

Employee Autonomy and Employee Creativity: The Mediating Role of Intrinsic Motivation

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How to cite this paper: Alhassan, Y.M., Akparep, J.Y. and Ngmenkpieo, F. (2022). Employee Autonomy and Employee Creativity: The Mediating Role of Intrinsic Motivation. *Open Journal of Leadership*, 11, 356-369.

<https://doi.org/10.4236/ojl.2022.114019>

Received: August 21, 2022

Accepted: November 5, 2022

Published: November 8, 2022

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Abstract

Globally, improving the degree of self-development of workers is very critical for companies to promote sustainable development. In an attempt to find an appropriate way to motivate and empower employees to be creative, organizations and management experts have come to realize that employees' operational autonomy and intrinsic motivation are paramount. This research explores how the connection between employee autonomy and employee innovation is mediated by employee intrinsic motivation. Using the Hayes Process model of mediation, we collected and analyzed data from a sample of 133 employees of selected institutions in Ghana. The findings show that the relationship between employee autonomy and employee creativity is mediated by employee intrinsic motivation. Thus, our analysis found that there is a significant connection between employee autonomy and creativity. Also, there was a significant relationship between employee autonomy and intrinsic motivation. Equally, we realized a significant relationship between intrinsic motivation and employee creativity. These findings highlight the need to develop more strategies and principles of motivation in organizations. The study recommends that policymakers in organizations attach the necessary attention to the intrinsic side of employees' motivation for better performance to spur productivity.

Keywords

Employee Autonomy, Intrinsic Motivation, Employee Creativity, Self-Determination Theory, Mediation Analysis

1. Introduction

According to [Pascale et al. \(2001\)](#), the business environment of organizations experiences constant changes and the survival of organizations within that turbulence depends on their ability to innovate and adapt to the environment. The human capital theory suggests that the employee of the firm is a unique competence that produces innovation through the unique ability to be creative ([Tan, 2014](#)). Work has become increasingly knowledge-based in the 21st century and it takes only creative employees to achieve innovation for their organizations ([Fischer et al., 2019](#)).

Based on the above, there have been several efforts by management scholars and professionals to create an internal organizational environment conducive enough to propel creativity, innovation, and adaptation among employees to enhance the survival of their organizations within the turbulent business environment ([Pascale et al., 2001](#); [Glasberg & Ouerghemi, 2011](#)). The individual creative behaviors of employees are keys to promoting organizational creativity and innovation ([McGregor, 1960](#)). In support of this argument, [Unsworth and Parker \(2003\)](#) argue that individual employee creativity contributes significantly to the performance of organizations. [De Jong and Den Hartog \(2007\)](#) suggest that organizations would be more innovative if they rely on and make use of the innovative capabilities of their employees. Further, [Glasberg and Ouerghemi \(2011\)](#) suggest that human behavior plays a major role in the innovative behaviors of the organization. Employee behavior is greatly determined by several factors, but the most important ones are incentive and reward systems (motivation) and organizational culture ([Nacinovic et al., 2009](#)).

An existing study suggests that employee autonomy plays a significant role in stimulating the needed creativity among employees ([Sia & Appu, 2015](#)). While studies are stressing the importance of employee autonomy, some organizations reduce it to mere employee empowerment through participation. However, the 21st-century employee needs more than participation to get the best part of his or her creative and innovative abilities for the organization ([Weinstein et al., 2012](#)). Therefore, understanding the relationships that exist among employee autonomy, intrinsic motivation, and employee creativity will help advance our knowledge of what facilitates organizations' adaptability and innovation. Much has been done in the fields of employee autonomy, intrinsic motivation, and employee creativity. Also, it can be seen that all the concepts (employee autonomy, intrinsic motivation, and employee creativity) are of critical importance to the theory of Self-Determination (SDT) ([Fischer et al., 2019](#)). It is in light of this that some scholars proposed the SDT as a working and a reliable framework for understanding the employee and his/her work attitude.

It is however obvious that fewer attempts have been made to comprehend the connections among employees' autonomy, creativity, and intrinsic motivation. This research aims to understand how the relationships between workers' autonomy and their creativity are mediated by their intrinsic motivation. This

study assesses and provides empirical evidence on whether intrinsic motivation mediates the interaction of employee autonomy and employee creativity among Ghanaian workers. This study, therefore, finds out whether there is a relationship between employee autonomy and employee creativity. It also assesses the relationship between employee autonomy and intrinsic motivation. Finally, it investigates whether intrinsic motivation mediates the relationship between employee autonomy and employee creativity.

2. Literature Review

This section explores evidence in literature on the relationships among the variables under study in the research. In doing that, the mediating role of employee intrinsic motivation on the link between employee autonomy and employee creativity are looked at.

2.1. Employee Autonomy and Employee Intrinsic Motivation

Amabile (1988) states that an organizational environment that promotes employee operational autonomy promotes employee creativity. This was a result of research the author conducted to construct a model of individual creativity and how it influences organizational innovation. However, the research did not find any mediation effect of the intrinsic motivation in the relationship between workplace autonomy and creative performance. In line with the author's conclusion is the finding of *Choi et al. (2009)* that close monitoring of employees positively relates to employee creativity. Their study was based on a survey of Canadian employees across different industries. This research, however, did not deal much with the strength of the relationship since it was set out to identify some organizational features that inhibit employee creativity. *Ben-Hur and Kinley (2016)* try to help managers understand the concept of intrinsic motivation and how employee behavior can be changed. They discussed the concept and provided its components. The authors noted that intrinsic motivation is comprised of; autonomy, mastery, and connection. They recommended that managers should foster employees' feelings of autonomy, mastery, and connection to increase intrinsic motivation among their employees. However, they did not conduct an empirical study to test the model they have presented. *Choong et al. (2014)* notes that workplace autonomy and workers' intrinsic motivation are significantly related. They made this conclusion after surveying 203 academic staff in Malaysia's private universities about the link between workers' autonomy and their intrinsic motivation and how they contribute to organizational commitment. With this, they indicated that the connection between employees' autonomy and their intrinsic motivation plays a key role in fostering organizational commitment. However, these conclusions were based on self-reported data. Also, the study was a cross-sectional one and this affects the generalizability of the study.

H1: employee autonomy positively relates to employee intrinsic motivation.

2.2. Intrinsic Motivation and Employee Creativity

The impact of employee intrinsic motivation on employee creativity may be controversial (Wang et al., 2021). Lempiälä and Vanharanta (2018) recognize personal interest and organizational gain as the innovators' two motivational drivers and explored how they work in determining the level of intrinsic motivation of innovators towards innovative efforts. They found out that, even though it is necessary to set boundaries for the creative activities of innovators for organizational benefits, it is equally important for innovators to have a sense of autonomy. The study findings acknowledged the importance of intrinsic motivation on employee well-being and creativity. However, the researchers used a case study method which is dependent on a few cases. These findings are similar to those of Li et al. (2018) who found that intrinsic motivation links employee autonomy to employee creativity. Dewett (2007) conducted a study of 165 R & D personnel from organizations in the USA. The researchers note that intrinsic motivation is a major precedent for the creativity of employees. Also, a task-based measure of intrinsic motivation was used and found to be appropriate; meaning managers could manipulate employee intrinsic motivation using work tasks. However, his study findings were based on self-reported data. Gupta and Banerjee (2016), in an attempt to create antecedents of organizational creativity model at a Multi-level approach, identified several factors including employee creativity and intrinsic motivation as the antecedents of firm creativity. They asserted that organizational creativity is comprised of individual creativity and group/team creativity. They further observed that employee intrinsic motivation promotes employee creativity. However, this study was a literature review and did not test its model with empirical evidence. Saari (2012) sets out to further understand the concept of intrinsic motivation from the perspectives of psychology and neuroimaging. To clarify the idea of intrinsic motivation, the author adopted a critical analysis of research. The study revealed a positive association of intrinsic motivation and variables like persistence, conceptual learning, innovation, and both hedonic and eudaimonic well-being. However, the analysis was not based on empirical data. This affects the generalizability of the findings of the analysis. In another study, intrinsic motivation is seen to partially mediate the link between authoritarian-benevolent leadership and students' creativity (Xia et al., 2021). This means that intrinsic motivation of employees impacts their creativity.

H2: employee intrinsic motivation positively relates to employee creativity.

2.3. Employee Autonomy and Employee Creativity

Lempiälä and Vanharanta (2018) suggest that creative innovators need a high sense of autonomy to exhibit their innovative behaviors for the benefit of the organization. They tried to comprehend by re-conceptualizing the paradox of control-freedom in guiding and inspiring innovators in their research. In the study, they analyzed several studies systematically and conducted case studies.

They finally concluded that it is essential to set boundaries for innovators but it is equally important to provide a high level of autonomy so that they can be creative. However, the researchers used a case study method which is dependent on a few cases. [Sia and Appu \(2015\)](#) found a similar relationship between employee autonomy and employee creativity. In their study, they realized that work autonomy provided and promoted creativity within the organization. However, self-reported data were used in their analysis which could expose the study to biases of respondents. [Ekmekçi and Tekin \(2011\)](#) support the argument that employee autonomy is related positively to employee creativity. Their view is based on an empirical study conducted among 154 employees and supervisors in two organizations that operate in the white-goods sector of Turkey. They tried to find out the relationship between work environment and organizational creativity. However, the subject of the study was organizational creativity. Notwithstanding this, the results are still relevant because organizational creativity comprises of individual and team creativity ([Gupta and Banerjee, 2016](#)).

H3: employee autonomy relates positively to employee creativity.

3. Conceptual Framework for This Study

For this study, the researchers propose the following framework for the analysis of the hypothesis:

Figure 1. A theoretical framework of the study noting that employee autonomy relates with employee creativity and employee intrinsic motivation mediates that relationship.

Based on **Figure 1**, the study tests the following general hypothesis:

H: intrinsic motivation mediates the relationship between employee autonomy and employee creativity.

4. Methodology

4.1. Research Design, Population and Sample

In this study, a survey design was adopted in an attempt to collect data to address the research problem. Thus, a survey was conducted with the help of a questionnaire. The target population for this study was workers of organizations in the private sector of Ghana. 200 questionnaires were administered but 133

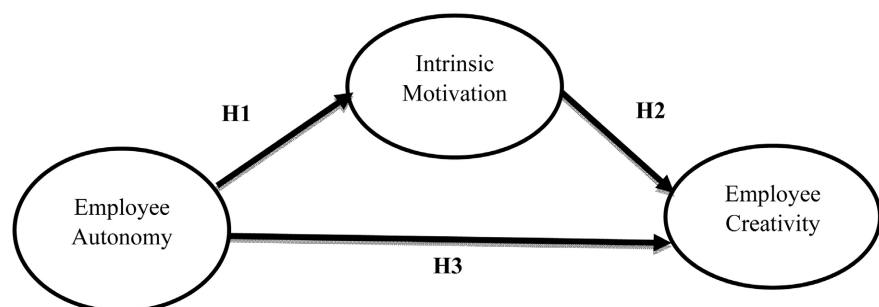


Figure 1. The mediation model for this study. Source: Literature analysis.

questionnaires were retrieved at the end of the data collection, representing 66.5% response rate. In completing the questionnaires, we informed the respondents that there were no right or wrong answers. We assured respondents of their anonymity and confidentiality of their responses. The sample was obtained using a convenience sampling technique. This is similar to the method employed by Nili and Tasavori (2022) when gathering data regarding employee creativity in Iran. Data obtained was analyzed using PROCESS 3.4v in the SPSS software.

4.2. Measures

Authorship/Self-congruence: This construct examines how someone's ideas, wants, and priorities influence their behavior (Deci & Ryan, 1985; Koestner & Losier, 2002). Respondents rated how well the items reflected the reasons why basic rules are crucial for intrinsic motivation on a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, "My decisions represent my most important values and feelings." Internal consistency is equal to .852.

Interest-taking: The concept assesses how organizational agents focus on internal and external events instinctively and freely (Weinstein et al., 2012). Participants reported the extent to which the items show the reasons why fewer central control structures are required for employee intrinsic motivation on a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). For instance, "I often reflect on why I react the way I do." It has an internal consistency of $\alpha = .846$.

Susceptibility to Control: This construct attempts to understand how an individual employee is externally regulated and/or responds to authority-imposed control pressures. It is made up of five Likert-type items with responses ranging from 1 (strongly disagree) to 5 (strongly agree) (strongly agree). For instance, "I do things in order to avoid feeling bad about myself." This autonomy antecedent had an internal consistency of .774.

Intrinsic Motivation: It is claimed that the variables of employee freedom will result in employee intrinsic motivation. According to Amabile (1988), this will encourage employees to be more creative. Respondents indicated their intrinsic motivation for work on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, "I enjoyed doing my job very much." Internal consistency for this measure is .790.

Employee Creativity: The constructs used in this study to assess employee creativity were adapted from Rice (2006). This consists of a nine-item scale on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) on which respondents rate their creative behaviors. For example, "My boss feels that I am creative in my job." This measure's internal consistency was = .860.

5. Results

The researchers used the PROCESS macro developed by Hayes (2013) to analyze

and test the hypotheses in SPSS. This was accompanied by a basic mediation analysis using Model 4 of the PROCESS macro. First of all, a normality test was conducted in SPSS to determine whether the data was appropriate for the intended analysis. Then, employee creativity was moved into the Outcome Variable (Y) box, employee autonomy placed in the Independent Variable (X) box, and employee intrinsic motivation put in the M Variable(s) box. Model number 4, as suggested by Hayes (2013), gives a relationship between employee autonomy and employee creativity and the same link through employee intrinsic motivation.

5.1. Descriptive Statistics

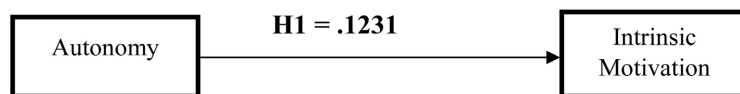
| Variables | N | Mean | SD | Skewness | Kurtosis |
|-------------------------------|-----|-------|--------|----------|----------|
| Employee Creativity | 133 | 33.78 | 6.34 | -.849 | .202 |
| Employee Autonomy | 133 | 50.68 | 11.773 | -.313 | -.363 |
| Employee Intrinsic Motivation | 133 | 26.09 | 5.204 | -.433 | -.082 |

Source: From data analysis.

After checking for the normality of the data, it was noticed that employee creativity was negatively skewed a bit. However, there was no problem with kurtosis. The other variables such as employee autonomy and employee intrinsic motivation do not have any problems with skewness and kurtosis. Due to this, the data was used in conducting the mediation analysis.

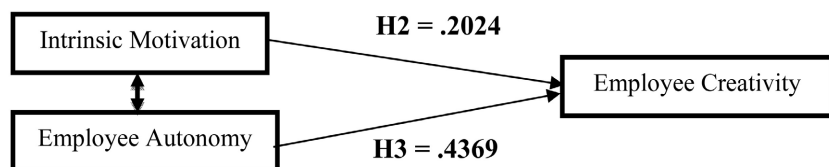
5.2. Simple Mediation Results

The researchers used OLS regression during the analysis. This suggests that the mediation model be divided into the following regression models:



Source: Data Analysis.

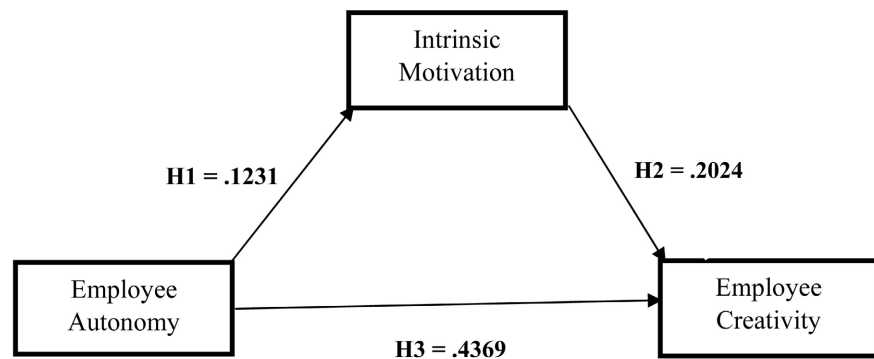
From the simple regression analysis, it is noted that employee autonomy positively and significantly predicts employee intrinsic motivation at $H1 = .1231$, $SE = .0371$, and $p < .001$. Thus, the coefficient shows the direct effect of employee autonomy on employee intrinsic motivation within the path model at a standardized path coefficient of $R = .2784$.



Source: Data Analysis.

It is realized from the second regression that both employee intrinsic motivation and employee autonomy significantly and positively predict employee creativity at ($H2 = .2024$, $SE = .0398$, $p < .001$) and ($H3 = .4369$, $SE = .0901$, $p < .001$) respectively. Thus, these coefficients show the direct effects of both employee intrinsic motivation and employee autonomy on employee creativity in the path model. Also, the standardized path coefficients for that part of the model are .3584 and .3757 for intrinsic motivation and employee autonomy respectively.

Therefore, the results of the complete model of the mediation are presented below:



Source: Data analysis.

The unstandardized indirect effect (.0249) of intrinsic motivation was obtained by multiplying paths **H1** (.1231) and **H2** (.2024) in the regression analysis and models. Using bootstrap standard errors and confidence intervals, the researchers conducted a test for the indirect effect. From the analysis, there is no zero between the lower (.0182) and upper (.1047) bound of the confidence interval (at 95%) of the indirect effect coefficients. Therefore, the null hypothesis that the indirect effect of employee autonomy through intrinsic motivation on the population's creativity is rejected. Hence, the alternative hypothesis is maintained.

Also, the total effect of X (employee autonomy) on Y (employee creativity) was computed as a sum of Direct Effect + Indirect Effect = $.4369 + .0249 = .4618$. With this, there is no zero between the lower and upper bounds of the 95% confidence interval. Therefore, we can conclude that the total effect of employee autonomy on employee creativity is significant.

Summary of Findings:

- 1) **H1** is maintained as it is significant at $a = .1231$ with a $p < .001$.
- 2) **H2** is also maintained as it is significant at $b = .2024$ with a $p < .001$.
- 3) **H3** is accepted as it is positive and significant at $c = .4369$ with a $p < .001$.
- 4) **H** is accepted as an indirect effect of employee autonomy on employee creativity is positive and significant at $IE = .0249$ with **LLCI** (.0182) and **ULCI** (.1047).

6. Discussions

The findings of the study showed that there is a positive link between workers'

autonomy and their intrinsic motivation. This is consistent with the belief of [Gagne and Deci \(2005\)](#) that the freedom of employees stimulates intrinsic motivation among employees within an adaptive system (organization). Thus, when organizational agents are given autonomy to own and control their activities, they develop intrinsic motivation to carry out their activities towards the success of the organization. With this, it is believed that employee autonomy is fundamental in promoting employee intrinsic motivation. They, therefore, suggest that creating autonomy will help promote choice in the delivery of social policies.

As for [Ben-Hur and Kinly \(2016\)](#), creating autonomy (choice and control) among employees is a fundamental way of fostering intrinsic motivation. Consistent with this, [Pascale et al. \(2001\)](#) suggested that the existence of few and simple rules within the organization creates an environment suitable for organizational agents to exhibit intrinsic motivation behaviors in performing their tasks. Pascale and his colleagues are not alone in their opinion. For example, [Amabile \(1988\)](#) concluded after his research that the freedom of individual employees is crucial in harnessing the innovative behaviors of employees. This opinion was based on a research finding that suggested that about 74% of the surveyed population made specific reference to operational autonomy as a key ingredient for enhancing their intrinsic motivation. Finally, it is argued that in the literature that autonomy stimulates employees' ability to exhibit spontaneous behaviors. This is seen to be positively related to employee intrinsic motivation.

This analysis reveals that one of the variables impacting the development of creative behaviors among employees is the intrinsic motivation of employees. Thus, intrinsic motivation impacts positively on employee creativity. This supports the findings of [Hassan et al. \(2013\)](#) that the intrinsic motivation of employees is one of the key antecedents of their creativity. This is like the belief of [Hennessey and Amabile \(2010\)](#) that intrinsic motivation facilitates the development of creative behaviors of humans. Thus, when there is an intrinsic motivation of an individual in performing a task, there will be strong chances for the individual to become creative in it. For [Dewett \(2007\)](#), the intrinsic desire of an individual to perform a task is one of the crucial antecedents of the individual to be creative in performing. This suggests that employee creativity is dependent on the intrinsic motivation of the employees and that every organization that seeks creativity should promote the development of intrinsic motivation among its workers. Also, in a separate study, [Shin and Zhou \(2003\)](#) realized that intrinsic motivation is one of the antecedents of creativity by studying employees and their supervisors. All these studies support the argument that intrinsic motivation is one of the issues that explain creativity among people.

7. Conclusions and Policy Implications

To conclude, the findings of the study reveal that there was a significant and positive relationship between the levels of employee autonomy and employee intrinsic motivations. This means high levels of employee freedom will mean a

correspondingly high level of employee intrinsic motivation. Also, further analysis reveals that there is a significant relationship between employee intrinsic behaviors/motivation and employee creativity. Thus, the results of this study are consistent with the majority of previous findings that suggest that the higher the level of employee freedom, the higher the level of employee intrinsic motivation and hence higher levels of employee creativity. This suggests that organizations that seek to become creative and innovative in the long-run would find it imperative to create an organizational environment that promotes higher employee autonomy.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Amabile, T. (1988). A Model of Creativity and Innovation in Organizations. *Research in Organizational Behavior*, 10, 123-167.
- Ben-Hur, S., & Kinley, N. (2016). *Intrinsic Motivation: The Missing Piece in Changing Employee Behaviour*. International Institute for Management Development. <https://www.imd.org/research/perspectives-for-managers/intrinsic-motivation-the-missing-piece-in-changing-employee-behavior/>
- Choi, J. N., Anderson, T. A., & Veillette, A. (2009). Contextual Inhibitors of Employee Creativity in Organizations: The Insulating Role of Creative Ability. *Group and Organization Management*, 34, 330-357. <https://doi.org/10.1177/1059601108329811>
- Choong, Y. O., Tunku, U., & Rahman, A. (2014). The Relationships of Intrinsic Motivation and Job Autonomy with Organizational Commitment: An Empirical Study. *Australian Journal of Basic and Applied Sciences*, 8, 343-351.
- De Jong, J. P., & Den Hartog, D. D. (2007). How Leaders Influence Employees' Innovative Behaviour. *European Journal of Innovation Management*, 10, 41-64.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Plenum Press. <https://doi.org/10.1007/978-1-4899-2271-7>
- Dewett, T. (2007). Linking Intrinsic Motivation, Risk Taking, and Employee Creativity in an R&D Environment. *R&D Management*, 37, 197-208. <https://doi.org/10.1111/j.1467-9310.2007.00469.x>
- Ekmekçi, A. K., & Tekin, B. (2011). The Examination of the Relationship between Creativity and Work Environment Factors with a Research in White-Goods Sector in Turkey. *Öneri Dergisi*, 9, 51-74.
- Fischer, C., Malycha, C. P., & Schafmann, E. (2019). The Influence of Intrinsic Motivation and Synergistic Extrinsic Motivators on Creativity and Innovation. *Frontiers in Psychology*, 10, Article No. 137. <https://doi.org/10.3389/fpsyg.2019.00137>
- Gagne, M., & Deci, E. L. (2005). Self-Determination Theory and Work Motivation. *Journal of Organizational Behavior*, 26, 331-362. <https://doi.org/10.1002/job.322>
- Glasberg, R., & Ouerghemi, K. (2011). Innovation in Human Resources. A theoretical Advancement on Employee Motivation and Organisational Innovation. *2nd International Conference on Economics, Business and Management*, IACSIT Press, Singapore, IPEDR, vol. 22, 7-11.

- Gupta, R., & Banerjee, P. (2016). *Antecedents of Organisational Creativity: A Multi-Level Approach*. *Business: Theory and Practice*, 17, 167-177. <https://doi.org/10.3846/btp.2016.624>
- Hassan, M. U., Malik, A. A., & Hasnain, A. (2013). Measuring Employee Creativity and Its Impacts on Organizational Innovation Capacity and Performance in the Banking Sector of Pakistan. *World Applied Sciences Journal*, 24, 949-959.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. The Guilford Press.
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology*, 61, 569-598. <https://doi.org/10.1146/annurev.psych.093008.100416>
- Koestner, R., & Losier, G. F. (2002). Distinguishing Three Ways of Being Highly Motivated: A Closer Look at Introjection, Identification, and Intrinsic motivation. In E. L. Deci, & R. M. Ryan (Eds.), *Handbook of Self-Determination Research* (pp. 101-121). University of Rochester Press.
- Lempiälä, T., & Vanharanta, O. (2018). Rethinking the Control-Freedom Paradox in Innovation: Toward a Multifaceted Understanding of Creative Freedom. *Journal of Applied Behavioral Science*, 54, 62-87. <https://doi.org/10.1177/0021886317727458>
- Li, H., Li, F., & Chen, T. (2018). A Motivational-Cognitive Model of Creativity and the Role of Autonomy. *Journal of Business Research*, 92, 179-188. <https://doi.org/10.1016/j.jbusres.2018.07.025>
- McGregor, D (1960). *The Human Side of Enterprise*. McGraw-Hill.
- Nacinovic, I., Galetic, L., & Cavlek, N. (2009). Corporate Culture and Innovation : Implications for Reward Systems. *World Academy of Science, Engineering and Technology*, 53, 397-402.
- Nili, F., & Tasavori, M. (2022). Linking an Autonomy-Supportive Climate and Employee Creativity: The Influence of Intrinsic Motivation and Company Support for Creativity. *European Business Review*, 34, 666-688. <https://doi.org/10.1108/EBR-06-2021-0146>
- Pascale R. T., Mark M., & Linda G. (2001). *Surfing the Edge of Chaos*. Three Rivers.
- Rice, G. (2006). Individual Values, Organizational Context, and Self-Perceptions of Employee Creativity: Evidence from Egyptian Organizations. *Journal of Business Research*, 59, 233-241. <https://doi.org/10.1016/j.jbusres.2005.08.001>
- Saari, P. (2012). Intrinsic Motivation. Psychological and Neuroscientific Perspectives (pp. 507-537). oai: DiVA.org: his-6862.
- Shin, S., & Zhou, J. (2003). Transformational Leadership, Conservation, and Creativity: Evidence from Korea. *Academy of Management Journal*, 46, 703-714. <https://doi.org/10.5465/30040662>
- Sia, S. K., & Appu, A. (2015). Work Autonomy and Workplace Creativity: Moderating Role of Task Complexity. *Global Business Review*, 16, 772-784. <https://doi.org/10.1177/0972150915591435>
- Tan, E. (2014). Human Capital Theory: A Holistic Criticism. *Review of Educational Research*, 84, 411-445. <https://doi.org/10.3102/0034654314532696>
- Unsworth, K. L., & Parker, S. K. (2003). *Pro-Activity and Innovation: Promoting a New Workforce for the New Workplace*. In T. Holman, T. D. Wall, C. W. Clegg, P. Sparrow, & A. Howard (Eds.), *The New Workplace: A Guide to the Human Impact of Modern Work Practices* (pp. 175-196). Wiley.
- Wang, L., Cui, Y., Wang, X., Wang, J., Du, K., & Luo, Z. (2021). Regulatory Focus, Motivation, and Their Relationship with Creativity among Adolescents. *Frontiers in Psychology*, 12, Article ID: 666071. <https://doi.org/10.3389/fpsyg.2021.666071>

- Weinstein, N., Przybylski, A. K., & Ryan, R. M. (2012). The Index of Autonomous Functioning: Development of a Scale of Human Autonomy. *Journal of Research in Personality, 46*, 397-413. <https://doi.org/10.1016/j.jrp.2012.03.007>
- Xia, Z., Yang, F., & Xu, Q. (2021). Authoritarian-Benevolent Leadership and Its Effect on Graduate Student Creativity: The Mediating Role of Intrinsic Motivation. *The Journal of Creative Behavior, 55*, 25-38. <https://doi.org/10.1002/jocb.431>

Appendix

Questionnaire

This survey is intended to collect data on the following topic: “Employee Autonomy, Intrinsic Motivation and Employee Creativity: Exploring their Linkages” The information generated from this questionnaire is purely for academic purposes only. Respondents are assured of confidentiality about the information provided. Please indicate the degree to which you agree or disagree with the following statements by ticking your most appropriate answer. Thank you in advance for your kind cooperation.

1. Gender

- 1) Male
- 2) Female

2. Level of Education

- 1) No education
- 2) Below undergraduate
- 3) Undergraduate
- 4) Masters
- 5) Ph.D.

3. What is your occupation?

4. Please indicate how true each statement is of your experiences on the whole.

Please answer according to what really reflects your experience rather than what you think your experience should be. Items are paired as: 1 = “not at all true”, 2 = “a bit true”, 3 = “somewhat true”, 4 = “mostly true”, and 5 = “completely true.”

Authorship/self-congruence

- 1) My decisions represent my most important values and feelings.
- 2) I strongly identify with the things that I do.
- 3) My actions are congruent with who I really am.
- 4) My whole self stands behind the important decisions I make.
- 5) My decisions are steadily informed by things I want or care about.

Susceptibility to control

- 6) I do things in order to avoid feeling badly about myself.
- 7) I do a lot of things to avoid feeling ashamed.
- 8) I try to manipulate myself into doing certain things.
- 9) I believe certain things so that others will like me.
- 10) I often pressure myself.

Interest-taking

- 11) I often reflect on why I react the way I do.
- 12) I am deeply curious when I react with fear or anxiety to events in my life.
- 13) I am interested in understanding the reasons for my actions.
- 14) I am interested in why I act the way I do.
- 15) I like to investigate my feelings.

Adapted from **Weinstein et al. (2012)**.

5. Please indicate the degree to which you agree or disagree with the following statements by ticking your most appropriate answer. Items are: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree and 5 = Strongly Agree.

- 1) My boss feels that I am creative in my job.
- 2) I experiment with new approaches to doing my job.
- 3) I am on the lookout for new ideas from all the people with whom I interact as part of my job.
- 4) I believe that I am currently very creative in my work.
- 5) I try to be as creative as I can in my job.
- 6) I would like to learn some new skills that will help me to be more effective at work.
- 7) When I perform well, I know it's because of my own desire to achieve.
- 8) When new trends develop in my workplace, I am usually the first to get on board.
- 9) My work is so personally rewarding for me that I am indifferent to special incentives provided by management.

Adapted from **Rice (2006)**.

6. Please indicate the degree to which you agree or disagree with the following statements by ticking your most appropriate answer. Items are: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree and 5 = Strongly Agree.

- 1) I enjoyed doing my job very much
- 2) My job is fun to do.
- 3) I think my job is a boring activity. (R)
- 4) My job does not hold my attention at all. (R)
- 5) I would describe my job as very interesting.
- 6) I think my job is quite enjoyable.
- 7) While I am doing my job, I think about how much I enjoy it.

Adapted from **Amabile (1988)**.