

# The Innovative Behavior During Work from Home in Indonesia: The Role of Job Autonomy and Work Engagement

Aryo Wicaksono<sup>1,\*</sup> E.S. Pusparini<sup>2</sup>

<sup>1</sup> Department of Management, Faculty of Business & Economics, University of Indonesia Jakarta, Indonesia

<sup>2</sup> Department of Management, Faculty of Business & Economics, University of Indonesia Jakarta, Indonesia

\*Corresponding author. Email: [aryo.wicaksono92@ui.ac.id](mailto:aryo.wicaksono92@ui.ac.id)

## ABSTRACT

Covid-19 pandemic changes the way people work, with many companies implementing work from home policy as a new way of working. Employees must adapt to the new policy, which requires organizations to create an optimal working environment to enable employees to have positive behavior and performance to support the company's business. This study examines the effects of job autonomy and work engagement on innovative work behavior in Indonesia's Work from Home situation. This study is conducted through primary data collection using a quantitative research design, with questionnaires collected from 286 employees from various industries who work under the Work from Home policy. Data collected are further being analyzed using Structural Equation Modelling (SEM) to test the overall construct of the research model. This study shows that a high level of job autonomy has a positive and significant effect on work engagement and innovative work behavior. In contrast, work engagement is a significant driver of innovative work behavior and partially mediates the positive effect of job autonomy on innovative work behavior. Implementing a policy that could provide more control and freedom to employees when performing their job could increase employees' level of engagement and innovative behavior. This study has two significant contributions: first, enriching academic references in the field of human resources related to job autonomy, work engagement, and innovative work behavior variables, and secondly, providing insights for leaders and human resources department of organizations when implementing practical working policy in Work from Home situation in Indonesia.

**Keywords:** *Innovative Work Behavior; Work Engagement; Job Autonomy; Work from Home.*

## 1. INTRODUCTION

Dachner, Ellingson, Noe, & Saxton [1] argued that human resources were essential for an organization to gain a competitive advantage in the industry. The covid-19 pandemic, which has rapidly infected global countries since 2019, changes the way people work in many organizations. A recent survey by PwC in April 2021 to global company leaders showed that 70% of companies across the globe were impacted by the pandemic, including in Indonesia [2]. The same survey also reported that the work from home method is the most common policy implemented in many organizations to cope with the pandemic. According to a PwC report, 50% of leaders from Indonesia do the work from home method the main policy for an employee to work during this pandemic [2].

Work from home policy is predicted to continue for some time to come. Employees are faced with an unusual situation, especially with the adjustment of working from home conditions, which requires company leaders and management to create optimal working conditions for employees to have positive behavior and performance to support organizations' business continuity. In telework conditions, the role of the human resources department is fundamental to ensure the telework experience is positive for both employees and the company [3]. Telework changes the traditional concept of working arrangements, impacting the experience felt by employees and further may affect the engagement level of employees. Sardesmhukh, Sharma, & Golden argued that job resources were affected by telework and might have implications on employees' work engagement [4].

According to job demands-resources theory, job resources are the physical, psychological, social, or organizational aspects of work that help employees reduce the impact of job demands and the psychological burden of work, and generally one of the most important predictors of work engagement [5]. One kind of job resource that significantly affects engagement is job autonomy. Job autonomy helps employees cope with job demands (extra-load, physical and emotional demands of work) because employees have more freedom to decide how to respond and deal with the work demands. Job autonomy allows employees to achieve work goals and cope better with the job demands, enabling employees to work with dedication, vigor, and absorption, the characteristics of work engagement [6], [7].

Highly engaged workers are more likely to have better task performance, help their colleagues, and possess innovative ideas, contributing to team performance and organizational outcomes [8]. Work engagement is closely related to the use of cognitive, emotional, and behavioral in daily work [9]. In addition, employees engaged with their work show a high level of energy, are enthusiastic, focused, possess strong mental strength, and are persistent, characteristics that enable employees to work innovatively [10].

Although many previous studies had observed the impact of job autonomy and engagement on innovative work behavior, very few studies observed the effects in the telework context, especially in Indonesia. This research aims to examine the effects of job autonomy and work engagement on innovative work behavior in Indonesia's Work from Home situation. The research question is: what is the impact of job autonomy in work from home situations in Indonesia on employees' work engagement and innovative work behavior?

The first section of this paper highlights the emergence of work from home policy as one of the main working policy options for organizations to cope with the Covid-19 pandemic and how it might impact employees' autonomy, engagement level, and innovative behavior. In the second section of this paper, a literature review of innovative work behavior, work engagement, and job autonomy is explained, including the development of hypotheses this study proposed. The third section describes the research methodology: population, sample, data collection technique, and measurement of the variables in this study. In the fourth section, the findings and results of the study are discussed, while the last section describes the conclusions, limitations, and recommendations for future research.

## 1.1. Literature Review

### 1.1.1. Innovative Work Behavior

Kleysen & Street define innovative work behavior as individual activities carried out to generate, introduce, and implement practical innovations in any process that occurs within the organization [11]. While in other definition by De Spiegelaere, Van Gyes, De Witte & Van Hootegem, innovative work behavior is all efforts and employee behavior that leads to the creation, introduction, and implementation (in a role, group, or organization) of new ideas, processes, products, or procedures in units that provide significant benefits [12].

In previous research, several studies classified innovative work behavior as a multidimensional unit [13]. In the literature review of Kleysen & Street's research, innovative work behavior was classified into five classification factors related to individual innovative behavior: opportunity exploration, generativity, formative investigation, championing, dan application. Although theoretically, innovative behavior is a multidimensional concept, previous research shows that there is no substantial evidence that the multidimensional concept can accurately explain the construct of innovative work behavior. The research of Kleysen & Street itself ultimately measures and analyzes the construct of innovative work behavior in a unidimensional manner, with all research measurement items having good validity and reliability [11].

Innovative work behavior also includes employee behaviors that directly or indirectly support the development and introduction of innovations in the workplace [12]. The research of Van Zyl, Van Oort, Rispens, & Olckers shows that work engagement is a significant driver of innovative work behavior [14].

### 1.1.2 Work Engagement

The term engagement at the individual level was first coined by Kahn, which later became the basis for developing studies and theories regarding engagement. Kahn explained that personal engagement is positive energy that motivates and connects employees with the company emotionally, cognitively, and physically [15]. According to Schaufeli and Bakker, work engagement is defined as a positive and satisfying state of mind in the context of work, which is characterized by three characteristics: vigor, dedication, and absorption [7]. Individuals who have a high level of engagement will have high energy levels, feel enthusiastic, and be immersed in their work activities [8].

### 1.1.3. Relationship between Work Engagement and Innovative Work Behavior

One of the results of work engagement in relation to employee behavior is innovative work behavior (IWB). Shuck, Adelson, & Reio mentioned that engagement is closely related to the use of cognitive, emotional, and behavioral aspects, where these three things are needed for individuals to carry out the innovation process [9]. The synergy between the cognitive, emotional, and physical aspects of engagement is expected to drive employees' innovative behavior. Recent research by Van Zyl, Van Oort, Rispens, & Olckers also argued that work engagement is a significant driver of innovative work behavior [14].

Thus, the hypothesis proposed in this study is:

H1: Work engagement has a direct and positive relationship with innovative work behavior in Work from Home situation in Indonesia

### 1.1.4. Job Autonomy

In previous literature about work characteristics, autonomy is one of the most studied subjects [16]. Autonomy refers to the level of control employees have to perform their job. Another definition for autonomy comes from Morgeson & Humphrey, who define job autonomy as a level where employees have more freedom to schedule, make decisions, and determine the work method used to perform their job [16]. Hence, Morgeson and Humphrey classified autonomy into three dimensions: work scheduling, decision-making, and work methods.

Work scheduling dimension refers to the extent to which an employee has the freedom to have control over the arrangement and scheduling of tasks at work, decision-making dimension refers to the extent to which an employee has flexibility in control of work-related decision making, and work methods dimension refers to the extent where employees have control and discretion over the ways and methods will be used to get work done [16].

### 1.1.5. Relationship between Job Autonomy, Work Engagement, and Innovative Work Behavior

Previous research results by De Spiegelaere, Van Gyes, De Witte, Niesen & Van Hootegem showed that job autonomy had a positive relationship with innovative work behavior either directly or indirectly through work engagement mediation [12]. Another research by Malinowska, Tokarz & Wardzichowska also showed that job autonomy positively affected work engagement [17]. Thus, the proposed hypotheses are:

H2: Job autonomy has a direct and positive relationship with innovative work behavior in Work from Home situation in Indonesia

H3: Work engagement mediates the relationship between job autonomy and innovative work behavior in Work from Home situation in Indonesia

## 2. METHODS

### 2.1. Research Design

This research is conducted using a cross-sectional research design, with questionnaires collected online from 286 employees from various industries who work under the whole Work from Home policy in Indonesia at least for three months and have served their current employers for at least one year. From the distribution of the main test questionnaires, a total of 340 respondents were collected, with 315 respondents passing the initial screening. Of the 315 respondents, only 286 respondents could be further processed for analysis due to other 29 questionnaires were statistically inconsistent. Data that has been collected were analyzed using Structural Equation Modelling to test the overall construct of the research model

### 2.2. Measurement

Three self-report instruments were used to measure variables in this research, with a seven-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree were used in all measurement instruments in this study.

Morgeson & Humphrey [16] 9-items measurement instruments were adopted to measure the job autonomy variable in this study, which was consisted of three dimensions: work scheduling autonomy, decision-making autonomy, and work-method autonomy. Cronbach alpha for each dimension in this measurement instrument is 0.791 (work scheduling), 0.894 (decision-making), and 0.916 (work methods). Sample questions are "The job allows me to make my own decisions about how to schedule my work", "The job gives me a chance to use my personal initiative or judgment in carrying out the work", and "The job allows me to make decisions about what methods I use to complete my work".

UWES9 [18] 9-items measurement instruments developed by Schaufeli, Bakker, & Salanova were adopted to measure the work engagement variable, constructed by three dimensions: vigor, dedication, and absorption. Sample questions are "At my work, I feel bursting with energy", "I am enthusiastic about my job", and "I get carried away when I am working". Cronbach alpha for each dimension in this measurement instruments are 0.860 (vigor), 0.865 (dedication), and 0.823 (absorption).

Kleysen & Street 14-items measurement instruments [11] were adopted to measure innovative work behavior, which was measured as a unidimensional variable. Sample questions are “In my current job, I look for opportunities to improve an existing process, technology, product, service or work relationship”, “In my current job, I experiment with new ideas and solutions”, and “In my current job, I generate ideas or solutions to address problems”. Cronbach alpha in this measurement instrument is 0.941

### 3. RESULTS AND DISCUSSION

Data collection was conducted during April-June 2021 with the majority of 286 respondents are male ( $n = 180$ ; 62.94%), in 31-35 years of age ( $n = 109$ ; 38.11%), had bachelor's degree ( $n = 190$ ; 66.43%), are married ( $n = 231$ ; 80.77%), and had employment status as permanent employees ( $n = 235$ ; 82.17%). Majority of respondents work in ICT industry ( $n = 152$ ; 53.15%). More complete demographic profiles of respondents in this research are shown in Table 1.

**Table 1.** Demographic of Respondents

Demographics of Respondents		
Profiles	Frequency	Percentage (%)
<b>Gender</b>		
Male	180	62.94
Female	106	37.06
<b>Age Group (years)</b>		
21-25	12	4.20
26-30	43	15.03
31-35	109	38.11
36-40	69	24.13
41-45	31	10.84
>45	22	7.69
<b>Educational Background</b>		
High school	2	0.7
Diploma	9	3.15
Bachelor	190	66.43
Master	83	29.02
Doctor	2	0.7
<b>Marital Status</b>		
Single	52	18.18
Married	231	80.77
Widowed	3	1.05
<b>Employment Status</b>		
Permanent	235	82.17
Contract	51	17.83

#### 3.1. Measurement Model Analysis

This study used Lisrel 8.8 program to analyze both measurement and structural models. Table II below shows the standardized loading factor (SLF), construct reliability (CR), and average variance extracted (AVE) for each variable in this study. According to measurement model reliability analysis presented in Table II below, all variables in this research have met construct reliability, and average variance extracted criteria, which already passed the minimum requirement value of 0.70 for CR and 0.50 for AVE.

**Table 2.** Measurement Model Reliability Analysis

Variable	Measurement Model		
	Dimension	CR	AVE
Job Autonomy	Work Scheduling	0.94	0.64
	Decision-Making		
	Work Methods		
Work Engagement	Vigor	0.96	0.71
	Dedication		
	Absorption		
Innovative Work Behavior		0.96	0.64

All variables also have met the validity criteria, having already passed the minimum requirement of 0.50 for Standardized Loading Factor (SLF) [24]. In this study, SLF values of all innovative work behavior indicators passed the requirement (IWB1 = 0.65, IWB2 = 0.69, IWB3 = 0.61, IWB4 = 0.81, IWB5 = 0.83, IWB6 = 0.89, IWB7 = 0.87, IWB8 = 0.79, IWB9 = 0.78, IWB10 = 0.84, IWB11 = 0.83, IWB12 = 0.83, IWB13 = 0.88, IWB14 = 0.82). For variables work engagement and job autonomy, the SLF values of both variables also passed the requirement. (Work engagement dimensions: vigor = 0.93, dedication = 0.97, and absorption = 0.93. Job autonomy dimensions: work scheduling = 0.86, decision-making = 0.92, and work methods = 0.93).

#### 3.2. Structural Model Analysis

The analysis of goodness of fit for the research model is summarized in Table III below. Table III shows four indexes with poor fit levels that do not meet the minimum criteria of good fit level, even after respecification adjustment on the Lisrel program. Despite the fact that not all of the goodness of fit index in the model is considered as a good fit, the model is considered acceptable since it has already surpassed the minimum number of three of the goodness of fit indexes that reach the good fit level.

**Table 3.** Structural Model Analysis

Goodness of Fit	Structural Model		
	Benchmark	Result	Remarks
Chi-Square	$\leq 0.05$	1406,41	Poor fit
Standardized Root Mean Square Residual (SRMR)	$\leq 0.05$	0.068	Poor fit
Root Mean Square Error of Approximation (RMSEA)	$\leq 0.05$	0.086	Poor fit
Goodness-of-Fit (GFI)	$\geq 0.90$	0.76	Poor fit
Non-Normed Index Fit (NNFI)	$\geq 0.90$	0.97	Good fit
Normed Fit Index (NFI)	$\geq 0.90$	0.96	Good fit
Relative Fit Index (RFI)	$\geq 0.90$	0.95	Good fit
Incremental Index Fit (IFI)	$\geq 0.90$	0.97	Good fit

Comparative Index Fit(CFI)	$\geq 0.90$	0.97	Good fit
-------------------------------	-------------	------	----------

### 3.3. Hypothesis Testing

The structural model of this study is shown in Figure 1 below. The hypothesis is considered accepted if the t-value  $\geq 1.64$ . Based on the results, employees who had autonomy in doing their work would have a higher level of engagement (t-value = 6.54) and would be more innovative (5.73). Employees also would be more likely to be innovative if they were more engaged with their work (t-value = 8.62). The existence of work engagement in employees plays an essential role in strengthening the relationship between autonomy and innovative work behavior in work from home situations in Indonesia

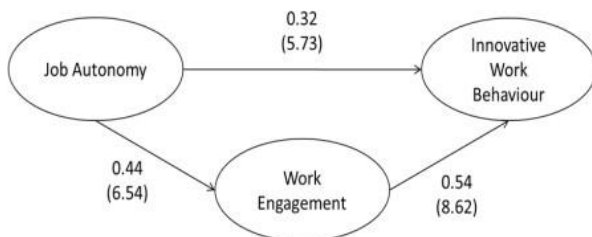


Figure 1. Path Diagram

Figure 1 shows that a high level of job autonomy has a positive and significant effect on work engagement and innovative work behavior in work from home situations in Indonesia. This study also shows that work engagement is a significant driver of innovative work behavior and partially mediates the positive effect of job autonomy on innovative work behavior.

### 3.4. Discussion

According to previous research, in the normal situation where work from home policy was not implemented, job autonomy affected the engagement level of employees [12], [17]. Based on the result from this study, autonomy is one of the predictors of employee work engagement in work from home situations in Indonesia. Having more control of how to schedule, make the decision, and decide the method to perform their job increases employees' engagement level during work from home implementation.

In addition, having more control of their work also proved to be fundamental in driving innovative work behaviors of employees in work from home situations. According to results, employees with a high level of autonomy tend to have a higher level of innovative work behaviors, in line with previous studies in normal working conditions, which shows that job autonomy had a significant effect directly on innovative work [12].

Results from this study also show that the engagement level of employees affected the innovative work behavior of employees in work from home situations in Indonesia. This result supported previous

studies that showed work engagement had significant effects on innovative behavior [10], [12]. An employee with a high level of engagement will be more likely to have innovative work behaviors in performing their job in work from home situations. Furthermore, the existence of work engagement factors will further increase the influence and significance of job autonomy on innovative work behavior, with the type of mediation on the role of work engagement being partial mediation.

This mediating role of work engagement supports previous research, which also showed that work engagement was able to act as a mediator in the direct and positive relationship between job autonomy and innovative work behavior [12]. The flexibility and freedom in managing the work schedule, deciding the work, and determining how to complete tasks at work will positively and significantly influence an employee to explore and implement new ideas to complete tasks of work during work from home situation in Indonesia. The influence on the innovative behavior of these employees will be even greater and significant when employees who have high autonomy in their work also feel a high level of engagement with their work.

According to the results, leaders in organizations need to maintain the level of engagement and innovative work behavior of employees through policy that could increase the level of engagement and innovative behavior within employees, such as giving more control and freedom to employees when performing their job with regular evaluation and feedback so that the implementation can be more effective and optimal. As mentioned earlier, in telework conditions or work from home, the role of the human resources department is important to ensure positive work experiences for both employees and the company [3]. With the implementation of a work from home policy that provides a conducive and optimal working environment for employees to carry out their work, it is expected that employees will be able to provide a positive contribution to the company through a high level of work engagement and innovative work behavior so that organizations could gain a competitive advantage during a global industry that increasingly competitive.

Based on results from the research conducted, there are several limitations in this study. This study was conducted with a cross-sectional approach in the specific context of employees working from home in Indonesia, so the results of this study cannot be generalized to studies with different contexts and times. In addition, the data collection method via questionnaires was distributed to respondents to be filled out on a self-rate basis so that the research results were not free from the possibility of self-report bias in filling out the questionnaire items contained in the study.

Findings from this study also suggest that demographic profiles of respondents in this study tend to

be homogeneous and centered on specific group categories, which might affect the research's overall results. With more than half of the respondents are coming ICT industry which works from home are frequently implemented even before the pandemic hits, most of the respondents have already adapted to the new ways of working and with the autonomy itself. In addition to that, the ICT industry is one of the industries which encourages innovation to develop products and services, making the influence of respondents coming from this sector even stronger in affecting the result. Besides the working sector, the educational background of most respondents also might affect the result of this study. With most of the respondents holding bachelor's degrees in minimum as their educational background, they might already used to think innovatively in performing their work, thus might affect the result of this study

#### 4. CONCLUSIONS

This study shows that a high level of job autonomy has a positive and significant effect on work engagement and innovative work behavior. In contrast, work engagement is a significant driver of innovative work behavior and partially mediates the positive effect of job autonomy on innovative work behavior. Findings from this study highlight the significance of job autonomy and work engagement to increase employees' innovative work behavior in work from home situations in Indonesia. Future research might consider focusing on more diverse respondents in various work sectors and educational backgrounds so that in-depth analysis can be obtained from the research. Further research also can add and complement data collection methods in the form of surveys conducted by this research with data collection methods in the form of interviews, focus group discussions, or other data collection methods so that the information obtained can more accurately explain the main research topic and minimize the possibility of bias in research result.

#### REFERENCES

- [1] A. M. Dachner, J. E. Ellingson, R. A. Noe, and B. M. Saxton, "The future of employee development," *Hum. Resour. Manag. Rev.*, vol. 31, no. 2, p. 100732, Jun. 2021, doi: 10.1016/J.HRM.2019.100732.
- [2] PwC, "Survei PwC: Sektor Healthcare dan Teknologi Paling Sedikit Terdampak Pandemi Covid-19 Halaman all - Kompas.com," *Kompas*, Apr. 30, 2021.
- [3] K. A. Basile and T. A. Beauregard, "Strategies for successful telework: how effective employees manage work/home boundaries," *Strateg. HR Rev.*, vol. 15, no. 3, pp. 106–111, Jun. 2016, doi: 10.1108/SHR-03-2016-0024.
- [4] S. R. Sardeshmukh, D. Sharma, and T. D. Golden, "Impact of telework on exhaustion and job engagement: a job demands and job resources model," *New Technol. Work Employ.*, vol. 27, no. 3, pp. 193–207, Nov. 2012, doi: 10.1111/J.1468-005X.2012.00284.X.
- [5] A. B. Bakker and E. Demerouti, "Job Demands–Resources Theory," *Wellbeing*, pp. 1–28, Feb. 2014, doi: 10.1002/9781118539415.WBWELL019.
- [6] J. D. Nahrgang, F. P. Morgeson, and D. A. Hofmann, "Safety at work: a meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes," *J. Appl. Psychol.*, vol. 96, no. 1, pp. 71–94, Jan. 2011, doi: 10.1037/A0021484.
- [7] W. B. Schaufeli and A. B. Bakker, "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study," *J. Organ. Behav. J. Organiz. Behav.*, vol. 25, pp. 293–315, 2004, doi: 10.1002/job.248.
- [8] A. B. Bakker and S. Albrecht, "Work engagement: current trends," *Career Dev. Int.*, vol. 23, no. 1, pp. 4–11, Feb. 2018, doi: 10.1108/CDI-11-2017-0207/FULL/PDF.
- [9] B. Shuck, J. L. Adelson, and T. G. Reio, "The Employee Engagement Scale: Initial Evidence for Construct Validity and Implications for Theory and Practice," *Hum. Resour. Manage.*, vol. 56, no. 6, pp. 953–977, Nov. 2017, doi: 10.1002/HRM.21811.
- [10] S. Aryee, F. O. Walumbwa, Q. Zhou, and C. A. Hartnell, "Transformational Leadership, Innovative Behavior, and Task Performance: Test of Mediation and Moderation Processes," <http://dx.doi.org/10.1080/08959285.2011.631648>, vol. 25, no. 1, pp. 1–25, Jan. 2012, doi: 10.1080/08959285.2011.631648.
- [11] R. F. Kleysen and C. T. Street, "Toward a multi-dimensional measure of individual innovative behavior," *J. Intellect. Cap.*, vol. 2, no. 3, pp. 284–296, Sep. 2001, doi: 10.1108/EUM0000000005660/FULL/XML.
- [12] S. De Spiegelaere, G. Van Gyes, H. De Witte, W. Niesen, and G. Van Hootegeem, "On the relation of job insecurity, job autonomy, innovative work behavior and the mediating effect of work engagement," *Creat. Innov. Manag.*, vol. 23, no. 3, pp. 318–330, 2014, doi: 10.1111/CAIM.12079.
- [13] S. G. Scott and R. A. Bruce, "Determinants of innovative behavior: a path model of individual

- innovation in the workplace.,” *Acad. Manag. J.*, vol. 37, no. 3, pp. 580–607, Jun. 1994, doi: 10.2307/256701.
- [14] L. E. van Zyl, A. van Oort, S. Rispens, and C. Olckers, “Work engagement and task performance within a global Dutch ICT-consulting firm: The mediating role of innovative work behaviors,” *Curr. Psychol.*, vol. 40, no. 8, pp. 4012–4023, Aug. 2021, doi: 10.1007/S12144-019-00339-1.
- [15] W. A. Kahn, “psychological conditions of personal engagement and disengagement at work.,” *Acad. Manag. J.*, vol. 33, no. 4, pp. 692–724, Dec. 1990, doi: 10.2307/256287.
- [16] F. P. Morgeson and S. E. Humphrey, “The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work,” *J. Appl. Psychol.*, vol. 91, no. 6, pp. 1321–1339, Nov. 2006, doi: 10.1037/0021-9010.91.6.1321.
- [17] D. Malinowska, A. Tokarz, and A. Wardzichowska, “Job autonomy in relation to work engagement and workaholism: Mediation of autonomous and controlled work motivation,” *Int. J. Occup. Med. Environ. Health*, vol. 31, no. 4, pp. 445–458, 2018, doi: 10.13075/IJOMEH.1896.01197.
- [18] W. B. Schaufeli, A. B. Bakker, and M. Salanova, “The Measurement of Work Engagement With a Short Questionnaire: A Cross-National Study,” <http://dx.doi.org/10.1177/0013164405282471>, vol. 66, no. 4, pp. 701–716, Jul. 2016, doi: 10.1177/0013164405282471.