy on the well-being of workers based on the type of work that is conducted. The researchers found that the autonomy of employees has a positive correlation with their psychological well-being, regardless of the work type.

The findings of past researchers that demonstrate a relationship between autonomy and psychological well-being are consistent with the self-determination theory, in which it is suggested that providing employees with a context of work that supports autonomy will increase their psychological results, as well as their intrinsic motivation (Deci & Ryan, 1985). Meanwhile, Parto and Besharat (2011) found evidence of mediating mechanisms in their study relating to the autonomy of students, in which autonomy has a mediating role between the variables of mindfulness and psychological well-being, also implying that the autonomy of students can increase their psychological well-being. Similarly, Steinberg (1990) asserts the necessity relating to the possession of self-direction and choice for students in schools, as well as outside of an academic context, in terms of adolescent psychological development. This finding provides the literature with evidence that autonomy also holds great importance to the psychological needs of younger people. However, the study focuses on adolescent individuals.

In general, the literature contains many studies relating to the impact of autonomy on students and teenagers, as well as employees in different contexts; however, there is a gap in the literature relating to the impact of job autonomy on young employees and fresh graduates in specific. Furthermore, with the support of

the provided evidence and findings of previous studies relating to the relationship between autonomy and psychological well-being, along with the self-determination theory, the current study proposed the following hypothesis:

H1- The autonomy of fresh graduates impacts their psychological well-being.

2.6 Psychological Well-being and Loyalty

The loyalty of an employee is essential, as the acquisition cost for talented and skilled workers is usually exceeding the cost of retention, highlighting the necessity for employee loyalty as a contributor to the success of an organization. According to Aggarwal-Gupta et al. (2010), along with the implications of the organizational support theory (Eisenberger et al., 2001), when companies facilitate employees with an environment that enhances their psychological well-being, the employees' attitude, behavior and commitment towards an organization is influenced, demonstrating strong evidence of a reciprocal relationship. This not only builds on the assumption that there is an impact of psychological well-being on employee loyalty, but also on the importance of employers understanding such an impact, as they can be a major determinant of the well-being of their employees, in turn impacting their commitment. According to Krekel et al. (2019), many scholars have asserted that workers who possess a favorable psychological well-being directly and positively impact the performance of a given firm, in terms of productivity, profitability and employee retention.

Previous researchers have demonstrated that an employee's loyalty is not only associated with his/her economic needs, but also with aspects including his/her satisfaction and feelings. Additionally, the impact of well-being on the employees' loyalty levels can be demonstrated through the findings of previous scholars, stating that low levels of psychological well-being can lead to staff leaving a given company and searching for new positions (Benraiss-Noailles & Viot, 2021). Moreover, organizational commitment has been found to be highly correlated with the

job satisfaction of workers (Uzair et al., 2017). In a study conducted by Benraiss-Noailles and Viot (2021), it was found that the brand equity of employers positively affected the psychological well-being of French employees, which in turn influenced their loyalty. Meanwhile, Aksoy et al. (2015) conducted a study relating to the loyalty of consumers in the US and the UK and found that the happiness and well-being of consumers enhanced their loyalty to a given company.

After reviewing the provided evidence, theories and findings of previous studies relating to the relationship between psychological well-being and loyalty, this study proposed the following hypothesis:

H2- The psychological well-being of fresh graduates impacts their loyalty towards their employers.

Moreover, according to Lin and Ping (2016), scholars have stated that the effect of autonomy is favorable, as it allows workers to exercise and utilize their decision-making skills, which holds an influence on their psychological states and ultimately and positively contributes to their level of organizational commitment. Similarly, according to Debus et al. (2020), employees intend to leave their companies when their employer provides them with low autonomy levels, which can be assumed to be mediated by the impact of the mental state that such autonomy provides, as jobs tend to facilitate employees with more feelings of enrichment and motivation when autonomy is granted. Built on the evidence demonstrated in the reviewed literature, along with the assumption that autonomy has an impact on psychological well-being and psychological well-being has an impact on loyalty, the following hypotheses were formulated (direct and indirect impact):

H3- The autonomy of fresh graduates impacts their loyalty (direct impact).

H4- Psychological well-being of fresh graduates has a mediating impact on the relationship between their autonomy and loyalty (indirect impact).

2.7 Psychological Well-being and Innovative Work Behavior

According to Demircioglu (2021), researchers have found that innovative work behavior could potentially place an effect on both individuals and companies. The findings of multiple studies have provided evidence that psychological well-being can improve work performance (Ding & Yu, 2020; Wright & Cropanzano, 2004; Daniels & Harris, 2000). This correlation is relevant, as employee innovative work behavior is a form of extra-role performance, which supports the assumption that psychological well-being has an impact on innovative work behavior (Ding & Yu, 2020; van Woerkom & Meyers, 2015). Further support is proved by the broaden-and-built theory, as it states that positive psychological well-being, along with various positive emotions, have the capability to expand a person's momentary thought-action repertoires by broadening the identifying of potential actions and thoughts that reach one's mind. In other words, workers who possess high levels of psychological well-being carry a stronger want and desire to be exposed to and unravel new information, holding the tendency to be more creative. Moreover, it was found that employees who are characterized as "happy" are associated with high levels of creativity, along with innovative work behavior (Ding & Yu, 2020; Alkshali & Badran, 2020; Wright & Cropanzano, 2004:343; Joo et al., 2016). This is similar to the assertion of Csikszentmihalyi (1996), in which it is stated that with the support of the hedonistic approach, as emotions associated with positivity enable people to feel good, they provoke the desire to discover and explore, along with the initiation of innovative and creative thinking. As cognitive capacities expand, openness to new and different ideas increases.

In a study conducted by Ding and Yu (2020) relating to Chinese enterprises, it was found that psychological well-

being has an impact on innovative behavior, as it mediates the relationship between followers' strength-based leadership and innovative work behavior. Meanwhile, some past researchers argued that while feelings of positivity may initiate feelings of satisfaction and comfort, negative feelings may also lead to innovative work behavior and creative solutions (Martin & Stoner, 1996; Frijida, 1988). Despite the findings and theories of the mentioned studies, according to Isen et al. (1987), as well as Rasulzada (2007), the impact of psychological well-being on innovative and creative behavior has been neglected in the literature, strengthening the need for research that highlights, identifies and investigates this relationship. Furthermore, with the support of the provided evidence, finding and theories of previous studies relating to the relationship between psychological well-being and innovative work behavior, this study proposed the following hypothesis:

H5- The psychological well-being of fresh graduates influences their innovative work behavior.

According to Ko and Yoo (2012), a positive relationship was found between autonomy and job satisfaction, in which job satisfaction mediated the relationship between autonomy and innovative work behavior. Moreover, according to Dolan et al. (2008), well-being is arguably highest when an individual successfully has met his or her social, material and psychological needs. In the psychological well-being literature, there is a discussion based on the subsets regarding psychological needs, one of which includes autonomy as a key psychological need. With the evidence and findings that demonstrate the effects and importance of psychological well-being on an individual's creativity and innovative behavior, it can be assumed that psychological well-being mediates the relationship between an individual's autonomy and his/her innovative work behavior, meaning that when one is granted higher levels of autonomy, he or she can

exhibit more innovative behavior, affected by the state of mental health that such autonomy has provoked.

Built on the evidence demonstrated in the reviewed literature, along with the assumption that autonomy has an impact on psychological well-being and psychological well-being has an impact on innovative work behavior, the following hypotheses were formulated (direct and indirect impact):

H6- The autonomy of fresh graduates impacts their innovative work behavior (direct impact).

H7- Psychological well-being of fresh graduates has a mediating impact on the relationship between their autonomy and innovative work behavior (indirect impact).

3. Theoretical Framework

After extensively reviewing the literature related to the topic at hand, as well as examining the findings, evidence, concepts and theories relating to the mentioned variables, this study contributes to the literature through the creation of the research model shown in Figure 1, which links the relationships reviewed into a single framework and depicts the hypotheses and theoretical expectations of the study. The

model begins with the independent variable, autonomy, the mediating variable, psychological well-being and the two dependent variables of the study: loyalty and innovative work behavior.

In addition to the developed and designed research model, this study also contributes to the literature by filling the gap that exists relating to the limited studies that provide a focus on fresh graduates in specific, in regard to the topic and relationships at hand. Previous studies have presented findings that are associated with students, along with employees in various fields; however, there is a lack in the investigation of the autonomy of fresh graduates and its impact on different variables. As fresh graduates resemble employees who are starting out their careers, they must be managed in a way that contributes most to their personal growth, along with the growth of the organization. This emphasizes the need of conducting a study that investigates the impact of the autonomy granted to fresh graduates, which will be achieved in this study, along with the mediating impact of their psychological well-being.

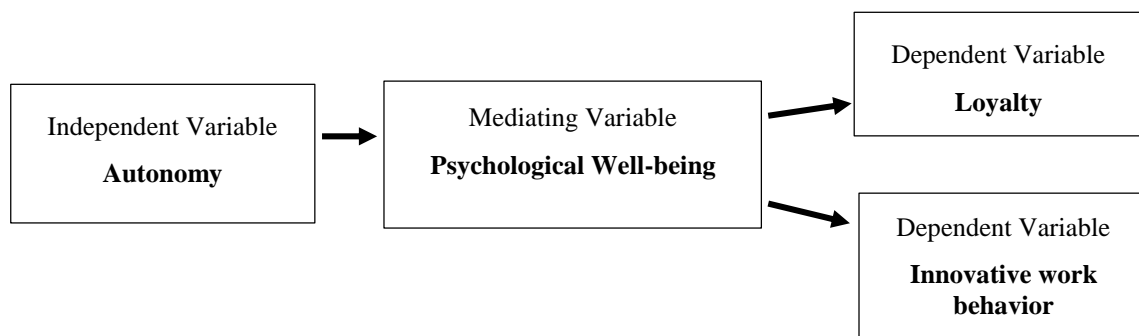


Figure (1)
Research model

Sources: Developed and designed by the researchers of this study, based on these studies (Clausen et al., 2021; Madsen et al., 2017; Theorell et al., 2015; Theorell et al., 2016; Benraiss-Noailles & Viot, 2021; Aksoy et al., 2015; Ding & Yu, 2020; Wright & Cropanzano, 2004; Joo et al. 2016).

4. Methodology

4.1 Population and Sample of the Study

The population of this study consists of fresh graduates in Jordan; more specifically, those who have graduated from both public and private universities and colleges, strictly two years ago or less, of whom are also currently employed. Fresh graduates have been selected to be examined, because Jordan has such a large percentage of youth in its population, amounting to approximately 50,000 fresh graduates annually (Allouzi, 2021). This emphasizes the importance of Jordanian firms maintaining and utilizing such human capital in a way that encourages innovative work behavior and loyalty, as this will translate to successful results. According to Grund & Rubin (2021), job autonomy can impact different age groups differently, meaning that fresh graduates should be examined separately from older employees with more years of experience. Additionally, there are limited studies relating to Jordanian fresh graduates and the topic under investigation. The criterion “two years ago or less” was selected as a means of ensuring that the respondents will be able to accurately express their experience and perceptions relating to working as a recently graduated individual, as considering the responses of individuals who must try to recall such perceptions could potentially threaten the accuracy of their responses. Moreover, in terms of measuring loyalty exhibited within a short time frame, such as 2 years or less, the methods of Matzler and Renzl (2006) and Mowday et al. (1979) were adopted, as they created questionnaires that do not measure loyalty through years, but rather commitment and positive intention to help the firm succeed and stay within it.

The sample of the study consisted of 52 participants, two of whom were removed after checking for outliers and through the internal-check question. As demonstrated above, the unit of analysis of the current study is the individual.

4.2 Data-collection Methods

This research is classified as a causal study, as it aimed to investigate the impact and the relationship between the

variables of interest. The research method selected to best fit this aim is the quantitative-data approach, as causal studies are quantitative in nature. More specifically, the quantitative method and research strategy of conducting an online survey was selected as a means of measuring the variables, as it is a safe way to reach respondents during the COVID-19 pandemic. Additionally, this facilitated speedy data collection, as online surveys are known for being one of the quickest routes for acquiring responses (Saleh & Bista, 2017). Moreover, this study pursued cross-sectional research, in which data collection has been conducted once, over a period of time.

The questionnaire construction was facilitated through the utilization of Google Forms, a web-based survey software. The online questionnaire link was distributed through e-mail, along with different social-networking platforms (Whatsapp, LinkedIn, Facebook and Instagram). Moreover, through these channels, the questionnaire forms were directly sent to each individual in the sample, to avoid responses from outside the identified population. The questionnaire is divided into a total of five sections, four of which are designed to measure each single variable in the study. The fifth section is reserved for inquiring demographic information, specifically gender and marital status.

A total of 19 items comprise the questionnaire, in which all items are close-ended questions, to allow for the numerical translation of the responses to facilitate data analysis through the selected approach of this study. “Autonomy” is measured in the current study through five items, four of which are adopted from Voydanoff (2004), as a means of successfully measuring the perceived autonomy of employed fresh graduates. The fifth question is negatively worded to serve as an internal check for the questionnaire. In terms of measuring “psychological well-being,” five items were adopted from Clarke et al. (2011), as this study characterized them as fit to achieve a measure for

the perceived psychological well-being of employed fresh graduates. Moreover, to achieve a measure for “employee loyalty,” this study combined items from two different questionnaires of previous researchers. Three items were adopted from Matzler and Renzl (2006) and a single item was adopted from Mowday et al. (1979) to successfully capture the perceptions of fresh graduates in terms of their loyalty towards their employers. Similarly, this study also utilized two different questionnaires to measure innovative work behavior, with one item adopted from Mumtaz and Parahoo (2019) and three items from Scott and Bruce (1994). An interval scale was selected to achieve strong measures for all of the items in the questionnaire. More specifically, a five-point Likert scale was utilized, ranging from “Strongly agree” to “Strongly disagree.” The questionnaire was ensured external validity through pretesting, in which it was distributed to and approved by an expert in the field of organizational behavior.

4.3 Data-analysis Methods

The current study analyzed the data in order to achieve the objectives and answer the questions of the research. The data was analyzed through the facilitation of IBM SPSS.

The demographic information of the respondents, which was collected for analytical purposes, is depicted in tables and pie charts to show relevant frequencies of the gender and

marital status of participants. Additionally, descriptive statistical measures were utilized including standard deviation, along with measures of central tendency, specifically the mean. A Cronbach's alpha test was run to ensure the reliability of the constructs. There were no control variables used in this study, as its aim was not to develop a model to predict the two dependent variables using the independent variable; it rather focused on identifying relationships (if any) between the variables of interest.

In terms of testing the hypotheses, a Pearson's correlation coefficient test was conducted, as a means of measuring the statistical relationships relating to the variables of interest. To further prove the hypotheses relating to the direct relationships of interest, three linear-regression tests were exploited. Lastly, in terms of testing for the mediating relationships hypothesized in this study, a mediation analysis was conducted.

5. Findings and Discussion

5.1 Demographical Findings

Tables 1 and 2 display the demographical characteristics of (50) fresh graduates (respondents). Considering the gender and marital status, the demographical characteristics were collected considering analytical purposes.

Table 1
Sample demographical characteristics: Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	32	64%	64%	64%
	Male	18	36%	36%	100%
	Total	50	100%	100%	

Table 2
Sample demographical characteristics: Marital status

Marital status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	46	92%	92%	92%
	Married	4	8%	8%	100%
	Total	50	100%	100%	

As shown in Tables 1 and 2, the sample included (50) fresh graduates who are currently employed, as outlined in the methodology. As portrayed, it is evident that the number of females who participated in the questionnaire exceeds the number of males, in which females represent (64%) and males represent (36%) of the sample. As for the marital

status, the percentage of married respondents were far less than those who were single, where (92%) were single participants and (8%) were married.

The depicted pie charts in Figures 2 and 3 separately represent the demographical characteristics of the fresh graduates' sample.

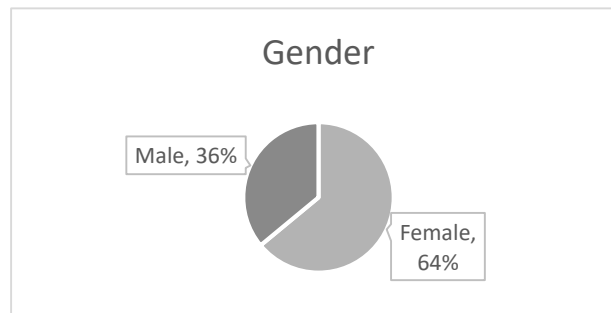


Figure (2)
Gender distribution of the sample

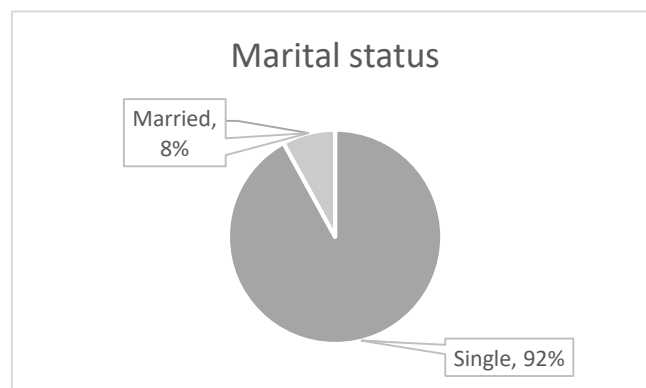


Figure (3)
Marital-status distribution of the sample

5.2 Descriptive Statistics

In this sub-section, the variables were evaluated in accordance with each response through the utilization of the central tendency, specifically the mean, in addition to what is known as a common measure of dispersion, the standard deviation.

As outlined in the methodology, a 5-point Likert scale was utilized for the calculation of the responses of the fresh graduates, with 1 set as strongly agree and 5 set as strongly

disagree. With (3) being the midpoint, the mean indicates a rating that is positive if it shows to be less than 3, otherwise a negative rating will be the case. In accordance with this and according to Table 3, it is evident that each variable was positively rated. It can also be observed that none of the standard deviation statistics was very high, all being notably less than 1.0. An overview statistic of each variable is illustrated in Table 3.

Table 3
Descriptive statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
Autonomy	50	2.2333	0.63976
Psychology	50	2.2200	0.73651
Loyalty	50	2.0650	0.65623
Innovative work behavior	50	1.8500	0.48445

5.3 Reliability Analysis

The reliability of the constructs of interest was tested to determine and ensure internal consistency. This was achieved through the conduction of a Cronbach's alpha test, which was completed through the selection of the "reliability" command on SPSS. Moreover, this specific parameter relates to a value ranging from 0 to 1. When the value is closer to the end of this range, (1), the internal consistency increases, along with the reliability of the items that are on the scale of the questionnaire of the study (Briz-Ponce, 2017). The rule of thumb towards the acceptance of the value of Cronbach's alpha was based on and facilitated by George and Mallery (2003): " $\alpha > 0.9$ = excellent, $\alpha > 0.8$ = good, $\alpha > 0.7$ = acceptable, $\alpha > 0.6$ = questionable, $\alpha > 0.5$ = poor, $\alpha < 0.5$ = unacceptable". Due to this, this study considered 0.7 to be the "acceptable" value of Cronbach's alpha. The findings of the reliability test are depicted in Table 4.

Table 4
Reliability Test

Cronbach's Alpha	No. of Items
0.819	16

As clearly shown in Table 4, the reliability statistics have proven to be above what is considered to be the minimum acceptable value of Cronbach's alpha. With the internal consistency being acceptable, the researchers of this study can confirm that all the constructs are reliable.

5.4 Hypothesis Testing

5.4.1 Correlations of Variables

Through the conduction of a Pearson's correlation coefficient test, the statistical relationships between the variables were successfully measured. The correlation coefficient, which is also referred to as Pearson's r ,

ranges between the values +1 and -1, with +1 being a correlation that is perfectly positive, holding the maximum strength that a positive relationship can possess and -1 being a correlation that is perfectly negative, holding the maximum strength that a negative relationship can possess. Moreover, a value of zero shows the absence of any type of linear correlation.

As demonstrated in Table 5, the p-values that relate to relationships of interest in the model of this study are all less than 0.05, proving significant correlations. However, due to the results of the correlation analysis, the researchers were able to achieve an additional finding, as it can also be noted that there is no statistically significant correlation between loyalty and innovative work behavior, the two dependent variables of the study. Additionally, it was found that there

is no direct statistical correlation between the independent variable (autonomy) and the dependent variable (loyalty).

In terms of the other three hypothesized direct relationships, the strongest positive correlation appeared to be between psychological well-being and employee loyalty, holding a correlation coefficient of ($r = 0.519$). A significant positive direct relationship was also apparent between autonomy and innovative work behavior ($r = 0.499$). A significant positive relationship was found between psychological well-being and innovative work behavior ($r = 0.377$) and a significant positive correlation was found between autonomy and psychological well-being ($r = 0.293$).

Table 5
Correlations matrix

Correlations					
		Autonomy	Psychology	Loyalty	Innovative work behavior
Autonomy	Pearson Correlation	1	0.293*	0.016	0.499**
	Sig. (2-tailed)		0.039	0.913	0.000
	N	50	50	50	50
Psychology	Pearson Correlation	0.293*	1	0.519**	0.377**
	Sig. (2-tailed)	0.039		0.000	0.007
	N	50	50	50	50
Employee Loyalty	Pearson Correlation	0.016	0.519**	1	0.208
	Sig. (2-tailed)	0.913	0.000		0.148
	N	50	50	50	50
Innovative work behaviour	Pearson Correlation	0.499**	0.377**	0.208	1
	Sig. (2-tailed)	0.000	0.007	0.148	
	N	50	50	50	50
* Correlation is significant at the 0.05 level (2-tailed).					
** Correlation is significant at the 0.01 level (2-tailed).					

5.4.2 Linear-regression Test

To further test the hypothesized direct relationships,

three different linear-regression tests were conducted, dealing with each relationship and dependent variable

separately. Tables 6 and 7 display the relevant results relating to the linear relationship between autonomy and psychological well-being. It can be concluded from Table 6 that 8.6% of the change in the dependent variable (psychological well-being in this relationship) can be explained by the change in the independent variable

(autonomy) in addition to the constant, as R Square = 0.086. Additionally, Table 7 proves that there is a significant relationship, as the p-value proves to be less than 0.05 and a positive relationship, as Beta = 0.293. This proves an impact of autonomy on psychological well-being.

Table 6
Linear-regression model summary: Autonomy impact on psychological well-being

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.293 ^a	0.086	0.067	0.71147
a. Predictors: (Constant), Autonomy				

Table 7
Linear-regression results: Autonomy impact on psychological well-being

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.466	0.369		3.976	0.000
	Autonomy	0.337	0.159	0.293	2.124	0.039
a. Dependent Variable: Psychology						

Tables 8 and 9 display the results of the test relating to the linear relationship between psychological well-being and loyalty. As portrayed in Table 8, it can be concluded that 26.9% of the change in the dependent variable (employee loyalty in this relationship) can be explained by the change in the independent variable (psychological well-being) in

addition to the constant, as R Square = 0.269. Additionally, Table 9 proves that there is a significant relationship, as the p-value proves to be less than 0.05 and a positive relationship, as Beta = 0.519. This proves a strong impact of psychological well-being on employee loyalty.

Table 8
Linear-regression model summary: Psychological well-being impact on employee loyalty

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.519 ^a	0.269	0.254	0.56685
a. Predictors: (Constant), Psychology				

Table 9
Linear-regression results: Psychological well-being impact on employee loyalty

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.039	0.257		4.044	0.000
	Psychology	0.462	0.110	0.519	4.204	0.000
a. Dependent Variable: Loyalty						

Tables 10 and 11 display the results of the test relating to the linear relationship between psychological well-being and innovative work behavior. As portrayed in Table 10, it can be concluded that 14.2% of the change in the dependent variable (innovative work behavior) can be explained by the change in the independent variable (psychological well-

being) in addition to the constant, as R Square = 0.142. Additionally, Table 11 proves that there is a significant relationship, as the p-value proves to be less than 0.05 and a positive relationship, as Beta = 0.377. This proves an impact of psychological well-being on innovative work behavior.

Table 10
Linear-regression model summary: Psychological well-being impact on innovative work behavior

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.377 ^a	0.142	0.124	0.45340
a. Predictors: (Constant), Psychology				

Table 11
Linear-regression results: Psychological well-being impact on innovative work behavior

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.300	0.205		6.325	0.000
	Psychology	0.248	0.088	0.377	2.818	0.007
a. Dependent Variable: Innovative work behavior						

5.4.3 Mediation Analysis

To test the hypothesized mediating relationships, a

mediation analysis has been conducted through the utilization of the tools written by Andrew F. Hayes.

The output relating to the mediating role of psychological well-being between autonomy and loyalty is displayed in

Tables 12 and 13.

Table 12

Mediation-analysis legends (1)

Y	Employee Loyalty
X	Autonomy
M	Psychological Well-being
Sample Size	50

Table 13

Effect of autonomy and psychological well-being on employee loyalty

OUTCOME VARIABLE: Loyalty			
Standardized coefficients	Coeff.	p	
Autonomy	-0.149	0.2524	
Psychological Well-being	0.5624	0.0001	

As shown in Table 13, psychological well-being (the mediator) proved to have a significant effect on employee loyalty, as $\text{Coeff.} = 0.5624$ ($p < 0.05$). Additionally, no significant direct effect was demonstrated by autonomy (the independent variable) on employee loyalty, as ($p > 0.05$). This proves that psychological well-being fully mediates the

relationship between autonomy and loyalty.

In terms of the mediating relationship regarding psychological well-being amid autonomy and innovative work behavior, a mediation analysis was also conducted and the results are displayed in tables 14 and 15.

Table 14

Mediation-analysis legends (2)

Y	Innovative Work Behavior
X	Autonomy
M	Psychological Well-being
Sample Size	50

Table 15

Effect of autonomy and psychological well-being on innovative work behavior

OUTCOME VARIABLE: Innovative work behavior			
Standardized Coefficients	Coeff.	p	
Autonomy	0.4255	0.0016	
Psychological Well-being	0.2521	0.0529	

As shown in Table 15, autonomy's effect on innovative work behavior is equivalent to $\text{Coeff.} = 0.4255$ and is significant as $p < 0.05$ ($p = 0.0016$); however, psychological well-being has no significant effect on innovative work behavior as $\text{Coeff.} = 0.2521$ ($p = 0.0529$). This indicates that psychological well-being does not mediate the relationship between autonomy and employee loyalty, but rather a direct and significant relationship exists between autonomy and innovative work behavior. Additionally, as proved by the linear regression and correlation matrix, a significant relationship exists between psychological well-being and innovative work behavior.

5.5 Summary of Results

After analyzing the data through the conduction of the correlation, linear regression and mediation analysis, the following findings were concluded. The autonomy of fresh graduates has a significant positive impact on their psychological well-being (accepting H1). Additionally, the psychological well-being of fresh graduates has a significant positive impact on their loyalty towards their employers (accepting H2). Moreover, the autonomy of fresh graduates has no direct impact on their loyalty (rejecting H3). It was also found that the psychological well-being of fresh graduates has a mediating impact on the relationship between their autonomy and loyalty (accepting H4) and the psychological well-being of fresh graduates has a significant positive impact on their innovative work behavior at work (accepting H5). Furthermore, the autonomy of fresh graduates has a significant positive direct impact on their innovative work behavior (accepting H6). However, the psychological well-being of fresh graduates does not have a mediating impact on the relationship between their autonomy and innovative work behavior (rejecting H7).

5.6 Discussion of Results

As previously mentioned, the researchers of this study found that autonomy has a positive impact on psychological well-being, which is consistent with the self-determination

theory (Deci & Ryan, 1985), along with the findings of Clausen et al. (2021), Madsen et al. (2017), Theorell et al. (2015) and Theorell et al. (2016), who suggested that autonomy is an essential determinant of well-being.

It was also found by this study that psychological well-being has a strong positive impact on loyalty, which is also aligned with past literature, specifically the organizational support theory (Eisenberger et al., 2001), which asserts that when companies facilitate employees with an environment that enhances their psychological well-being, the employees' attitude, behavior and commitment towards an organization is influenced, demonstrating strong evidence of a reciprocal relationship. Additionally, the findings support the claims of Krekel et al. (2019), who found that psychological well-being has an impact on employee retention. This study found that psychological well-being mediates the relationship between autonomy and loyalty, emphasizing its role. This finding supports the assertion of Lin and Ping (2016), in which it is suggested that when effect of autonomy is favorable, it allows workers to exercise and utilize their decision-making skills, which holds an influence on psychological states, ultimately and positively contributing to their level of organizational commitment.

This study provided evidence that psychological well-being positively impacts innovative work behavior. This can be further explained by past researchers, as they found that employees that are characterized as "happy" are associated with high levels of creativity, along with innovative work behavior (Ding & Yu, 2020; Wright & Cropanzano, 2004: 343; Joo et al., 2016).

The last hypothesis of this study was rejected, in which it was found that psychological well-being does not play a role as a mediator between autonomy and innovative work behavior. This contradicts Ko and

Yoo (2012), as they found that a positive relationship exists between autonomy and job satisfaction, in which job satisfaction mediated the relationship between autonomy and innovative work behavior. This topic has been debated in the literature, as many insist that well-being is highest when an individual successfully has met his or her social, material and psychological needs, autonomy being a key psychological need (Dolan et al., 2008).

6. Conclusion, Practical Implications and Future Research

6.1 Conclusion

This study concluded that when fresh graduates are granted autonomy in their early years in the work force, this will directly impact their mental health. This is important, as fresh graduates with autonomy incorporated in their work norms, allowing for higher levels of loyalty towards their employers due to their psychological well-being states. Additionally, psychological well-being has proved to be a cause for innovative work behavior. This demonstrates the highlighted benefit of maintaining a work force with positive psychological well-being, as this contributes to two important success factors in most organizations: loyalty and innovative work behavior. Although psychological well-being does not have a mediating role between the autonomy and innovative work behavior of fresh graduates, it can also be concluded that autonomy has a direct and strong relationship and impact on innovative work behavior, also magnifying the importance of introducing autonomy to the workplace during early stages in the career lifecycle of employees.

The current study contributes to the literature in a number of ways. First, it provides a focus on fresh graduates, which has limited coverage in previous studies. According to Grund & Rubin (2021), job autonomy can impact different age groups differently. Therefore, fresh graduates were examined separately from older employees with more years of experience, providing the literature with a more focused understanding. Additionally, the results of the current study assist in advancing the knowledge relating to proving the

importance of maintaining a happier staff and incorporating autonomy in management styles in order to achieve higher levels of innovative work behavior. Moreover, the current study answers the calls of Preenen et al. (2016), in which it was insisted that future researchers investigate the consequences of job autonomy on the employees of the firm, which the current study achieves by investigating job autonomy's relationship with the employees' psychological well-being, loyalty and innovative work behavior, filling a gap in the literature. Finally, the current study advances our knowledge in this field by adding a mediating variable in the relationship between autonomy and innovative behavior, which was recommended by Al-Mamary and Alshallaqi (2022).

6.2 Practical Implications

With the insight provided by the findings of the research, it is recommended that employers give their fresh graduate employees an emphasized amount of freedom to do their daily work tasks in the way that they see fit, as opposed to micromanaging them at this critical stage. This will not only keep them happy in the workplace, but will also secure the organization with loyal employees and top talent from the beginning, allowing these fresh graduates to commit to their companies instead of keeping an eye out for alternative options for their futures.

Additionally, the researchers of this study recommend that employers make it a priority to keep tabs on their staff's psychological well-being, with a strong emphasis on fresh graduates. Organizations that strive for internal innovative work behavior and the loyalty of their employees should continuously reflect on their management style, as it can leave employees at different psychological states. Promoting positive well-being will sway the company to favorable results, towards the best interest of both the firm itself and its workers.

6.3 Future Research

Future researchers in this field should consider conducting studies on more success factors and causal relationships relating to fresh graduates, as the available studies relating to them are still limited with much remaining to explore. The impact of autonomy on workplace motivation, performance and organizational outcomes when mediated by psychological well-being should be investigated. Additionally, future research should focus on investigating different variables that contribute to the psychological well-being of fresh graduates, which could serve as a tool for organizations to maximize benefits,

including loyalty. Some of these determinants (independent variables) that could be investigated include work-life balance, flexible working arrangements and different leadership styles.

Lastly, future researchers should apply the model of this study on different geographic areas, as the results may vary due to culture and values. This will provide the literature with a more generalized outlook on the matter of fresh graduates on a global scale and how to maximize their benefit to their companies, as well as to their own careers.

REFERENCES

- Aggarwal-Gupta, M., Vohra, N., & Bhatnagar, D. 2010. Perceived Organizational Support and Organizational Commitment: The Mediational Influence of Psychological Well-being. *Journal of Business & Management*, 16 (2).
- Aksoy, L., Keiningham, T.L., Buoye, A., Lariviere, B., Williams, L., & Wilson, I. 2015. Does Loyalty Span Domains? Examining The Relationship between Consumer Loyalty, Other Loyalties and Happiness. *Journal of Business Research*, 68 (12): 2464-2476.
- Ali, M.O., Tawfeq, A.O., & Dler, S.M. 2020. Relationship between Diversity Management and Human-resource Management: Their Effects on Employee Innovation in Organizations. *Black Sea Journal of Management and Marketing*, 1 (2): 36-44.
- Alkshali, S., & Badran, A. 2020. The Impact of Organizational Flexibility on Entrepreneurial Orientation Enhancement: A Field Study on Jordanian Information Technology Companies. *Jordan Journal of Business Administration*, 16 (1): 93-124.
- Allouzi, L. 2021. After Pandemic, Jordan Left with Thousands of Graduates and No Jobs - Jordan News: Latest News from Jordan, MENA. *Jordan News/Latest News from Jordan, MENA*. Retrieved on September 5, 2022, from: <https://www.jordannews.jo/Section-109/News/After-pandemic-Jordan-left-with-thousands-of-graduates-and-no-jobs-3607>
- Al-Mamary, Y.H., & Alshallaqi, M. 2022. Impact of Autonomy, Innovativeness, Risk-taking, Proactiveness and Competitive Aggressiveness on Students' Intention to Start a New Venture. *Journal of Innovation & Knowledge*, 7 (4): 200-239.
- Antoncic, J.A., & Antoncic, B. 2011. Employee Loyalty and Its Impact on Firm Growth. *International Journal of Management & Information Systems (IJMIS)*, 15 (1).
- Aristana, I. N., Arsawan, I. W. E., & Rustiarini, N. W. 2021. Employee Loyalty during Slowdown of Covid-19: Do Satisfaction and Trust Matter? *International Journal of Tourism Cities*, 8 (1): 223-243.
- Arnold, K. A. 2017. Transformational Leadership and Employee Psychological Well-being: A Review and Directions for Future Research. *Journal of Occupational Health Psychology*, 22 (3): 381-393.
- Benraiss-Noailles, L., & Viot, C. 2021. Employer Brand Equity Effects on Employees Well-being and Loyalty. *Journal of Business Research*, 126: 605-613.
- Briz-Ponce, L., Pereira, A., Carvalho, L., Juanes-Méndez, J.A., & García-Peñalvo, F.J. 2017. Learning with Mobile Technologies: Students' Behavior. *Computers in Human Behavior*, 72: 612-620.

- Clarke, A., Friede, T., Putz, R., Ashdown, J., Martin, S., Blake, A., & Stewart-Brown, S. 2011. Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Validated for Teenage School Students in England and Scotland. A Mixed Methods Assessment. *BMC Public Health*, 11 (1): 1-9.
- Clausen, T., Pedersen, L.R.M., Andersen, M.F., Theorell, T., & Madsen, I.E. 2021. Job Autonomy and Psychological Well-being: A Linear or a Non-linear Association? *European Journal of Work and Organizational Psychology*, 1-11.
- Csikszentmihalyi, M. 1996. *Flow and the Psychology of Discovery and Invention*. New York: Harper Collins.
- Daniels, K., & Harris, C. 2000. Work, Psychological Well-being and Performance. *Occupational Medicine*, 50 (5): 304-309. <https://doi.org/10.1093/occmed/50.5.304>
- Debus, M.E., Gross, C., & Kleinmann, M. 2020. The Power of Doing: How Job Crafting Transmits the Beneficial Impact of Autonomy among Overqualified Employees. *Journal of Business and Psychology*, 35 (3): 317-331
- Deci, E.A., & Ryan, R.M. 1985. *Intrinsic Motivation and Self-determination in Human Behavior*.
- Demircioglu, M.A. 2021. Sources of Innovation, Autonomy and Employee Job Satisfaction in Public Organizations. *Public Performance & Management Review*, 44 (1): 155-186.
- Ding, H., & Yu, E. 2020. Follower Strength-based Leadership and Follower Innovative Behavior: The Roles of Core Self-evaluations and Psychological Well-being. *Revista de Psicología del Trabajo y de las Organizaciones*, 36 (2): 103-110.
- Dolan, P., Metcalfe, R., Powdthavee, N., Beale, A., & Pritchard, D. 2008. Innovation and Well-being. *Innovation Index Working Paper*, London: NESTA.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D., & Rhoades, L. 2001. Reciprocation of Perceived Organizational Support. *Journal of Applied Psychology*, 86 (1): 42-51.
- Frijda, N.H. 1988. The Laws of Emotion. *American Psychologist*, 43: 349-358.
- George, D., & Mallery, P. 2003. *SPSS for Windows Step by Step: A Simple Guide and Reference*. 11.0 Update (4th edn.). Boston: Allyn & Bacon.
- Getchell, E.H. 1975. *Factors Affecting Employee Loyalty*. Doctoral Dissertation, Massachusetts Institute of Technology.
- Grund, C., & Rubin, M. 2021. The Role of Employees' Age in the Relation between Job Autonomy and Sickness Absence. *Journal of Occupational and Environmental Medicine*, 63 (9): 800-807.
- Hamdi, A.L. 2019. Impact of Psychological Empowerment (PE) on Organizational Citizenship Behavior (OCB) among the Employees of the National Social Security Fund of Laghouat, Algeria. *Jordan Journal of Business Administration*, 15 (1): 51-80.
- Hashim, K.L. 2021. Enhancing Innovative Work Behaviour of Malaysian Public-sector Employees. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6 (2): 253-265.
- Hughes, D.J., Lee, A., Tian, A.W., Newman, A., & Legood, A. 2018. Leadership, Creativity and Innovation: A Critical Review and Practical Recommendations. *The Leadership Quarterly*, 29 (5): 549-569.
- Isen, A.M., Daubman, K.A., & Nowicki, G.P. 1987. Positive Affect Facilitates Creative Problem-solving. *Journal of Personality and Social Psychology*, 52 (6): 1122.
- Janssen, O. 2000. Job Demands, Perceptions of Effort-reward Fairness and Innovative Work Behaviour. *Journal of Occupational and Organizational Psychology*, 73: 287-302.
- Joo, B.K., Park, J.G., & Lim, T. 2016. Structural Determinants of Psychological Well-being for Knowledge Workers in South Korea. *Personnel Review*, 45 (5): 1069-1086. <https://doi.org/10.1108/PR-01-2015-0011>
- Khoshnaw, S., & Alavi, H. 2020. Examining the Interrelation between Job Autonomy and Job Performance: A Critical Literature Review. *Multidisciplinary Aspects of Production Engineering*, 3 (1): 606-616.
- Ko, D., & Yoo, T. 2012. The Effect of Job Autonomy on Innovation Behavior: The Mediating Effect of Job Satisfaction and Moderating Effects of Personality and Climate for Innovation. *Korean Journal of*

- Industrial and Organizational Psychology*, 25 (1): 215-238.
- Krekel, C., Ward, G., & De Neve, J.E. 2019. Employee Well-being, Productivity and Firm Performance. *Saïd Business School WP*, 4.
- Lin, J.T.P., & Ping, N.C.L. 2016. Perceived Job Autonomy and Employee Engagement As Predictors of Organizational Commitment. *Undergraduate Journal of Psychology*, 29 (1): 1-16.
- Madsen, I.E., Nyberg, S.T., Hanson, L.M., Ferrie, J.E., Ahola, K., Alfredsson, L., ..., & IPD-Work Consortium. 2017. Job Strain As a Risk Factor for Clinical Depression: Systematic Review and Meta-analysis with Additional Individual Participant Data. *Psychological Medicine*, 47 (8): 1342-1356.
- Martin, L.L., & Stoner, P. 1996. *Mood As Input: What We Think about How We Feel Determines How We Think*.
- Matzler, K., & Renzl, B. 2006. The Relationship between Interpersonal Trust, Employee Satisfaction and Employee Loyalty. *Total Quality Management and Business Excellence*, 17 (10): 1261-1271.
- Mowday, R.T., Steers, R.M., & Porter, L.W. 1979. The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, 14 (2): 224-247.
- Mumtaz, S., & Parahoo, S.K. 2019. Promoting Employee Innovation Performance: Examining the Role of Self-efficacy and Growth Need Strength. *International Journal of Productivity and Performance Management*, 69 (4): 704-722. <https://doi.org/10.1108/IJPPM-12-2017-0330>
- Pang, E., Wong, M., Leung, C.H., & Coombes, J. 2019. Competencies for Fresh Graduates' Success at Work: Perspectives of Employers. *Industry and Higher Education*, 33 (1): 55-65.
- Parto, M., & Besharat, M.A. 2011. Mindfulness, Psychological Well-being and Psychological Distress in Adolescents: Assessing The Mediating Variables and Mechanisms of Autonomy and Self-regulation. *Procedia-Social and Behavioral Sciences*, 30: 578-582.
- Preenen, P.T., Oeij, P.R., Dhondt, S., Kraan, K.O., & Jansen, E. 2016. Why Job Autonomy Matters for Young Companies' Performance: Company Maturity As a Moderator between Job Autonomy and Company Performance. *World Review of Entrepreneurship, Management and Sustainable Development*, 12 (1): 74-100.
- Rasulzada, F. 2007. *Organizational Creativity and Psychological Well-being*. Lund, Sweden: Lund University.
- Saleh, A., & Bista, K. 2017. Examining Factors Impacting Online Survey Response Rates in Educational Research: Perceptions of Graduate Students. *Journal of MultiDisciplinary Evaluation*, 13 (29): 63-74.
- Sazkaya, M.K., & Dede, Y.E. 2018. The Mediating Role of Employee Loyalty between Employee Empowerment and Employee Innovative Behavior: A Study from Teknopark Istanbul. *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 8 (1): 55-82.
- Scott, S.G., & Bruce, R.A. 1994. Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Academy of Management Journal*, 37 (3): 580-607.
- Steinberg, L. 1990. *Autonomy, Conflict and Harmony in the Family Relationship*.
- Theorell, T., Hammarström, A., Aronsson, G., Bendz, L. T., Grape, T., Hogstedt, C., & Hall, C. 2015. A Systematic Review Including Meta-analysis of Work Environment and Depressive Symptoms. *BMC Public Health*, 15 (1): 1-14.
- Theorell, T., Jood, K., Järvalm, L.S., Vingård, E., Perk, J., Östergren, P.O., & Hall, C. 2016. A Systematic Review of Studies in the Contributions of the Work Environment to Ischaemic Heart Disease Development. *The European Journal of Public Health*, 26 (3): 470-477.
- Tomic, I., Tesic, Z., Kuzmanovic, B., & Tomic, M. 2018. An Empirical Study of Employee Loyalty, Service Quality, Cost Reduction and Company Performance. *Economic Research-Ekonomska Istraživanja*, 31 (1): 827-846.
- Uzair, M., Razzaq, W., Sarfraz, M., & Nisar, Q.A. 2017. Impact of HR Practices on Employee Loyalty and Commitment: Mediating Role of Job Satisfaction. *International Journal of Management Excellence*, 9 (2): 1067-1073.

- van Hoorn, A. 2018. How Much Does Job Autonomy Vary Across Countries and Other Extra-organizational Contexts? *The International Journal of Human Resource Management*, 29 (2): 420-463.
- Van Woerkom, M., & Meyers, M.C. 2015. My Strengths Count! Effects of a Strengths-based Psychological Climate on Positive Affect and Job Performance. *Human Resource Management*, 54 (1): 81-103. [https:// doi.org/10.1002/hrm.21623](https://doi.org/10.1002/hrm.21623)
- Voydanoff, P. 2004. The Effects of Work Demands and Resources on Work-to-Family Conflict and Facilitation. *Journal of Marriage and Family*, 66 (2): 398-412.
- Wright, T.A., & Cropanzano, R. 2000. Psychological Well-being and Job Satisfaction as Predictors of Job Performance. *Journal of Occupational Health Psychology*, 5 (1): 84-94. <https://doi.org/10.1037/1076-8998.5.1.84>
- Wright, T.A., & Cropanzano, R. 2004. The Role of Psychological Well-being in Job Performance: A Fresh Look at an Age-old Quest. *Organizational Dynamics*, 33 (4): 338-351. <https://doi.org/10.1016/j.orgdyn.2004.09.002>
- Xerri, M.J., & Brunetto, Y. 2013. Fostering Innovative Behaviour: The Importance of Employee Commitment and Organizational Citizenship Behaviour. *International Journal of Human Resource Management*, 24 (16): 3163-3177.