# What causes 'Good Soldier' Behavior?

*A study examining the relationship between Work Engagement and Organizational Citizenship Behavior and the mediating roles of Organizational Commitment and Job Satisfaction*

Master's Thesis

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**Abstract**

Researchers in organizational behaviors have long been interested in exploring behaviors benefiting to organisations and sought to better understand the relation with work engagement. This study aims at understanding the role of the three components of organizational commitment (i.e., affective, normative, and continuance commitment) and job satisfaction as a mediator between work engagement and Organizational Citizenship Behaviors (OCB). Within this cross-sectional study, the data ($N = 151$) was analyzed via a parallel mediation analysis using the PROCESS-tool. Drawing upon the Social Exchange Theory, the current study found evidence that work engagement positively relates to OCB. Moreover, affective commitment was found to partially mediate the relation between work engagement and OCB. However, normative and continuance commitment were not found to mediate the relationship. In addition, job satisfaction was not a significant mediator through which work engagement affects OCB. This study contributes to existing literature as it is among the first to provide insight into the role of all three components of organizational commitment and job satisfaction on the proposed work engagement – OCB relation. Implications for results and suggestions for further research are discussed. As affective commitment is found to mediate the relation between work engagement and OCB, the importance of identification with, involvement in, and emotional attachment towards organizations is underlined for managers and organizations in order to increase OCB among engaged employees.

## What Causes 'Good Soldier' Behavior?

Work engagement is a highly interesting construct which is argued to lead to high levels of job as well as organizational performance (Kahn, 1990; Rich et al., 2010). Several studies argue that this is because engaged employees tend to work harder and even go beyond the call of duty (Chalofsky & Krishna, 2009; Hakanen et al., 2006). Moreover, engaged employees perform more extra-role behaviors such as helping others, volunteering for extra tasks, innovating, and show more punctuality overall (Ariani, 2013; Babcock-Roberson & Strickland, 2010). These behaviors have a positive impact on an organization's performance, effectiveness, and efficiency (Ariani, 2013; Organ et al., 2006 Motowidlo, 2000) and are referred to as prosocial Organizational Citizenship Behaviors (OCB). Employees who engage in OCB are also referred to as "good soldiers" (Organ, 1988). Although previous research has focused on studying *if* work engagement and OCB are related, studies which examine possible constructs that could explain this relationship are in its early stages. Therefore, the current study investigates *how* work engagement increases OCB and which constructs influence this relationship.

Potential mechanisms influencing the relationship between work engagement and OCB are researched within the current study. In social psychological literature, work engagement is found to relate to organizational commitment (Huynh et al., 2012; Organ et al., 2006). In addition, several studies suggest that organizational commitment relates to OCB (Chen & Francesco, 2003; Ngunia et al., 2006). In spite of the multidimensionality of organizational commitment, only a few researchers have investigated all three components of organizational commitment in the same study (Hackett et al., 1994; Meyer et al., 1993; Randall et al., 1990).

Next to the possible influence of organizational commitment, work engagement can be linked to job satisfaction (Karanika-Murray et al., 2015; Lu, Lu et al., 2016). Besides, researchers contend that OCB could be an outcome of job satisfaction (LePine et al., 2002; Podsakoff et al., 2000; Ngunia et al., 2006). Moreover, Ilies et al. (2006) stated that job satisfaction could explain citizenship related behaviors, highlighting the importance of investigating the effect job satisfaction might have on the relationship between work engagement and OCB.

Although these relationships have been implied, there is no empirical research, to our knowledge, on how work engagement and OCB are related, when all three components of organizational commitment and job satisfaction are considered. Based on the previous suggested relationships, the current study strives to deepen the knowledge of *how* engaged employees, come to perform more organizational benefiting extra-role behaviors.

**Work Engagement and OCB**

Work engagement and OCB are two constructs in social psychology literature that are used the most to explain the behaviors and performance of employees in an organizational context (Khalili, 2017). Work engagement is a construct that captures the amount of time, energy, and dedication employees put in their job and represents the willingness to dedicate physical, cognitive, and emotional resources to the work (Kahn, 1990). Within this view, employees who are more engaged in their work, perform work-tasks with a sense of self-investment, energy, and passion. Moreover, work engagement is viewed as a positive attitude towards the organization and its value and therefore employees do not change jobs that often (Schaufeli & Bakker, 2004). This view translates into the definition of Schaufeli et al. (2002a, p. 74), who defined work engagement as "A positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption".

In more detail, work engagement can be defined in three sub-concepts such as vigor, dedication, and absorption (Schaufeli et al., 2002a). *Vigor* is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even when facing difficulties. Secondly, *dedication* refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Lastly, *absorption* is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and having difficulties with detaching oneself from work (p. 74). These sub-concepts are found to be closely related in the study of Schaufeli et al. (2002a). Therefore, the current study views work engagement as a whole scale and measures it as such.

On the other hand, employee behavior that goes beyond formal role requirements and contributes to organizational effectiveness is referred to as Organizational Citizenship Behavior (OCB) (Organ et al., 2006). OCB has thought to influence organizational effectiveness through behaviors managers want but cannot technically require (Motowidlo, 2000). Organ et al. (2006, p. 34) defined OCB as; "… discretionary contributions that go beyond the strict description and that do not lay claim to contractual recompense from the formal reward system". In other words, when performing OCB, employees contribute more to the organization than is formally required of them. More in detail, OCB can be viewed as behaviors that benefit the organization (OCB-O) and behaviors that are directed towards coworkers to help with work-related issues (OCB-P) (Fox et al., 2009). With several studies that reported that all proposed dimensions of OCB in literature (e.g., OCB-O and OCB-P) are

in fact closely related (Christian et al, 2011; Rurkkhum & Bartlett, 2012), the current study views OCB as a unidimensional construct and measures it as such.

The foundation for the relationship between work engagement and OCB is laid out within social psychological literature. Work engagement and OCB are found to relate positively, because an increased positive attitude towards the organization (i.e., work engagement) increases extra-role behaviors that are beneficial for organizations (Babcock-Roberson & Strickland, 2010; Hakanen et al., 2006). Those with high levels of work engagement, work diligently because they enjoy their work more and are found to exhibit more proactive behaviors (Salanova & Schaufeli, 2008). This is because engaged employees experience more energy, passion, and self-investment in their work.

A theoretical explanation for work engagement can be found in the Social Exchange Theory (Gouldner, 1960). This theory alludes to employment as the trade of effort for tangible benefits and social rewards due to the view that this social exchange can lead to beneficial outcomes for either party (i.e., employee or employer). In other words, in the process of exchange, employees will evaluate potential benefits that may arise after the exchange. If satisfactory results or rewards are not obtained, the exchange cannot occur. This exchange could include emotion, rewards, resources, and fairness (Befu, 1977). This theory is guided by the norms of reciprocity; people in a social relationship should receive equitable levels of reward. Based on this theory, the return obtained from the organization (e.g., salary, flexible hours, fairness) will determine if employees stay engaged in their job. On this note, Rhoades and Eisenberger (2002) stated that these levels of reward from ones' organization result in positive emotions and thereby more willingness to reciprocate this treatment. This can be done with OCB, since the results of the study of Bennett and Robinson (2002) showed that the performance of OCB includes an emotional component. This view is consistent with research suggesting that performing OCB is the result of positive employee emotion towards the organization (i.e., work engagement) (Miles et al., 2002). In view of these arguments, the current study proposes that employees that are engaged in their work will perform more extra-role behaviors that are beneficial for the organization. The following is hypothesized:

*Hypothesis 1: Work engagement is positively related to OCB.*

**Mediating Role of Organizational Commitment**

Several researchers have demonstrated that organizational commitment is important to work-related behaviors (Hackett et al., 1994; Zeinabadi, 2010). Organizational commitment is a three-component construct (Meyer & Allen, 1991, p. 67). The first component, *affective*

*commitment*, is defined as identification with, involvement in, and emotional attachment to the organization. Secondly, *normative commitment* refers to internalized normative beliefs of duty and obligation towards an organization and is defined as the employee's feelings of obligation to remain with the organization. Lastly, *continuance commitment* is defined as the extent to which employees feel committed to their organization by virtue of the costs that they feel are associated with leaving. Meyer and Allen (1991) proposed that the common view for these three, yet distinguishable, components is that organizational commitment refers to a psychological state that (a) characterizes the employee's relationship with the organization, and (b) has implications for the decision to continue or discontinue the membership in the organization. However, the nature of each component is quite different. Employees who have strong affective commitment, remain with their organization because they *want* to. In addition, employees with strong normative commitment stay loyal to their organization because they feel they are *ought* to do so. Lastly, high levels of continuance commitment indicates that employees stay because they *need* to. Of all three components, the component affective commitment might be more dominant than the other components. Mercurio's (2015) claim supports this whilst stating that affective commitment is the essence of organizational commitment. However, given the assertion of Meyer and Herscovitch (2001) that organizational commitment consists of all three-components as a binding force to the organization, the components normative and continuance commitment also need to be considered to accurately represent and measure organizational commitment. Thus, the present study views organizational commitment as a multi-dimensional construct and measures it as such.

Within social psychological literature, work engagement was found to positively impact organizational commitment (Albdour & Altarawneh, 2014; Hakanen et al., 2006). Even though work engagement and organizational commitment seem closely related, their definitions imply that organizational commitment emphasizes the relationship between the employee and the *organization* whereas work engagement focuses on the relationship between the employee and the *work they perform*. Moreover, Hallberg and Schaufeli (2006) investigated the psychometric properties and discriminant validity of work engagement (measured by the Utrecht Work Engagement Scale; UWES) and concluded that work engagement and organizational commitment are distinct, yet related constructs that describe different aspects of work attachment.

Even though work engagement and organizational commitment are closely related, different effects for the relation between the components of organizational commitment and

work engagement are expected. The study of Albdour and Altarawneh (2014) stated that employees who are engaged in their work and have a positive and work-related state of mind, are more likely to report positive attitudes towards their organization and thereby show higher levels of affective commitment. In addition, engaged employees are likely to show more loyalty to the organization (i.e., normative commitment) because they feel that they ought to do so (Blau, 1964). In contrast, the study of Bakker and Demerouti (2008) argued that work engagement negatively affects continuance commitment. This is because higher levels of energy and passion (i.e., engagement) lowers the levels of awareness of costs that are related to leaving the organization (i.e., continuance commitment). Thus, these findings indicate that work engagement has a positive relation with affective and normative commitment however a negative relation with continuance commitment.

In addition to the above stated findings, not all types of commitment ought to be beneficial for OCB (Meyer et al., 1989; Somers, 1995). The emotional attachment and involvement in the organization, demonstrated by affective commitment, are found to lead to more OCB (Chen & Francesco, 2003; Shore & Wayne, 1993). In addition, according to Wiener (1982), employees with high levels for normative commitment, might feel a deep-seated obligation "to act in a way which meets organizational goals and interests" and therefore perform more OCB (p. 421). However, continuance commitment is likely to negatively impact OCB. This is because employees with high levels of continuance commitment stay at the organization because they *need* to, not because they *want* to. Within this view, employees do not feel the need to perform extra-role behavior. The side-bets theory from Becker (1960) underlines this view. Within this theory, commitment is viewed as consistent lines of activity as a result of accumulated 'side bets' made by the employee. If the activity, thereby referring to the active employment, would be discontinued, a sense of loss will occur due to loss of these side-bets. Because employment is a necessity for employees with high levels of continuous commitment, their behaviors are likely to be dependent on implications for maintaining their employment. As OCB is viewed as extra-role performance, failure to perform OCB will not jeopardize employment. Therefore, it is plausible to assume that employees with high continuance commitment do not care to engage in citizenship behaviors. Thus, literature indicates that affective and normative commitment will have a positive effect and continuance commitment a negative effect on OCB.

Based on the previous theoretical and empirical research, the current study proposes that the components of organizational commitment can act as mediating variables, explaining

the relation between work engagement and OCB. Based on the multidimensional construct of organizational commitment, distinct hypotheses are proposed:

*Hypothesis 2a: Work engagement increases affective commitment, which in turn increases OCB, thereby it is expected that affective commitment positively mediates the relation between work engagement and OCB.*

*Hypothesis 2b: Work engagement increases normative commitment, which in turn increases OCB, thereby it is expected that normative commitment positively mediates the relation between work engagement and OCB.*

*Hypothesis 2c: Work engagement decreases continuance commitment, which in turn decreases OCB, thereby it is expected that continuance commitment mediates the relation between work engagement and OCB.*

**Mediating Role of Job Satisfaction**

Job satisfaction is often linked to employee behaviors within an organizational context. This construct is defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job and job experience'' (Locke, 1976, p. 1304). This positive emotional state results when an employee's job provides what is valued in the work situation. Overall, job satisfaction represents a combination of the employees positive or negative feelings towards their work and is closely related to employees behavior in the workplace (Davis & Nestrom, 1985). Moreover, Kaliski (2007) argued that job satisfaction is the key ingredient for recognition, income, promotion, and the achievement of other goals that lead to the feeling of fulfillment for the employee.

Within social psychological literature, work engagement has been implied to positively relate to job satisfaction (Organ & Ryan, 1995; Ngunia et al., 2006; Karanika - Murray et al., 2015). According to Lu et al. (2016), job satisfaction is the outcome of the specific dimensions of work engagement (i.e., vigor, dedication, and absorption). More studies conclude that work engagement is indeed a determining factor for job satisfaction (Judge et al., 2005; Karatepe, 2013; Wefald & Downey, 2009). The relationship between work engagement and job satisfaction can be explained by the Job Characteristics Model from Hackman and Lawler (1971). This framework identified aspects of the job and workplace as crucial to the job satisfaction for employees; when job characteristics have the potential to engage employees in work, job satisfaction is likely to be obtained thereafter.

Next to this, job satisfaction has been consistently linked to OCB. The majority of researchers contend that citizenship behavior is an outcome of job satisfaction (LePine et al.,

2002; Ngunia et al., 2006; Podsakoff et al., 2000). Moreover, job satisfaction could explain OCB related behaviors (Ilies et al., 2006). Overall, satisfied employees are found to show better work performance (Judge et al., 2001) and are more likely to perform extra-role behaviors that are beneficial to the organization (Chen & Spector, 1991). Organ (1997) seemed to imply this perspective as well when suggesting that "job satisfaction could affect the willingness of people to help colleagues and work associates and their disposition to cooperate in varied and mundane forms to maintain organized structures that govern work" (p. 92). The relationship between job satisfaction and OCB can also be explained by the Social Identity Theory of Tajfel and Turner (2004) which stated that the social identity of employees plays an important role in employees' attitudes and behaviors in an organization. Social identity is a person's sense of who they are, based on their group identity within the organization. This can cause employees to act on behalf of the group's interests. For instance, meta-analysis showed that the identification of the employee with their team or organization relates to job satisfaction and OCB (Riketta & Van Dick, 2005).

In most studies, job satisfaction is positioned as either an antecedent of workplace behavior or as a desirable outcome. While the intrinsic value of both positions is recognized, the current study argues that a subsidiary role of job satisfaction lies as a mediator between various work characteristics and organizational outcomes. In view of these findings, the current study explores the mediating role of job satisfaction for the proposed work engagement and OCB relationship. The following is hypothesized:

*Hypothesis 3: Work engagement increases job satisfaction, which in turn increases OCB, thereby it is expected that job satisfaction positively mediates the relation between work engagement and OCB.*

**Hypotheses**

The purpose of this study is to investigate the impact of work engagement on OCB, through the three components of organizational commitment and job satisfaction. The proposed hypotheses are tested via a parallel mediation model (see Figure 1). In summary, the current study suggests that engaged employees are more likely to perform OCB (hypothesis 1) and that this relationship is mediated by affective commitment (hypothesis 2a), normative commitment (hypothesis 2b), continuance commitment (hypothesis 2c) and job satisfaction (hypothesis 3).

**Figure 1**

*Parallel Mediation Model and Expected Direction of Hypotheses*
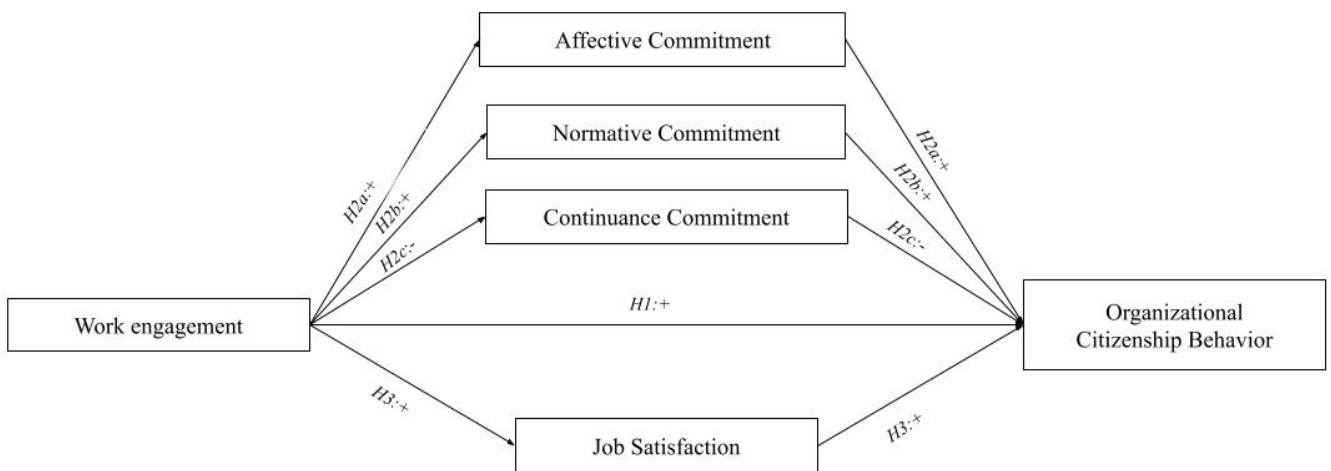


*Note.* The relationship between work engagement and OCB and the mediating roles of affective, normative, continuance commitment and job satisfaction.

## Methods

### Participants

Participants of this study were located in the Netherlands. Requirements for participation was a minimum age of 18 years and currently employed. To achieve 80% power, the aim for a minimum of participants was 150 (effect size $f^2 = .10$, power $= .80$, $\alpha = .05$). This is based on the sample size calculation provided by G*Power 3.1 (Faul et al., 2009). A total of 218 participants replied to the survey. Of these, 65 participants did not complete the survey and 2 participants did not give consent. After removing these participants, 151 participants remained for analysis. From these participants, $N = 76$ were female (50.3%) and $N = 75$ were male (49.7%). Furthermore, the mean age of the participants was $M = 29.29$ ($SD = 6.62$). In addition, most participants completed an HBO (40.4%) or WO (41.7%) study. Almost half of the participants were 2 to 5 years employed at their current job (49.7%) or 1 year or less (34.4%). Lastly, most of the participants had a full-time employment contract (79.5%), the remaining participants worked part-time.

### Design and procedure

The design of this study was cross-sectional. The participants for this study were selected by means of a convenience sample. The participants were recruited via email, social

media and at social gatherings. The participants were asked to fill in an online questionnaire via a link, which could only be completed using computers, tablets, or telephones. This questionnaire was made using the survey program Qualtrics.

Before the start of the questionnaire, participants were briefly instructed on the purpose of the study. In addition, they were informed that the data would be analyzed anonymously. To complete the questionnaire, participants needed to sign an informed consent. Participants who did not approve the consent form were not asked to complete the survey. After completion of the survey, participants were debriefed and thanked for their participation. Ethical approval for this study has been obtained via the Ethical Review Board of the Faculty of Social and Behavioral Sciences of Utrecht University (file number 22-0670).

**Measures**

The questionnaire used for the study was a combination of several existing instruments (Appendix A). Variables measured in the questionnaire were organizational citizenship behavior, work engagement, organizational commitment, and job satisfaction. To interpret the results correctly, background information was asked such as age, level of education, type and duration of employment contract, and level of the English language.

*Organizational Citizenship Behavior Checklist*

To measure Organizational Citizenship Behavior, the Organizational Citizenship Behavior Checklist (OCB-C) was used from Fox, Spector, Goh, Bruursema & Kessler (2009) (Appendix A; Questionnaire 1). The OCB-C consisted of 20 items with two separate subscales; organizational citizenship behaviors that benefit the organization (OCB-O) and behaviors directed towards coworkers to help with work-related issues (OCB-P). The first dimension OCB-O consisted of 6 items ($\alpha$= .69). An example item is; "I offered suggestions to improve how work is done.". The second dimension OCB-P also consisted of 6 items ($\alpha$ = 66). An example item is; "I lent a compassionate ear when someone had a work problem.". The other 8 items are not defined as OCB-O or OCB-P items, specifically. All items were scored on a 5-point Likert scale (1 = *Never*; 5 = *Every day*). The current study found that the reliability of OCB as a single scale was good ($\alpha$ = .84). For this reason, the scores for OCB are measured via the total score (e.g., sum of responses to all items).

*Utrecht Work Engagement Scale*

Secondly, work engagement was measured via the Utrecht Work Engagement Scale

(UWES-9) from Schaufeli & Bakker (2004) (Appendix A; Questionnaire 2). The UWES-9 consisted of nine items with three subscales. The first subscale vigor consisted of 3 items ($\alpha$ = .82). An example item is; "At my job, I feel strong and vigorous". The second dimension absorption consisted of 3 items ($\alpha$ = .83). An example item is; "I am immersed in my work". Lastly, the third dimension dedication consisted of 3 items ($\alpha$ = .72). An example item is; "I am proud of the work that I do". All items were scored on a 6-point Likert scale (0 = *Never*; 6 = *Always*). The total scale was found to be highly internally consistent ($\alpha$ = .89). Due to the subscales being closely related and because the current study made no different predictions per subscale, work engagement was measured via the total score (e.g., sum of responses to all items).

### *Organizational Commitment Questionnaire*

Thirdly, organizational commitment was measured via the short version of the Organizational Commitment Questionnaire (OCQ) from Allen & Meyer (1990) (Appendix A; Questionnaire 3). The OCQ consisted of 18 items with three subscales. The first subscale affective commitment consisted of 6 items ($\alpha$ = .82). An example item is "I really feel as if this organization's problems are my own.". The second subscale normative commitment consisted of 6 items ($\alpha$ = .82). An example item is "This organization deserves my loyalty.". Lastly, the third subscale continuance commitment also consisted of 6 items ($\alpha$ = .79). An example item is "Too much of my life would be disrupted if I leave my organization.". All items were scored on a 5-point Likert scale (1 = *Strongly disagree*; 5 = *Strongly agree*). The total scale was found to be highly internally consistent ($\alpha$ = .85). Since the three dimensions of organizational commitment are viewed as three mutually exclusive psychological states of commitment, organizational commitment was measured via the separate sub-dimensions.

### *Job Satisfaction Scale*

Finally, Job Satisfaction was measured via the Job Satisfaction Scale (JSS) of Macdonald and MacIntyre (1997) (Appendix A; Questionnaire 4). The JSS consisted of 10 items and did not contain subscales. Examples of items are "I feel close to the people at work." and "I feel good about my job.". All items were scored on a 5-point Likert scale (1 = *Strongly agree*; 5 = *Strongly disagree)*. The Cronbach's alpha reliability for this scale ($\alpha$ = .76) was acceptable. Factor analysis showed that removing items from the analysis would not increase the alpha. The diversity of item themes likely reduced the reliability coefficient.

However, a diversity of items is consistent with the intent to include the relevant facets of job satisfaction.

**Statistical Analysis**

The proposed parallel mediation model was analyzed using the PROCESS macro for SPSS Statistics 26 (Hayes, 2017). To run the parallel mediation analysis, the variables were standardized. Before running the analysis, the statistical assumptions for the mediation analysis such as linearity, homoscedasticity, normality of estimation error, outliers and independence of observations were checked. No outliers were removed, and the assumptions were found to be correct.

## Results

**Preliminary Analysis**

Means ($M$), standard deviations ($SD$) and Pearson correlations ($r$) were computed to probe the associations among the variables of this current study (see Table 1). Regarding the demographic variables, age ($r = .17$, $p < .05$), and gender ($r = .22$, $p < .001$) seemed to affect OCB-P. In addition, level of education seemed to affect the whole construct of OCB ($r = .31$, $p < .001$). Therefore, age, gender and level of education were added as covariates in the mediation analysis. Furthermore, when analyzing proposed hypotheses with OCB-O and OCB-P as two separate dependent variables, the pattern of results did not change. Thus, OCB is analyzed as one single scale in the present study.

Table 1 reveals that there were significant correlations in direction to the research model for work engagement, OCB, affective, normative, continuance commitment and job satisfaction. However, continuance commitment did not significantly correlate with OCB ($r = -.14$, $p = .08$). Next to this, the analysis showed that normative commitment did not correlate significantly with OCB ($r = .14$, $p = .08$).

**Table 1**

*Means, standard deviations and correlations between variables*

| | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Age | 29.29 | 6.62 | - | | | | | | | | | | | | | | | | | |
| 2 Gender | 1.50 | .05 | .02 | - | | | | | | | | | | | | | | | | |
| 3 Level of education | 5.17 | 1.01 | .22** | .11 | - | | | | | | | | | | | | | | | |
| 4 Level of English | 2.47 | .05 | -.14 | .02 | .20* | - | | | | | | | | | | | | | | |
| 5 Employment contract | 1.21 | .41 | -.18* | -.08 | -.23** | -.14 | - | | | | | | | | | | | | | |
| 6 Years of employment | 1.85 | .76 | .54** | -.01 | .01 | -.18* | -.09 | - | | | | | | | | | | | | |
| 7 OCB | 76.87 | 12.21 | .14 | .14 | .31** | .11 | -.24** | .21** | - | | | | | | | | | | | |
| 8 OCB-O | 24.14 | 4.69 | .02 | .06 | .24** | .20* | -.26** | .03 | .84** | - | | | | | | | | | | |
| 9 OCB-P | 23.35 | 4.55 | .17* | .22** | .28** | .03 | -.15 | .21** | .82** | .50** | - | | | | | | | | | |
| 10 WE | 42.77 | 7.15 | .08 | .08 | .04 | .19* | -.21** | .08 | .33** | .32** | .24** | - | | | | | | | | |
| 11 WE - Vigor | 13.86 | 2.70 | .03 | .00 | .05 | .16 | -.16 | .03 | .32** | .31** | .19* | .88** | - | | | | | | | |
| 12 WE - Absorption | 15.16 | 2.67 | .15 | .11 | -.01 | .16 | -.23** | .16 | .30** | .25** | .26** | .83** | .56** | - | | | | | | |
| 13 WE - Dedication | 7.68 | 1.69 | .05 | -.06 | -.14 | -.12 | .15 | .01 | -.30** | -.32** | -.19* | -.36** | -.35** | -.28** | - | | | | | |
| 14 OC | 56.22 | 10.07 | .24** | .15 | .03 | -.31** | -.07 | .18* | .17* | .03 | .24** | .31** | .20* | .33** | -.15 | - | | | | |
| 15 OC - Affective | 20.97 | 4.10 | .09 | .10 | .07 | -.05 | -.18* | .16* | .41** | .31** | .33** | .61** | .53** | .51** | -.60** | .69** | - | | | |
| 16 OC - Continuance | 16.39 | 4.79 | .22** | .05 | -.06 | -.43** | .08 | .17* | -.14 | -.23** | .01 | -.22** | -.26** | -.11 | .38** | .65** | -.01 | - | | |
| 17 OC - Normative | 18.86 | 4.63 | .20* | .18* | .07 | -.18* | -.08 | .08 | .14 | .03 | .23** | .35** | .23** | .38** | -.20* | .89** | .61** | .39** | - | |
| 18 JS | 26.17 | 5.04 | .07 | .17* | .05 | -.02 | -.15 | .11 | .29** | .21* | .25** | .62** | .58** | .41** | -.40** | .45** | .70** | -.12 | .48** | - |

*Notes.* $p < .05$ * $p < .001$**; M = mean; SD = standard deviation; OCB = organizational citizenship behavior; OCB-O = organizational citizenship behavior for Organization; OCB-P = organizational citizenship behavior for Person; WE = work engagement; OC = Organizational Commitment; JS = job satisfaction.

**Major Analysis**

Table 2 presents the results from the parallel mediation tests using ordinary least squares path analysis (Model 4; Hayes, 2017) with 5.000 bootstrap samples and estimates taken at a 95% confidence interval to examine the relationship between work engagement and OCB through organizational commitment and job satisfaction. The outcome variable for the analysis was OCB, with a predictor variable of work engagement. Besides this, age, gender, and level of education were added as covariates in analysis. First, the direct effects of work engagement between variables are discussed (path *a1 - e1*). Lastly, indirect effects of work engagement on OCB via the subscales of organizational commitment and job satisfaction are presented.

Overall, results of the parallel mediation analysis showed that the total effect (*c* path) was statistically significant and positive (*c* = .31, *SE* = .08, *p* <.001). Thus, indicating that work engagement has a significant positive effect on OCB. Hence, supporting hypothesis 1. When the mediators affective, normative, continuance commitment and job satisfaction were added to the analysis, the direct effect (*c'* path) between work engagement and OCB did not remain significant (β = .10, *SE* = .10, *p* = .35). When controlled for age, gender, level of education, and proposed mediators, 29% of the variance could be explained for OCB.

*Direct Effects*

Concerning the direct effects between proposed variables, the results displayed in Table 2 and visualized in Figure 2 revealed that work engagement had a significant influence on affective, normative, continuance commitment and job satisfaction. Precisely, findings show that work engagement had a significant and positive effect on affective commitment (β = .61, *SE* = .07, *p* < .001), normative commitment (β = .33, *SE* = .08, *p* < .001) and a negative significant direct effect on continuance commitment (β= -.23, *SE* = .08, *p* < .05). In addition, the direct effect of work engagement to job satisfaction was found to be positive and significant (β = .63, *SE* = .06, *p* <.001). Moreover, affective commitment showed to have a positive direct effect on OCB after controlling for work engagement, (β = .45, *SE* = .12, *p* <.001). However, results showed that normative commitment (β = -.18, *SE* = .11, *p* = .10) and continuance commitment (β = -.06, *SE* = .09, *p* = .52) did not have a significant direct effect on OCB after controlling for work engagement. Also, results showed that job satisfaction did not have a direct significant effect on OCB after controlling for work engagement (β = -.03, *SE* = .01, *p* = .24).

**Table 2**

*Standardized direct effects between work engagement, organizational commitment, job satisfaction and OCB*

| Direct effects | β | SE | t | p | 95% CI [LL, UL] |
|---|---|---|---|---|---|
| WE → OCB (*c* path) | 0.31 | 0.08 | 4.10 | <.001** | [-2.88, -0.90] |
| WE → OCB (*c'* path) | 0.10 | 0.10 | 0.94 | 0.352 | [-0.11, 0.30] |
| WE → AC (*a1* path) | 0.61 | 0.07 | 9.35 | <.001** | [0.48, 0.74] |
| WE → NC (*a2* path) | 0.33 | 0.08 | 4.45 | <.001** | [0.19, 0.48] |
| WE → CC (*a3* path) | -0.23 | 0.08 | -0.15 | 0.003* | [-0.39, -0.08] |
| WE → JS (*d1* path) | 0.63 | 0.06 | 10.68 | <.001** | [0.52, 0.74] |
| AC → OCB (*b1* path) | 0.45 | 0.12 | 0.94 | <.001** | [0.23, 0.68] |
| NC → OCB (*b2* path) | -0.18 | 0.11 | -1.64 | 0.103 | [-0.39, 0.04] |
| CC → OCB (*b3* path) | -0.06 | 0.09 | -0.65 | 0.518 | [-0.24, 0.12] |
| JS → OCB (*e1* path) | -0.03 | 0.01 | 1.17 | 0.242 | [-0.27, 0.21] |

*Notes.* $N = 151$. $p < .05$ * $p < .001$**; Results are controlled for age, gender, and level of education; *CI* = confidence interval (LL, lower limit; UL, upper limit); WE = work engagement; OCB = organizational citizenship behavior; AC = affective commitment; NC = normative commitment; CC = continuance commitment; JS = job satisfaction.

**Figure 2**

*Parallel Mediation Model with Direct Effects*
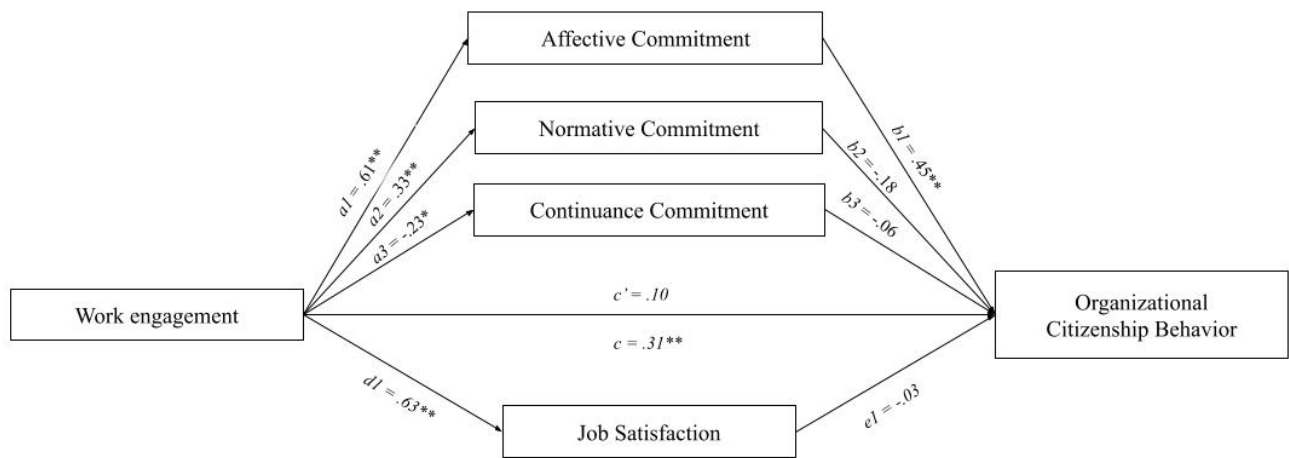


*Notes.* $p < .05$ * $p < .001$**; Results are controlled for age, gender, and level of education; all presented effects are standardized; $a$ is the effect of work engagement on organizational commitment dimensions; $b$ is the effect of organizational commitment dimensions on OCB; $c'$ is the direct effect of work engagement on OCB; $c$ is the total effect of work engagement on OCB; $d$ is the effect of work engagement on job satisfaction; $e$ is the effect of job satisfaction on OCB.

*Indirect Effects*

Shedding more light on possible mediations, indirect effects were examined. More in detail, as seen in Table 3, the indirect effect of affective commitment ($IE = .28$) for the effect of work engagement on OCB was found to be positive and significant 95%CI = [.13, .44]. Hence, providing support for hypothesis 2a. In contrast, the indirect effect of work engagement on OCB via normative commitment ($IE = -.06$) was negative but not significant 95%CI = [-.14, .00]. Hence, hypothesis 2b was not supported. In addition, the indirect effect of work engagement on OCB via continuance commitment ($IE = .01$) was found to be positive but not statistically significant 95%CI [-.04, .07]. Hence, hypothesis 2c was not supported. Lastly, the indirect effect of work engagement on OCB via job satisfaction ($IE = -.02$) was negative but not statistically significant 95%CI = [-.20, .15]. Hence, hypothesis 3 was not supported.

**Table 3**

*Standardized indirect effects between work engagement, organizational commitment, job satisfaction and OCB displayed via pathways*

| Indirect effects | *IE* | *SE* | *95% CI [LL, UL]* |
|---|---|---|---|
| WE → AC → OCB | 0.28 | 0.08 | [0.13, 0.44] |
| WE → NC → OCB | -0.06 | 0.04 | [-0.14, 0.00] |
| WE → CC → OCB | 0.01 | 0.03 | [-0.04, 0.07] |
| WE → JS → OCB | -0.02 | 0.09 | [-0.20, 0.15] |

*Notes*. Results are controlled for age, gender, and level of education; *IE* = indirect effect; *SE* = standard error; *CI* = confidence interval (LL, lower limit; UL, upper limit); WE = work engagement; OCB = organizational citizenship behavior; AC = affective commitment; NC = normative commitment; CC = continuance commitment; JS = job satisfaction.

## Discussion

The aim of this study is to deepen the knowledge on how work engagement and OCB relate to each other by investigating the influence of all three components of organizational commitment (i.e., affective, normative and continuance commitment) and job satisfaction. The hypotheses in this study were examined via a total of 151 participants and provide a broader understanding of how work engagement and OCB are related when organizational commitment and job satisfaction are considered.

### Work engagement and OCB

Results from parallel mediation analysis indicate that work engagement has a positive significant effect on OCB, supporting hypothesis 1. This finding indicates that engaged employees are more likely to perform extra-role behaviors (i.e., OCB). This is in line with previous research, in which work engagement is viewed as an antecedent of individual behavior (Ariani, 2013; Babcock-Roberson & Strickland, 2010). In more detail, employees with high levels of engagement, might show more proactive behaviors and perform tasks that are not formally required from them (Salanova & Schaufeli, 2008). The study of Podsakoff et al. (2009) indeed stated that engaged employees are more conducive to teamwork, helping

colleagues, and other discretionary behaviors (i.e., OCB). The finding that work engagement is positively related to OCB, underlines the importance of work engagement for the beneficial outcomes for organizations since OCB is linked to organizational effectiveness, performance, and efficiency (Ariani, 2013; Organ et al., 2006; Motowidlo, 2000). Because of this, it is interesting to explore whether the three components of organizational commitment and job satisfaction could provide more insight into how work engagement affects OCB.

**Mediating role of Organizational Commitment**

*Affective commitment.* Affective commitment is found to positively and partially mediate the effect of work engagement on OCB, supporting hypothesis 2a. This implies that higher levels of identification with, involvement in, and emotional attachment to the organization partially explain why engaged employees perform more extra-role behaviors at work. This finding is in line with previous research suggesting that affective commitment plays an important role in organizational citizenship behaviors (Chen & Francesco, 2003; Shore & Wayne, 1993). As the vast amount of research only examined the main effects of affective commitment (Angle & Lawson, 1993; Meyer et al., 1989; Shore & Wayne, 1993), the present study emphasizes the importance of affective commitment as a mediating variable for several reasons. First, employees who have more willingness to dedicate physical, cognitive, and emotional resources to work, are more predisposed to experience positive emotions towards their organization which is expected to increase their extra-role behaviors. Secondly, the importance of positive affective states on behaviors that benefit organizations is underlined by the current findings. This is in contrast with a study of OCB (Organ & Konovsky, 1989) which determined that OCB behaviors are cognitive rather than affectively driven due to the implication that OCB has a deliberate and controlled character, which makes decision making to perform OCB more cognitive than emotionally driven. Lastly, the result of the present study is in line with the view of Saks (2006) that if engagement is an individual level construct that impacts organizations' results, work engagement must first relate to employees' attitudes (e.g., affective commitment).

*Normative commitment.* Due to the nature of normative commitment, this component is expected to positively mediate the effect of work engagement on OCB (hypothesis 2b). However, no concluding evidence is found for this mediation. Results of the present study show that work engagement is significantly related to normative commitment, however normative commitment is not significantly related to OCB. A possible explanation for these findings can be found in the view of Meyer and Parfyonova (2010), who stated that normative

commitment can be divided into two dimensions; namely a sense of indebted obligation to the organization and a sense of moral duty of the employee. These dimensions have different behavioral outcomes, whereas the first dimension is beneficial for OCB and the second dimension is not. However, this is not the common view for the operationalization of this component of organizational commitment and therefore normative commitment was not measured as such in the present study. Besides this, it could also be argued that normative commitment might actually be a form of continuance commitment, due to the finding that 'side bets' (e.g., reflecting social costs) were found to correlate strongly with normative commitment in the study of Powell and Meyer (2004). Taken together, these arguments underline that a deeper understanding of normative commitment and its effect on behavioral outcomes is needed.

*Continuance commitment.* Contrary to the expectations, no evidence is found for the mediating effect of continuance commitment on the relation between work engagement and OCB (hypothesis 2c). In particular, continuance commitment and OCB do not significantly relate to one another. A possible explanation could be that the function and perspective of the employee could play a role in viewing tasks as in-role or extra-role performance. For instance, items measured via the OCB-C (Fox et al., 2009) such as "I took time to advise, coach, or mentor a co-worker" could be viewed as in-role instead of extra-role tasks by employees with a coaching aspect within their job. Considering that continuance commitment does not have a significant relationship with in-role tasks (Hackett et al., 1994; Somers & Birnbaum, 1998), items that are viewed as in-role tasks within the OBC-C could be a possible explanation for why continuance commitment is not significantly related to OCB. Hence, further investigation and research is advised for the effect of continuance commitment on OCB.

**Mediating role of Job Satisfaction**

Lastly, it was expected that job satisfaction positively mediated the effect of work engagement on OCB (hypothesis 3). Contrary to the expectations, no concluding evidence was found for this mediation. Based on the significant simple correlations in Table 1 between work engagement, job satisfaction, and OCB, the associations were in the direction of the proposed hypothesis. However, the inclusion of the components of organizational commitment as a mediator seemed to nullify the effect of job satisfaction on OCB. Especially, when affective commitment is added as a mediator in the model, affective commitment takes all variance and nullifies the correlation between job satisfaction and OCB. Considering that several researchers indicate that job satisfaction could explain OCB (Ilies et al., 2006; Organ,

1997; Riketta & Van Dick, 2005), the relationship between job satisfaction and OCB is quite robust in literature. This pattern of results hints that affective commitment has a greater influence on OCB, compared to job satisfaction. Job satisfaction is measured as the satisfaction with salary, colleagues, and overall nature of work (Macdonald & MacIntyre, 1997), whereas affective commitment is the identification with, involvement in, and emotional attachment to the organization. In view with the Social Exchange Theory, employees who reciprocate with OCB due to the higher levels of affective commitment, might pay less attention to economic rewards such as salary and promotion. The study of Arzu Wasti (2003) also provided evidence supportive of the strong effects of affective commitment for OCB, in comparison to other characteristics.

**Practical Implications**

The results of the current study underline the importance of affective commitment and reveal practical implications for management to consider in terms of the relations with employees. Based on the Social Exchange Theory, organizations should view the employee - organization relationship as a two-way street to increase levels of affective commitment. The current study emphasizes the importance of organizational support based on the reciprocating effect; employees who feel supported by the organization may feel the need to reciprocate in order to reduce the imbalance of the employee and organization relationship by engaging in OCB. Supporting acts that could invoke the reciprocity effect are practices such as favorable Human Resource conditions, desirable job conditions, and fair treatment of employees. On the other hand, based on the Social Exchange Theory, when these supporting acts from the organization are not enough for employees, employees could become less engaged in their work and their affective commitment (i.e., involvement in, identification with, and emotional attachment to the organization) might decrease. This way engaged employees might stop performing behaviors benefitting the organization. Economic rewards such as salary, promotion, and financial rewards (e.g., bonuses) become more important, and when compared with other organizations (Ahmadi et al., 2010) chances for employee turnover intentions could increase. Therefore, the importance of a focus on affective commitment of employees for organizations and managers is emphasized in order to increase OCB within employees.

**Suggestions for Future Research**

The findings of this study show that the work engagement - OCB relation is worth exploring in future research. One area in need of investigation is that of other possible variables that

could explain more variance for OCB.

Previous research shows a foundation for including job crafting as a mediator in analysis. Job crafting allows employees to achieve a better person-job fit by adjusting their job to their own capabilities and needs (Wrzesniewski & Dutton, 2001). Most recently, work engagement is positively linked to job crafting (Tims et al., 2012). Engaged employees are more likely to tailor their own jobs via increasing their skills to meet the job requirements and seek more feedback from colleagues in order to perform better (Bakker, 2010). Moreover, due to the view that engaged employees perform job crafting, several studies argue that by displaying their best abilities, employees perform more extra-role behavior (i.e., OCB) (Irvin, 2017; Theeuwes, 2016). Because job crafting improves the person-job fit, several researchers argue that job crafting leads to positive organizational outcomes (Bakker & Demerouti, 2008; Demerouti et al., 2015; Rudolph et al., 2017).

Another avenue for future research is investigating the impact of self-efficacy on the work engagement - OCB relationship. Unlike personality traits which are largely fixed, self-efficacy is dynamic and can change over time due to new experiences and learning (Bandura, 1982). Work engagement might be related to self-efficacy, because when an employee becomes more engaged in their work, their beliefs in their abilities grow and thereby increase their self-efficacy (Erum et al., 2020). Moreover, self-efficacious employees show high persistence and determination, and are more likely to engage in extra-role behaviors that contribute to an organization's success (Bateman & Organ, 1983). Because of the direct influence self-efficacy has on employees' cooperation and effort they put in their job, self-efficacy is believed to involve motivational potential towards extra-role behaviors that contribute to their organization (Çetin & Aşkun, 2018). Thus, investigating potential mechanisms, such as job crafting or self-efficacy, that could explain more variance in the work engagement - OCB relation is advised.

**Study Limitations**

Several limitations of the current study should be noted. Within analysis, age, gender, and level of education were controlled for since these covariates were related to OCB (Table 1). In the current sample there was an equal ratio between the representation of both men (49.7%) and women (50.3%). However, not all age categories were represented ($M = 29.29$; $SD = 6.62$). This could have impacted the results, due to the finding that age could be a resilient predictor for extra-role behavior. Moreover, younger employees (< 30 years) are found to report lower job satisfaction and OCB than older employees (Kuehn & Al-Busaidi,

2002). As a result, the results found may not be representative for all age groups (Cook et al., 2000). In addition, most participants were highly educated (HBO, 40.4%; WO, 41.7%). Because employees with a high educational level tend to show more organizational citizenship behavior (Konovsky & Organ, 1996) this could have impacted the current results. Besides this, college educated employees show greater interest in protecting organizational resources than lower educated employees. As the educational level increases, work values also increase, which promote OCB (Ng & Feldman, 2009).

On another note, the current study emphasizes the importance of controlling for in-role performance when measuring OCB, as was previously mentioned. OCB items that can be related to altruism and civic virtue could be considered more in-role than extra-role behavior (Moorman, 1991). For example, these items describe behavior that is directed to coworkers or keeping up with developments outside the organization which can be seen as tasks that are part of the job. This underlines the importance of controlling for in-role behavior when measuring OCB related behaviors. Moreover, the function and perception of employees could play a significant role in how tasks are perceived; as in-role or extra role-tasks.

## Conclusion

This study adds to the understanding of the relation between work engagement and organizational citizenship behavior and the influence of mediators such as affective, normative, and continuance commitment, and job satisfaction. Results of the current study indicate a positive relationship between work engagement and OCB. Based on the Social Exchange Theory and its reciprocity effect, organizations should view the employee - organization relationship as a two-way street and pay attention to positive employee treatment. Moreover, affective commitment was found to be a positive significant mediator, underlying the importance of the identification with, involvement in, and emotional attachment to the organization for organizational benefiting behaviors. Not all hypotheses are found to be significant. However, combined with future research, the present research can be a foundation for future interventions that foster work engagement to increase extra-role behavior in organizations to improve effectiveness and overall performance of organizations.

**References**

Ahmadi, P., Forouzandeh, S., & Kahreh, M. S. (2010). The relationship between OCB and
social exchange constructs. *European Journal of Economics, Finance and
Administrative Sciences*, 19, 107-120.

Albdour, A. A. & Altarawneh, I. I. (2014). Employee engagement and organizational
commitment: Evidence from Jordan. *International Journal of Business,* 19, 192-212.

Allen, N. J. & Meyer, J. P. (1990). The measurement and antecedents of affective,
continuance and normative commitment to the organization. *Journal of Occupational
Psychology*, 63, 1-18.

Allen, N. J., & Meyer, J. P. (1993). Organizational commitment: evidence of career stage
effects?. *Journal of Business Research,* 26, 49-61.

Angle, H. L., & Lawson, M. B. (1993). Changes in affective and continuance commitment in
times of relocation. *Journal of Business Research,* 26, 3-15.

Ariani, D. W. (2013). The relationship between employee engagement, organizational
citizenship behavior, and counterproductive work behavior. *International Journal of
Business Administration,* 4, 303-321.

Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic
leadership, work engagement, and organizational citizenship behaviors. *The Journal of
Psychology*, 144, 313-326.

Bakker, A. B. (2010). Engagement and "job crafting": Engaged employees create their own
great place to work. *Handbook of Employee Engagement.* Edward Elgar Publishing.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career
Development International.*

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37,
122.

Becker, H. (1960). Notes on the Concept of Commitment", *American Journal of Sociology,*
66.

Befu, H. (1977). Social exchange. *Annual Review of Anthropology,* 6, 255-281

Bennett, R.J., & Robinson, S.L. (2000). Development of Measure of Workplace Deviance.
*Journal of Applied Psychology,* 85, 349-360.

Blau, P.M., (1964). Exchange and Power in Social Life. NY: John Wiley and Sons.

Çetin, F., & Aşkun, D. (2018). The effect of occupational self-efficacy on work performance
through intrinsic work motivation. *Management Research Review,* 41, 186–201.

Chalofsky, N. & Krishna, V. (2009). Meaningfulness, Commitment, and Engagement: The

Intersection of a Deeper Level of Intrinsic Motivation, *Advances in Developing Human Resources*, 11, 189- 203.

Chen, Z. X., & Francesco, A. M. (2003). The relationship between the three components of commitment and employee performance in China. *Journal of Vocational Behavior,* 62, 490-510.

Chen, P. Y., & Spector, P. E. (1991). Negative affectivity as the underlying cause of correlations between stressors and strains. *Journal of Applied Psychology,* 76, 398-407.

Christian, M.S., Garza, A.S. & Slaughter, J.E. (2011). Work engagement: A quantitative review and test of its relations with task and conceptual performance. *Personnel Psychology*, 65, 89-136.

Cook, C., Heath, F., & Thompson, R.L. (2000). A meta-analysis of response rates in web-, or internet-based surveys. *Educational & Psychological Measurement*, 60, 821-836.

Davis, K. & Nestrom, J.W. (1985). Human Behavior at work: Organizational Behavior, 7 edition, McGraw Hill, New York, 109.

Demerouti, E., Bakker, A. B., & Gevers, J. M. P. (2015). Job crafting and extra-role behavior: the role of work engagement and flourishing. *Journal of Vocational Behavior,* 91, 87-96.

Erum, H., Abid, G., Contreras, F., & Islam, T. (2020). Role of family motivation, workplace civility and self-efficacy in developing affective commitment and organizational citizenship behavior. *European Journal of Investigation in Health, Psychology and Education,* 10, 358-374.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.

Fox, S., Spector, P. E., Goh, A., Bruursema, K., & Kessler, S. R. (2009). The deviant citizen: Clarifying the measurement of organizational citizenship behavior and its relation to counterproductive work behavior. *Journal of Occupational and Organizational Psychology,* 85, 199-220.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review,* 25, 161-178.

Hackett, R. D., Bycio, P., & Hausdorf, P. (1994). Further assessment of Meyer & Allens 1991 three component model of organizational commitment. *Journal of Applied Psychology,* 79, 15–23.

Hackman, J. R., & Lawler, E. E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-286.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology,* 43, 495–513.

Hallberg, U. E., & Schaufeli, W. B. (2006). "Same same" but different? Can work engagement be discriminated from job involvement and organizational commitment?. *European Psychologist*, 11, 119-127.

Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications.

Huynh, J. Y., Metzer, J. C. & Winefield, A. H. (2012). Validation of the Four-Dimensional Connectedness Scale in a multisample volunteer study: A distinct construct from work engagement and organizational commitment. *International Society for Third-Sector Research*, 23, 1056-1082.

Ilies, R., Scott, B.A. & Judge, T.A. (2006). 'The interactive effects of personal traits and experienced states on intra individual patterns of citizenship behavior'. *Academy of Management Journal*, 49, 561-575.

Irvin, R. (2017). Job crafting and organizational citizenship behavior: Believing in your creative ability to better your job and organization. Doctoral dissertation, Kansas State University.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376-407.

Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology,* 90, 257-268.

Kahn, W.A. (1990). Psychological Conditions of Personal Engagement and Disengagement of Work. *Academy of Management Journal,* 33, 692-724.

Kaliski, B.S. (2007). Encyclopedia of Business and Finance, Second edition, Thompson Gale, Detroit, 446.

Khalili, A. (2017). Transformational leadership and organizational citizenship behavior: The moderating role of emotional intelligence. *Leadership & Organization Development Journal,* 38, 1004-1015.

Karanika-Murray, M., Duncan, N., Pontes, H. M., & Griffiths, M. D. (2015). Organizational

identification, work engagement, and job satisfaction. *Journal of Managerial Psychology,* 30, 1019-1033.

Karatepe, O. M. (2013). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management,* 32, 132-140.

Konovsky, M.A. & Organ, D.W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior,* 17, 253–266.

Kuehn, K. W., & Al-Busaidi, Y. (2002). Citizenship behavior in a non-western context: An examination of the role of satisfaction, commitment, and job characteristics on self-reported OCB. *International Journal of Commerce and Management.*

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: a critical review and meta-analysis. *Journal of applied psychology*, *87*, 52.

Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology,* 1293-1349.

Lu, L., Lu, A. C. C., Gursoy, D., & Neale, N. R. (2016). Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees. *International Journal of Contemporary Hospitality Management,* 28, 737-761.

Ngunia, S., Sleegers, P., & Denessen, E. (2006). Transformational and Transactional Leadership Effects on Teachers' Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behavior in Primary Schools: The Tanzanian case. *School Effectiveness and School Improvement,* 17, 145-177.

Macdonald, S., & Maclntyre, P. (1997). The generic job satisfaction scale: Scale development and its correlates. *Employee Assistance Quarterly,* 13, 1-16.

Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative literature review. *Human Resource Development Review*, 14, 389-414.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource Management Review,* 1, 61-89.

Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review,* 11, 299-326.

Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D., & Jackson, D. N. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of Applied Psychology,* 74, 152.

Meyer, J. P., & Parfyonova, N. M. (2010). Normative commitment in the workplace: A theoretical analysis and re-conceptualization. *Human Resource Management Review,* 20, 283-294.

Miles, D.E., Spector, P.E., Borman, W.E., & Fox, S. (2002). Building An Integrative Model of Extra Role Work Behavior: A Comparison of Counterproductive Work Behavior with Organizational Citizenship Behavior. *International Journal of Selection and Assessment,* 10, 51-57.

Motowidlo, S. J. (2000). Some basic issues related to contextual performance and organizational citizenship behavior in human resource management. *Human Resource Management Review,* 10, 115-126.

Ng, T.W.H. & Feldman, D.C. (2011). Affective organizational commitment and citizenship behavior: Linear and non-linear moderating effects of organizational tenure. *Journal of Vocational Behavior,* 79, 528–537.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10, 85-97.

Organ, D. W. (1988). Organizational Citizenship Behavior: The Good Soldier Syndrome, Lexington Books, Lexington, England.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology,* 74, 157.

Organ, D.W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 755-802.

Organ. D.W., Podsakoff, Ph.M. & MacKenzie, S.B. (2006). Organizational Citizenship Behavior: Its Nature, Antecedents and Consequences. Thousand Oaks, CA: Sage Publication.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, *26*, 513-563.

Podsakoff, N.P., Whiting, S.E., Podsakoff, P.M., & Blume, B.D. (2009). Individual and Organizational Level Consequences of Organizational Citizenship Behavior: A Meta-Analysis. *Journal of Applied Psychology*, 94, 122-141.

Powell, D. M., & Meyer, J. P. (2004). Side-bet theory and the three-component model of organizational commitment. *Journal of Vocational Behavior,* 65, 157-177.

Randall, D. M., Fedor, D. B., & Longenecker, C. O. (1990). The behavioral expression of organizational commitment. *Journal of Vocational Behavior,* 36, 210-224.

Rich, B.L., Lepine, J.A., & Crawford, E.R. (2010). Job Engagement: Antecedents and Effects on Job Performance. *Academy of Management Journal,* 53, 617-635.

Riketta, M., & Van Dick, R. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behavior,* 67, 490-510.

Rhoades, L., & dan Eisenberger, R. (2002). Perceived Organizational Support: A Review of Literature. *Journal of Applied Psychology,* 87, 698-714.

Rudolph, C. W., Katz, I. A., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics and work outcomes. *Journal of Vocational Behavior*, 102, 112–138.

Rurkkhum, S., & Bartlett, K. R. (2012). The relationship between employee engagement and organizational citizenship behaviour in Thailand. *Human Resource Development International,* 15, 157-174.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology.*

Salanova, M., & Schaufeli, W.B. (2008). A Cross-National Study of Work Engagement as a Mediator between Job Resource and Proactive Behavior. *The International Journal of Human Resource Managemen*t, 19, 116-131.

Schaufeli, W. B., & Bakker, A. B. (2004). Utrecht work engagement scale preliminary manual version 1.1. *Occupational Health Psychology Unit,* Utrecht University.

Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., & Bakker, A.B. (2002a). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.

Shore, L.M. & Wayne, S.J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived Organizational support. *Journal of Applied Psychology,* 78, 774-780.

Somers, M. J. (1995). Organizational commitment, turnover, and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior*, 16, 49-58.

Somers, M. J., & Birnbaum, D. (1998). Work-related commitment and job performance: Its also the nature of the performance that counts. *Journal of Organizational Behavior,* 19, 621-634.

Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In Political psychology. P*sychology Press,* 276-293.

Theeuwes, C. (2016). The relation between job crafting dimensions seeking challenges and resources, and organizational citizenship behavior. Tilburg University. Advisor: FC van de Voorde.

Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior,* 80, 173-186.

Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology,* 143, 91-112

Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review,* 7, 421.

Wrzesniewski, A., & Dutton, J.E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review,* 26, 179-201.

Zeinabadi, H. (2010). Job satisfaction and organizational commitment as antecedents of organizational citizenship behavior (OCB) of teachers. *Procedia-Social and Behavioral Sciences,* 5, 998-1003.

**Appendix A: Questionnaires**

**Questionnaire 1**

*Organizational Citizenship Behavior Checklist (OCB-C)*

| The following 20 statements are about your behavior at work. Do these statements apply to you? Please rate the statements below on a scale from 1 = Never to 5 = Every day. | 1. Never<br>2. Once or twice<br>3. Once or twice per month<br>4. Once or twice per week<br>5. Every day |
|---|---|
| 1. I picked up meals for others at work. | 1  2  3  4  5 |
| 2. I took time to advise, coach, or mentor a co-worker. | 1  2  3  4  5 |
| 3. I helped co-worker learn new skills or shared job knowledge. | 1  2  3  4  5 |
| 4. I helped new employees get oriented to the job. (OCBO1) | 1  2  3  4  5 |
| 5. I lent a compassionate ear when someone had a work problem. (OCBP1) | 1  2  3  4  5 |
| 6. I lent a compassionate ear when someone had a personal problem. (OCBP2) | 1  2  3  4  5 |
| 7. I changed my vacation schedule, work days, or shifts to accommodate a co-worker's needs. (OCBP3) | 1  2  3  4  5 |
| 8. I offered suggestions to improve how work is done. (OCBO2) | 1  2  3  4  5 |
| 9. I offered suggestions for improving the work environment. (OCBO3) | 1  2  3  4  5 |
| 10. I finished something for a co-worker who had to leave early. | 1  2  3  4  5 |
| 11. I helped a less capable co-worker lift a heavy box or other object. (OCBP4) | 1  2  3  4  5 |

| | |
|---|---|
| 12. I helped a co-worker who had too much to do. | 1  2  3  4  5 |
| 13. I volunteered for extra work assignments. (OCBO4) | 1  2  3  4  5 |
| 14. I took phone messages for absent or busy co-worker. | 1  2  3  4  5 |
| 15. I said good things about your employer in front of others. (OCBO5) | 1  2  3  4  5 |
| 16. I gave up meals and other breaks to complete work. (OCBO6) | 1  2  3  4  5 |
| 17. I volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker. | 1  2  3  4  5 |
| 18. I went out of the way to give co-worker encouragement or express appreciation. (OCBP5) | 1  2  3  4  5 |
| 19. I decorated, straightened up, or otherwise beautified a common work space. | 1  2  3  4  5 |
| 20. I defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisors. (OCBP6) | 1  2  3  4  5 |

Source: Fox, Spector, Goh, Bruursema & Kessler (2009).

*Note*: OCB-O = Organizational Citizenship Behavior Organization scale; OCB-P = Organizational Citizenship Behavior Personal scale.

**Questionnaire 2**

*Work and Well-Being Survey (UWES-9)*

| | |
|---|---|
| **The following 9 statements are about how you feel at work. Do these statements apply to you? Please rate the statements below on a scale from 0 = Never to 6 = Always.** | 0. Never<br>1. Almost never<br>2. Rarely<br>3. Sometimes<br>4. Often<br>5. Very often<br>6. Always |

| | |
|---|---|
| 1. At my work, I feel bursting with energy. (VI1) | 0 1 2 3 4 5 6 |
| 2. At my job, I feel strong and vigorous. (VI2) | 0 1 2 3 4 5 6 |
| 3. I am enthusiastic about my job. (DE1) | 0 1 2 3 4 5 6 |
| 4. My job inspires me. (DE2) | 0 1 2 3 4 5 6 |
| 5. When I get up in the morning, I feel like going to work. (VI3) | 0 1 2 3 4 5 6 |
| 6. I feel happy when I am working intensely. (AB1) | 0 1 2 3 4 5 6 |
| 7. I am proud of the work that I do. (DE3) | 0 1 2 3 4 5 6 |
| 8. I am immersed in my work. (AB2) | 0 1 2 3 4 5 6 |
| 9. I get carried away when I'm working. (AB3) | 0 1 2 3 4 5 6 |

Source: Schaufeli & Bakker (2004).

*Note*: VI = Vigor scale; DE = Dedication scale; AB = Absorption scale.

## Questionnaire 3

*Organizational Commitment Questionnaire (OCQ)*

| | |
|---|---|
| **The following 18 statements are also about how you feel at work. Do these statements apply to you? Please rate the statements below on a scale from 1 = Strongly disagree to 5 = Strongly agree.** | 1. Strongly disagree<br>2. Disagree<br>3. Neither agree or disagree<br>4. Agree<br>5. Strongly agree |
| 1. I would be very happy to spend the rest of my career in this organization. (ACS1) | 1 2 3 4 5 |
| 2. I really feel as if this organization's problems are my own. (ACS2) | 1 2 3 4 5 |
| 3. I do not feel like "part of my family" at this organization (R). (ACS3) | 1 2 3 4 5 |

4. I do not feel "emotionally attached" to this organization (R). (ACS4)  1  2  3  4  5

5. This organization has a great deal of personal meaning for me. (ACS5)  1  2  3  4  5

6. I do not feel a strong sense of belonging to this organization (R). (ACS6)  1  2  3  4  5

7. It would be very hard for me to leave my job at this organization right now even if I wanted to. (CC1)  1  2  3  4  5

8. Too much of my life would be disrupted if I leave my organization. (CC2)  1  2  3  4  5

9. Right now, staying with my job at this organization is a matter of necessity as much as desire. (CC3)  1  2  3  4  5

10. I believe I have too few options to consider leaving this organization. (CC4)  1  2  3  4  5

11. One of the few negative consequences of leaving my job at this organization would be the scarcity of available alternatives elsewhere. (CC5)  1  2  3  4  5

12. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice. (CC6)  1  2  3  4  5

13. I do not feel any obligation to remain with my organization (R). (NCS1)  1  2  3  4  5

14. Even if it were to my advantage, I do not feel it would be right to leave. (NC2)  1  2  3  4  5

15. I would feel guilty if I left this organization now. (NC3)  1  2  3  4  5

16. This organization deserves my loyalty. (NC4)  1  2  3  4  5

17. I would not leave my organization right now because of my sense of obligation to it. (NC5)  1  2  3  4  5

18. I owe a great deal to this organization. (NC6)  1  2  3  4  5

Source: Allen & Meyer (1990).

*Notes*. R = reversed; AC = Affective Commitment Scale; CC = Continuance Commitment Scale; NC = Normative Commitment Scale.

**Questionnaire 4**

*Job Satisfaction Survey (JSS)*

| **The following 10 statements are about how you perceive your work. Do these statements apply to you? Please rate the statements below on a scale from 1 = Strongly disagree to 5 = Strongly agree.** | 1. Strongly disagree<br>2. Disagree<br>3. Neither agree or disagree<br>4. Agree<br>5. Strongly agree |
|---|---|
| 1. I receive recognition for a job well done. | 1  2  3  4  5 |
| 2. I feel close to the people at work. | 1  2  3  4  5 |
| 3. I feel good about working at this company. | 1  2  3  4  5 |
| 4. I feel secure about my job. | 1  2  3  4  5 |
| 5. I believe management is concerned about me. | 1  2  3  4  5 |
| 6. On the whole, I believe work is good for my physical health. | 1  2  3  4  5 |
| 7. My wages are good. | 1  2  3  4  5 |
| 8. All my talents and skills are used at work. | 1  2  3  4  5 |
| 9. I get along with my supervisors. | 1  2  3  4  5 |
| 10. I feel good about my job. | 1  2  3  4  5 |

Source: Macdonald & MacIntyre (1997)