

The Effect of Intrinsic Motivation and Work Engagement on Contextual Performance

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Abstract

Employee motivation and engagement are critical to achieving maximum productivity at work. The aim of this research is to determine the impact of employees' intrinsic motivation and engagement on contextual performance. The research participants are employees from two public companies in Kosovo. The data were gathered using the convenient sampling method, with 315 employees working in various positions. The study variables were tested through correlation and hierarchical regression analyses. The study found that intrinsic motivation improves contextual performance. In terms of the impact of intrinsic motivation on work engagement, the findings discovered that autonomy and competence have a positive effect on vigor and dedication, as well as competence has a substantial favourable effect on absorption. Furthermore, when the effect of work engagement on contextual performance was investigated, the results found that engagement had a highly significant effect.

Keywords: *intrinsic motivation, work engagement, contextual performance, autonomy, Kosova.*

1. Introduction

Previous research indicates that a worker's intrinsic motivation has a significant impact on productivity, engagement, and performance levels. Employee motivation and engagement are critical for achieving maximum productivity at work. Intrinsic motivation is determined as the desire to engage in a specific behaviour for intrinsic satisfaction rather than to reap rewards or avoid punishment (E. L. Deci et al., 1989). Self-determination theory (SDT) (Ryan & Deci, 2017) is a motivation theory that investigates human development and well-being and clarifies how do social and contextual elements can increase or hinder people's desires to fulfil three psychological needs, including autonomy, competence, and relatedness. This theory demonstrates how meeting the three psychological needs allows people to reach their full potential at work (Van den Broeck et al., 2016).

Work engagement is a concept that is closely related to intrinsic motivation and performance. Kahn (1990) was the first scientist who defined work engagement as the positive state of mind, fulfilment, and motivation that an employee feels in the workplace. (Bakker & Demerouti, 2009) discovered that workers who are involved are more deeply engaged in their job and perform better in the organization, while motivation and a positive mood make them more committed to their colleagues.

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Many research have been carried out on workers motivation and engagement in the workplace, likewise the positive impact of engagement and motivation on work performance. In this study we will examine the effect of motivation and engagement on contextual performance. Contextual performance is related to the behaviour of individuals who engage in and work beyond the work tasks defined by their employment contract; this voluntary commitment is not rewarded or explicitly required by the employer (Schreurs et al., 2012).

The goal of this research is to investigate the impact of intrinsic motivation and job engagement on contextual performance. One of the primary motivations to perform this research is that no research studies has been undertaken in the present literature or in Kosovo to investigate the influence of these sub dimensional factors.

Research Hypotheses

Intrinsic Motivation and Job Performance

Several studies have been undertaken to far, and all have found that motivation increases job performance. For example, Van Loon et al., (2018) discovered that motivation improves work performance and the attainment of organizational goals. These findings are consistent with those of Andersen et al., (2014), who found that enhancing employee engagement in the public sector had a positive influence on the performance of Danish teachers. Furthermore, the first research utilizing SDT to study the effect of intrinsic motivation on job performance revealed a positive correlation (Ryan & Moller, 2017). According to Haruthaithanasan, (2018), intrinsic motivation has increased teacher performance. We will investigate the impact of worker motivation on another aspect of performance that is contextual. As a result, based on the information presented above, our evidence suggests the first hypothesis:

Hypothesis (H1). There exists a positive relation between intrinsic motivation and contextual performance.

Figure 1 demonstrates the proposed model for the study hypothesis.

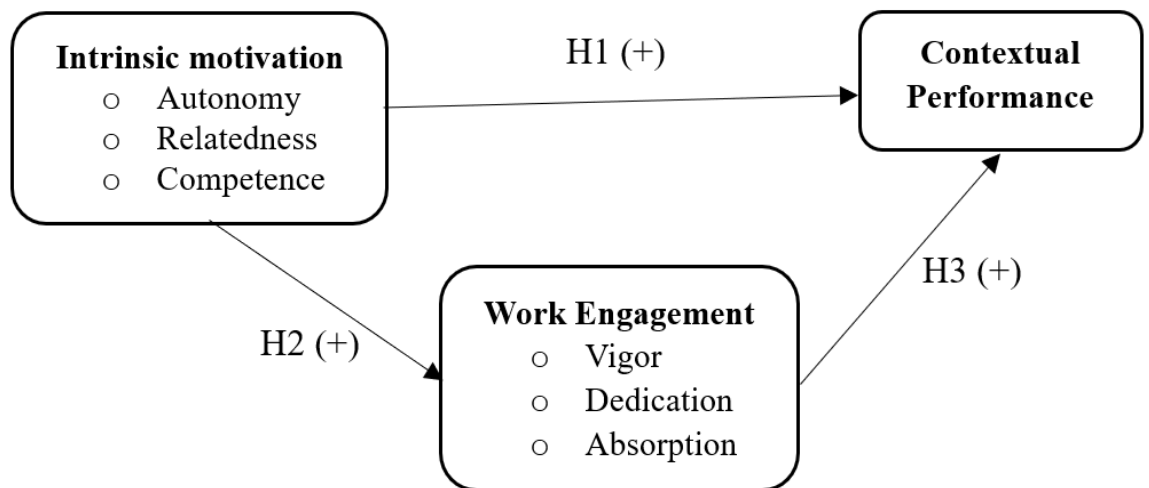


Figure 1 Research hypothesis

Intrinsic Motivation and Work Engagement

Previous research has revealed that employees appreciate some characteristics of their occupations more than promotion to higher positions or more pay (Grant, 2007). Years later, Pink, (2011) backed up these results by claiming that employees were more driven and creative when they had defined work goals, had more autonomy in their job, and were proficient at it. Furthermore, using Self-Determination Theory (Van Beek et al.,

2012), they conducted a study on the relationship between intrinsic motivation and work engagement. The study included 544 nurses and 216 Chinese doctors, and the findings revealed that internal motivation helped employees achieve higher levels of energy, commitment, and absorption at work. Therefore, we bring up the second hypothesis:

Hypothesis (H2). There is a positive relation between intrinsic motivation and job engagement (vigor, dedication, absorption).

Work Engagement and Extra-Role Performance

Many researchers believe that job engagement has a positive association with performance since it is defined by sentiments of enhanced passion and energy while doing work duties. Individuals that are engaged have a lot of energy and are more active at work and in pursuing activities to achieve corporate goals (Shirom, 2010). Also, Wang & Chen, (2020) conducted study on the hotel industry, and the findings demonstrated that engaged workers exhibit better emotional behaviours and are more optimistic, both of which improve job performance. However, in a study of IT workers Yao et al., (2022), the findings revealed a substantial positive association between job engagement and performance. We then proposed the following hypothesis:

Hypothesis (H3). There is a positive relation between the work engagement and contextual performance.

2. Methodology

The methods of analysis, synthesis, and comparison were utilized in conjunction with empirical research on the influence of intrinsic motivation and job engagement on extra-role performance. The data were gathered via questionnaires.

Participants

Participants in this study are workers of two public enterprises in Kosova, the Regional Water Company Prishtina as well as the Railways of Kosovo. The data were collected with the approval of the managements of the two companies. Some of the questionnaires contained incomplete data and were not taken into consideration, out of 315 completed questionnaires, only 270 are part of the analysis of the paper. The participants were of different ages and professions. Regarding the participation in the research, the findings showed that 63% of the participants (170 participants) were male.

Procedure

We tested our study hypotheses with multiple regression analyses. We conducted these analyses regarding of the demographic variables used in the study to find out how the connection between the independent and dependent variables influenced them. Before beginning the research analysis, we grouped the variables utilized in the study according to the questionnaires used for the influence of these factors.

Instruments

Intrinsic motivation scale

Intrinsic motivation studies, such as E. Deci et al., (2017), employed a unique work satisfaction measure with 21 questions that examined intrinsic motivation needs: competence, autonomy, and relatedness; we used the same scale. Participants were asked to score each statement on a 5-point scale, with (1 being not at all true and 5 being very true).

Work engagement scale

We assessed worker engagement using a shorter version of the engagement scale (Schaufeli et al., 2003). This version assesses three different elements of engagement:

energy, commitment, and absorption. We developed a five-point rating system that ranged from (1 for never to 5 for always). Higher ratings on this scale indicate a better feeling of vigor, dedication and absorption.

Extra-role performance scale

We assessed work performance using the Multidimensional work Performance (Williams & Anderson, 1991). The scale has 21 questions and measured work performance. We employed a five-point rating system, with (1) representing never and (5) representing always. Higher ratings on this scale indicate a better level of contextual performance.

3. Results

To examine the hypotheses of the research variables we used hierarchical regression analysis, as well as we used the average score of each scale. Regarding the reliability of the scale, the Alpha Cronbach coefficients, the results showed that for Intrinsic motivation, the Cronbach Alpha value was 0.820, for work engagement it was 0.844, while for contextual performance 0.787. All values of Cronbach alpha variables are ≥ 0.70 which indicate sufficient reliability.

The findings of the correlation study which are presented in Table 2 demonstrated that the participants' average age was 43.55 years, with the norm deviation of 10.32. Regarding the average of tenure, the average value is 12.92 years, with a standard deviation of 8.57 years. The results also showed that the average of all research variables is more than the mean of 2.5. This outcome implies that all research variables' queries were accurately comprehended by participants.

When table 2 is analysed for demographic variables, the results show that age has positive relations with two variables: marital status ($r = 0.309$, $p < 0.01$) and attitude ($r = 0.683$, $p < 0.01$), on the other hand, age has negative correlations with two other variables: relatedness ($r = -0.156$, $p < 0.01$) and competence ($r = -0.162$, $p < 0.01$). This shows that, as age increases, there is a tendency to decrease relatedness and competence.

Gender is negatively related to marital status ($r = -0.139$, $p < 0.05$), demonstrating that changes in gender are correlated negatively with marital status. On the other hand, marital status has a positive relationship with tenure ($r = 0.197$, $p < 0.01$). Marital status also has a negative relationship with relatedness ($r = -0.137$, $p < 0.05$) and with contextual performance ($r = -0.132$, $p < 0.05$). Furthermore, education negatively correlates with tenure ($r = -0.137$, $p < 0.05$), autonomy ($r = -0.124$, $p < 0.05$), relatedness ($r = -0.165$, $p < 0.01$), and contextual performance ($r = -0.124$, $p < 0.05$). Tenure correlates negatively with competence ($r = -0.135$, $p < 0.05$), absorption ($r = -0.131$, $p < 0.05$), and contextual performance ($r = -0.117$, $p < 0.05$).

On the other side, when examining the control variables, it can be observed that Autonomy is positively correlated with relatedness ($r = 0.392$, $p < 0.01$), competence ($r = 0.345$, $p < 0.01$), vigor ($r = 0.321$, $p < .01$), dedication ($r = 0.313$, $p < .01$), absorption ($r = 0.161$, $p < .01$) and contextual performance ($r = 0.301$, $p < 0.01$). Relatedness correlates positively with competence ($r = 0.374$, $p < 0.01$), vigor ($r = 0.221$, $p < 0.01$), dedication ($r = 0.187$, $p < 0.01$), absorption ($r = 0.174$, $p < 0.01$), and contextual performance ($r = 0.347$, $p < 0.01$). Competence has a significant correlation with vigor ($r = 0.361$, $p < 0.01$), dedication ($r = 0.334$, $p < 0.01$), absorption ($r = 0.214$, $p < 0.01$), and contextual performance ($r = 0.313$, $p < 0.01$). Vigor is positively correlated with dedication ($r = 0.361$, $p < 0.01$), absorption ($r = 0.334$, $p < 0.01$), and contextual performance ($r = 0.214$, $p < 0.01$). Dedication has a positive relationship with absorption ($r = 0.334$, $p < 0.01$), and contextual performance ($r = 0.328$, $p < 0.01$). Finally, absorption correlates positively with extra-role performance ($r = 0.376$, $p < 0.01$).

Table 1: Means, standard deviation, reliabilities, and correlations.

| | | Mean | SD | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|----|------------------------|-------|-------|---------|---------|---------|---------|---------|--------|--------|
| 1 | Age | 43.55 | 10.32 | 1 | | | | | | |
| 2 | Gender | 1.57 | 0.47 | 0,053 | 1 | | | | | |
| 3 | Marital Status | 1.90 | 0.37 | 0,309* | -0,139* | 1 | | | | |
| 4 | Education | 1.96 | 0.74 | -0,065 | -0,064 | -0,074 | 1 | | | |
| 5 | Tenure | 12.92 | 8.57 | 0,683* | 0,024 | 0,197* | -0,137* | 1 | | |
| 6 | Autonomy | 4.62 | 0.48 | -0,093 | 0,031 | -0,028 | -0,124* | -0,013 | (0.80) | |
| 7 | Relatedness | 4.57 | 0.49 | -0,156* | -0,004 | -0,137* | -0,165* | -0,019 | 0,392* | (0.82) |
| 8 | Competence | 4.63 | 0.48 | -0,162* | -0,077 | -0,067 | -0,074 | -0,135* | 0,345* | 0,374* |
| 9 | Vigor | 4.36 | 0.49 | -0,072 | -0,048 | -0,042 | 0,006 | -0,056 | 0,321* | 0,221* |
| 10 | Dedication | 4.50 | 0.50 | -0,083 | 0,021 | 0,074 | 0,015 | -0,068 | 0,313* | 0,187* |
| 11 | Absorption | 4.65 | .48 | -0,068 | 0,014 | 0,009 | 0,029 | -0,131* | 0,161* | 0,174* |
| 12 | Contextual performance | 4.52 | .34 | 0,031 | -0,021 | -0,124* | -0,124* | 0,117* | ,301** | 0,347* |

Table 1: Means, standard deviation, reliabilities, and correlations. (cont'd)

| | | (8) | (9) | (10) | (11) | (12) |
|----|------------------------|---------|---------|---------|---------|--------|
| 1 | Age | | | | | |
| 2 | Gender | | | | | |
| 3 | Marital Status | | | | | |
| 4 | Education | | | | | |
| 5 | Tenure | | | | | |
| 6 | Competence | (0.87) | | | | |
| 7 | Vigor | 0,361** | (0.91) | | | |
| 8 | Dedication | 0,334** | 0,361** | (0.90) | | |
| 9 | Absorption | 0,214** | 0,334** | 0,334** | (0.92) | |
| 10 | Contextual performance | 0,313** | 0,214** | 0,328** | 0,376** | (0.70) |

To assess the study's hypotheses, we created six distinct hierarchical regression models, which are presented in Table 2. In Model 1, we investigated the influence of demographic factors such as age, gender, marital status, education level, and experience on task, to evaluate the extent to which contextual performance can be explained. The model indicated a negative connection between extra-role performance and tenure ($\beta = -0.713$, $p = 0.01$) among demographic factors.

Model 2 was used to test hypothesis 1, with demographic factors included in the first stage and intrinsic motivation subdimensions added in the second step. The dependent variable in this situation was contextual performance. The study demonstrated that the three sub-dimensions of intrinsic motivation had a strong impact on contextual performance. Autonomy ($\beta = 0.142$, $p < 0.05$), competence ($\beta = 0.238$, $p < 0.01$), and relatedness ($\beta = 0.247$, $p < 0.01$) indicating that H1 is fully supported.

To test hypothesis 2, we constructed models 3, 4, and 5 that examined at the influence of intrinsic motivation on the work engagement subdimensions. After modifying for demographic factors (step 1), model 3 examined the ability of intrinsic motivation subdimensions to explain vigor. The study discovered that autonomy ($\beta = 0.240$, $p < 0.01$) and competence ($\beta = 0.201$, $p < 0.01$) have an important effect on vigor.

Model 4 shows that autonomy ($\beta = 0.181$, $p < 0.01$) and competence ($\beta = 0.318$, $p < 0.01$) have a substantial positive influence on dedication. In model 5, competence ($\beta = 0.291$, $p < 0.01$) had a significant favourable influence on absorption, while tenure ($\beta = -0.172$, $p < 0.05$) had an important negative impact. This shows that hypothesis 2 is at least partially supported.

To test hypothesis 3 of the study, we created model 6 to investigate the impact of the job engagement sub-dimensions on contextual performance. The study found that work engagement has a significant positive effect on contextual performance, including vigor ($\beta = 0.201$, $p < 0.01$), dedication ($\beta = 0.194$, $p < 0.05$), and absorption ($\beta = 0.246$, $p < 0.01$), with an important positive impact of age ($\beta = 0.134$, $p < 0.05$) and a negative impact of education ($\beta = -0.118$, $p < 0.05$) and tenure ($\beta = -0.124$, $p < 0.05$), indicating that hypothesis 3 is fully supported.

Table 2: Regression analysis

| Independent Variables | | | | | Dependent Variables | | | | | | | |
|---|---------|-------|--------|-------|------------------------|--------|--------|-------|----------------------|-------|-------|-------|
| | | | | | Contextual performance | | | | Vigor | | | |
| Model 1 (1 Step) | | | | | Model 2 (2 Steps) | | | | Model 3 (2 Steps) | | | |
| | β | SE | t | Sig | β | SE | t | Sig | β | SE | t | Sig |
| Constant | | 0.17 | 28.063 | 0 | | 0.403 | 4.48 | 0 | | 0.432 | 1.093 | 0 |
| Age | 0.072 | 0.005 | 1.423 | 0.321 | 0.091 | 0.007 | 1.436 | 0.278 | 0.032 | 0.006 | 0.003 | 0.821 |
| Gender | 0.008 | 0.038 | 0.141 | 0.857 | -0.003 | 0.042 | -0.071 | 0.827 | - | 0.055 | - | 0.272 |
| Marital Status | -0.481 | 0.041 | -0.723 | 0.421 | -0.019 | 0.044 | -0.164 | 0.895 | 0.008 | 0.093 | 0.009 | 0.894 |
| Education | 0.025 | 0.024 | 0.542 | 0.195 | 0.080 | 0.023 | 1.578 | 0.088 | 0.042 | 0.038 | 0.055 | 0.394 |
| Tenure | -0.713 | 0.005 | -0.224 | 0.001 | 0.131 | 0.004 | -0.184 | 0.001 | - | 0.004 | - | 0.492 |
| Autonomy | | | | | 0.142 | 0.034 | 4.869 | 0.003 | 0.240 | 0.042 | 0.234 | 0.000 |
| Relatedness | | | | | 0.247 | 0.041 | 5.234 | 0.000 | 0.077 | 0.038 | 0.085 | 0.089 |
| Competence | | | | | 0.238 | 0.039 | 5.423 | 0.000 | 0.201 | 0.058 | 0.201 | 0.000 |
| Vigor | | | | | | | | | | | | |
| Dedication | | | | | | | | | | | | |
| Absorption | | | | | | | | | | | | |
| R | | 0.215 | | | | 0.491 | | | | | | |
| R ² | | 0.049 | | | | 0.253 | | | | | | |
| R ² change | | 0.049 | | | | 0.204 | | | | | | |
| F | | 3,024 | | | | 11,012 | | | | | | |
| Sig. | | 0,003 | | | | 0.000 | | | | | | |
| N=270, *p < .05, ** p < .01, *** p < .001 | | | | | | | | | | | | |

Table 2 Regression analysis (cont'd)

| | Independent Variables | | | | Dependent Variables | | | | | | | |
|-----------------------|-----------------------|-------|--------|-------|----------------------|-------|--------|-------|------------------------|--------|--------|-------|
| | Dedication | | | | Absorption | | | | Contextual performance | | | |
| | Model 4 (2 Steps) | | | | Model 5 (2 Steps) | | | | Model 6 (3 Steps) | | | |
| | β | SE | t | Sig | β | SE | t | Sig | β | SE | t | Sig |
| Constant | | 0.17 | 3.84 | 0 | | 0.312 | 1.063 | 0 | | 0.159 | 2.21 | 0 |
| Age | 0.021 | 0.002 | 0.001 | 0.634 | 0.071 | 0.002 | 0.003 | 0.212 | 0.134 | 0.003 | 0.004 | 0.019 |
| Gender | -0.015 | 0.058 | -0.008 | 0.839 | -0.021 | 0.049 | -0.034 | 0.596 | 0.029 | 0.052 | 0.020 | 0.598 |
| Marital Status | 0.080 | 0.009 | 0.012 | 0.176 | 0.029 | 0.068 | 0.038 | 0.512 | -0.063 | 0.055 | -0.069 | 0.332 |
| Education | 0.033 | 0.035 | 0.019 | 0.396 | 0.034 | 0.037 | 0.028 | 0.412 | -0.118 | 0.019 | -0.054 | 0.003 |
| Tenure | -0.003 | 0.005 | -0.074 | 0.206 | -0.172 | 0.004 | -0.009 | 0.012 | -0.124 | 0.002 | -0.004 | 0.031 |
| Autonomy | 0.181 | 0.042 | 0.161 | 0.000 | 0.047 | 0.052 | 0.042 | 0.313 | | | | |
| Relatedness | 0.025 | 0.056 | 0.029 | 0.560 | 0.031 | 0.041 | 0.035 | 0.413 | | | | |
| Competence | 0.318 | 0.058 | 0.310 | 0.000 | 0.291 | 0.052 | 0.281 | 0.000 | | | | |
| Vigor | | | | | | | | | 0.201 | 0.037 | 0.146 | 0.000 |
| Dedication | | | | | | | | | 0.194 | 0.039 | 0.125 | 0.005 |
| Absorption | | | | | | | | | 0.246 | 0.039 | 0.259 | 0.000 |
| R | | 0.447 | | | | .315 | | | | 0.514 | | |
| R ² | | 0.215 | | | | .084 | | | | 0.213 | | |
| R ² change | | 0.169 | | | | .057 | | | | 0.184 | | |
| F | | 8,454 | | | | 2,746 | | | | 11,235 | | |
| Sig. | | 0.000 | | | | .000 | | | | 0.000 | | |

N=275, *p < .05, ** p < .01, *** p < .001

4. Discussion

The aim of the research was to evaluate and explain the association between intrinsic motivation and job engagement in contextual performance in two public organizations in Kosovo: Kosovo Railways and the regional Water Utility Prishtina.

Regarding the first hypothesis, which investigates the impact of intrinsic motivation on contextual performance, the findings revealed a significant positive effect of the three dimensions of intrinsic motivation on contextual performance. This demonstrates that intrinsically motivated employees of the two public enterprises are more likely to perform work and other tasks outside of the scope of their employment contract, as well as assist their colleagues at work when necessary.

Our results are compatible with those of Van Loon et al., (2018), who showed in their paper that employee motivation has an important positive correlation with job performance.

The second hypothesis investigates at the connection between the subdimensions of intrinsic motivation and work engagement. Our research discovered that when employees have a high amount of autonomy at work and feel competent in their jobs, they are more energetic throughout work hours. This suggests that autonomy and a sense of competence have an important effect on vigor, which contributes to improved performance; however, the findings reveal that relatedness has no impact on vigor. Fulfilling the need for autonomy and competence has shown a positive effect on dedication for employees of two public companies; however, as previously stated, the relatedness had no significant effect on dedication. In terms of the effect of intrinsic motivation on absorption, only

competence had a positive effect. This demonstrates that employees who are competent at work are fully focused and dedicated to work tasks, this increases absorption. Our findings are in line with those of Pink, (2011), Van Beek et al., (2012). Consequently, the positive effect between intrinsic motivation and work engagement was confirmed.

Hypothesis 3 examined the impact (vigor, dedication, and absorption) which are sub-dimensions of engagement on contextual performance. The findings of this study demonstrated that all subdimensions of job engagement had a positive and important impact on contextual performance. This emphasizes the reality that individuals that are highly committed at work are more likely to succeed in activities and jobs outside of their usual obligations. The results of the current study are in line with previous research Bakker et al., (2012) discovered that work engagement has substantial impact on both dimensions of performance. The same effect was observed in a recent investigation of IT professionals by Yao et al., (2022).

5. Conclusion

The primary goal of this study was to investigate how employees' intrinsic motivation and engagement impact their contextual performance. Employees from two public enterprises in Kosovo were included in the analysis of this study.

However, what distinguishes this study from others is that it demonstrates that sub-dimensions of intrinsic motivation (autonomy, competence, and relatedness) and job engagement (vigor, dedication, and absorption) influence one dimension of performance such as contextual role. Based on the importance of these study variables for employees, we believe that in the future, this phenomenon should be tested in other public enterprises, the private sector, and other sectors and industries.

References

- Andersen, L. B., Heinesen, E., & Pedersen, L. H. (2014). How does public service motivation among teachers affect student performance in schools? *Journal of Public Administration Research and Theory*, 24(3), 651–671.
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206.
- Bakker, A. B., & Demerouti, E. (2009). The crossover of work engagement between working couples: A closer look at the role of empathy. *Journal of Managerial Psychology*, 24(3). <https://doi.org/10.1108/02683940910939313>
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L. (2012). Work engagement, performance, and active learning: The role of conscientiousness. *Journal of Vocational Behavior*, 80(2), 555–564.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580.
- Deci, E., Olafsen, A., & Ryan, R. (2017). Self-Determination Theory in Work Organizations: The State of a Science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Du Plessis, A., Douangphichit, N., & Dodd, P. (2015). HRM in relation to employee motivation and job performance in the hospitality industry.
- Gagné, M., Chemolli, E., Forest, J., & Koestner, R. (2008). A temporal analysis of the relation between organisational commitment and work motivation. *Psychologica Belgica*, 48(2–3).
- Gerhart, B., & Fang, M. (2015). Pay, intrinsic motivation, extrinsic motivation, performance, and creativity in the workplace: Revisiting long-held beliefs. *Annual Review of Organizational*

- Psychology and Organizational Behavior, 2, 489–521. <https://doi.org/10.1146/annurev-orgpsych-032414-111418>
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34.
- Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, 54(1), 73–96.
- Haruthaithanasan, T. (2018). Effects of educational reforms in the 2nd decade (2009–2018) on teacher motivation and student achievement among schools in Southern Thailand. *Kasetsart Journal of Social Sciences*, 39(2), 222–229.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
- Keyko, K., Cummings, G. G., Yonge, O., & Wong, C. A. (2016). Work engagement in professional nursing practice: A systematic review. *International Journal of Nursing Studies*, 61, 142–164.
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). The effects of choice on intrinsic motivation and related outcomes: a meta-analysis of research findings. *Psychological Bulletin*, 134(2), 270.
- Pink, D. H. (2011). *Drive: The surprising truth about what motivates us*. Penguin.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. In *American Psychologist* (Vol. 55, Issue 1, pp. 68–78). American Psychological Association. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford publications.
- Ryan, R. M., & Moller, A. C. (2017). Competence as central, but not sufficient, for high-quality motivation: A self-determination theory perspective. In *Handbook of competence and motivation: Theory and application*, 2nd ed. (pp. 214–231). The Guilford Press.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2003). Utrecht work engagement scale-9. *Educational and Psychological Measurement*.
- Schreurs, B. H. J., Hetty van Emmerik, I. J., Günter, H., & Germeys, F. (2012). A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. *Human Resource Management*, 51(2), 259–279.
- Shirom, A. (2010). Feeling energetic at work: On vigor's antecedents. In *Work Engagement: A Handbook of Essential Theory and Research*, 69.
- Sinaiko, H. W., & Brislin, R. W. (1973). Evaluating language translations: Experiments on three assessment methods. *Journal of Applied Psychology*, 57(3), 328.
- Van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. J. (2012). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30–55.
- Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195–1229.
- Van Loon, N., Kjeldsen, A. M., Andersen, L. B., Vandenabeele, W., & Leisink, P. (2018). Only when the societal impact potential is high? A panel study of the relationship between public service motivation and perceived performance. *Review of Public Personnel Administration*, 38(2), 139–166.

- Wang, C.-H., & Chen, H.-T. (2020). Relationships among workplace incivility, work engagement and job performance. *Journal of Hospitality and Tourism Insights*, 3(4), 415–429.
- Weibel, A., Rost, K., & Osterloh, M. (2007). Crowding-out of intrinsic motivation-opening the black box. Available at SSRN 957770.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601–617.
- Yao, J., Qiu, X., Yang, L., Han, X., & Li, Y. (2022). The relationship between work engagement and job performance: psychological capital as a moderating factor. *Frontiers in Psychology*, 13, 729131.