# University of Twente

Faculty of Behavioural, Management and
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Specialisation Positive Psychology and Technology

**To what extent does mindfulness mediate the
relationship between conscientiousness and work
engagement in teachers?**

Maresa Lehmann
s1809075
Bachelor Thesis

First supervisor: Noortje Kloos (MSc)
Second supervisor: Dr. Erik Taal
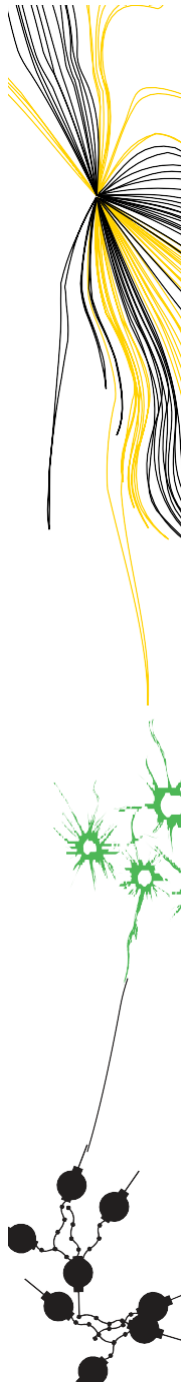
Abstract

Background: Work engagement is an important characteristic for teachers because it greatly affects their job performance. Teachers who are more engaged in their work, positively influence the learning outcomes of their students and ensure a high quality of education. Research established a relationship between mindfulness and work engagement. Another factor which positively influences whether a person experiences work engagement is the personality trait conscientiousness. Since the separate concepts are advantageous for teachers' working routine, the present study investigated how mindfulness relates to work engagement and conscientiousness in the educational context. Because studies showed that conscientious individuals are more mindful and that mindfulness is positively linked to both conscientiousness and work engagement, it was hypothesized that mindfulness mediates the relationship between mindfulness and work-engagement. **Methods:** The design of the current study was quantitative and cross-sectional. In total, 82 teachers who were sampled based on convenience, participated in the study. They filled in a questionnaire which measured trait work engagement, trait mindfulness, and conscientiousness. **Results:** A mediation analysis revealed that mindfulness did not mediate the relationship between trait work engagement and conscientiousness. A significant relationship between trait mindfulness and work engagement was established. **Conclusion:** This research showed that mindfulness related differently to work engagement and conscientiousness than initially assumed. Future research is needed to clarify whether mindfulness is a mediator in this relationship or not. Agreeing with past research, mindfulness was established as an important technique for promoting work engagement in teachers.

Keywords: work engagement, mindfulness, conscientiousness, mediation

Introduction

In their daily working routine, teachers are expected to manage various challenges, for instance, a high workload or student's inadequate behaviour in the classroom (Fiorilli, Schneider, Buonomo, & Romano, 2019; Burić & Macuka, 2018). Despite these challenges, it is important for teachers to show commitment in the working place, hence academic research increasingly investigated work engagement in the teaching occupation (Aslamiah, 2019; Granziera & Perera, 2019). Research found that work engagement is an advantageous characteristic, especially for teachers, since teachers' work engagement greatly affects their job performance. For instance, research demonstrated that teachers' work engagement is related to the learning outcomes of their students (Burić & Macuka, 2018). If students are taught by an engaged teacher, they show a better performance at school, get more involved in school-related activities, and have a higher self-efficacy (Granziera & Perera, 2019). Furthermore, engaged teachers ensure a high-quality of the education system in general (Burić & Macuka, 2018). Teachers who are engaged at work are less frequently absent from work, are less often ill and are less likely to work unproductively (Granziera & Perera, 2019). Despite these beneficial effects of work engagement, there is no research about the relationship between work engagement, mindfulness, and conscientiousness in the educational context. Therefore, this study aims at investigating how work engagement is experienced among high-school teachers and how it relates to teacher's mindfulness and conscientiousness.

Work engagement is defined as a condition in which individuals perceive positive emotions in their workplace and feel fulfilled by their working task (Schaufeli and Salanova, 2011). In the literature, work engagement is defined as consisting of three different components, namely absorption, vigor, and dedication. Persons who have a high level of absorption usually enjoy their work and find it easy to concentrate on their work task. They perceive the time to go by quickly and find it difficult to end their working process (Schaufeli & Bakker, 2004). Persons with a high level of vigor are more likely to work in an energetic and dedicated manner, to make a lot of effort for their work tasks and to show perseverance to overcome obstacles. Individuals who experience high dedication, experience their work as meaningful and feel inspired and enthusiastic in their work environment. They believe that their work is demanding and offers them the possibility to master a challenge (Schaufeli & Bakker, 2004). Work engagement can be conceptualized as a state or as a character trait. As a state, work engagement is momentary and differs from day to day. As a trait, work

engagement is experienced as stable, although it may vary depending on work-related factors (Schaufeli & Salanova, 2011). This research focuses on investigating trait work engagement.

Next to the benefits of work engagement, mindfulness received increasing attention in academic literature due to its advantageous impact in the workplace. Mindfulness is frequently described as the "art of conscious living" because it includes focusing one's attention on the present moment (Kabat-Zinn, 2004, p.15, Brown & Ryan, 2003). It has its origins in the Buddhist religion where mindfulness is considered an important mentality that enables individuals to accomplish their potential and to appreciate every moment of life (Coo & Salanova, 2018; Kabat-Zinn, 2004). Kabat-Zinn (2004) defined mindfulness as an attitude of "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (p.14). Furthermore, mindfulness is multifaceted and includes the components of acting with awareness, observing, describing, and maintaining a non-evaluative and non-reactive attitude (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Acting mindfully is beneficial in the workplace, for instance, it helps persons to improve their communication, to make appropriate decisions and to experience less frustration (Malinowski & Lim, 2015). Similar to work engagement, mindfulness can be categorized as a state or as a personality trait. As a state, a person's mindfulness differs from time to time and manifests itself depending on the specific situation (Brown & Ryan, 2003; Tsafou, Lacroix, Van Ee, Vinkers, & De Ridder, 2017). As a trait, mindfulness is experienced by individuals constantly over an extended time period and in various circumstances (Xu, An, Zhang, Du, & Ding, 2018). Hence, the degree to which one experiences mindfulness is considered stable but nevertheless, one's level of mindfulness may fluctuate over time (Brown & Ryan, 2003). Furthermore, mindfulness can be learned and enhanced by practice, for instance, through mindfulness interventions (Leroy, Anseel, Dimitrova, & Sels, 2013). Thus, in this study, trait mindfulness is considered as a generally stable skill which can vary in different situations and which can be enhanced by training (Baer et al., 2006). In the following research, mindfulness will be examined as a personality dimension.

Recent research established a relationship between mindfulness and work engagement, particularly in the context of a mindfulness training. Leroy and colleagues (2013) found that participants who took part in a mindfulness training, experienced higher mindfulness and were more likely to be engaged in their workplace. However, since the authors did not differentiate in their definition between state and trait mindfulness and work engagement, these results do not provide explicit information about the relationship between trait mindfulness and trait work engagement. Regarding trait mindfulness, Coo and Salanova

(2018) concluded that a mindfulness training, aimed at enhancing trait mindfulness, also improved the work engagement in health care professionals. These studies showed that a mindfulness training successfully increased individual's mindfulness and thus promoted their level of work engagement. However, few researchers addressed whether persons' trait mindfulness and work engagement are related, without following a mindfulness intervention. Similarly, no research is available about the relation between mindfulness and work engagement in the educational field. Therefore, more research is needed to clarify this relationship.

Since individuals differ in whether, and to which extent they experience work engagement and mindfulness, research investigated if personality traits influence these characteristics. In the literature, especially the personality trait conscientiousness was frequently shown to be positively related to work engagement (Scheepers, Arah, Heineman, & Lombarts, 2016; Janssens, De Zutter, Geens, Vogt, & Braeckman, 2019). Conscientiousness refers to a character trait which is indicated by high self-discipline and a planned and organized approach to life (Barańczuk, 2019). Conscientious individuals are ambitious, set themselves specific targets and act accordingly with these goals. Moreover, conscientious persons are reliable and think deliberately about their actions rather than acting impulsively (Giluk, 2009). Scheepers and colleagues (2016) addressed the question of whether conscientiousness is associated with an increased work engagement in supervisors who work as doctors and teachers in a hospital. They concluded that supervisors with a higher level of conscientiousness experienced more work engagement compared to supervisors with lower conscientiousness. This result refers to both their duties as a teacher and as a doctor. The authors explained that conscientious supervisors were more engaged because they focused on accomplishing a particular goal and therefore maintained a concentrated attitude (Scheepers et al., 2016).

Because both conscientiousness and mindfulness are beneficial characteristics in the work place and positively related to work engagement, few studies investigated if there is a relationship between conscientiousness and mindfulness. Research found that persons who experience conscientiousness are more likely to display mindfulness (Barańczuk, 2019, Giluk, 2009). Based on a meta-analysis, Giluk (2009) suggested deepening the research regarding the relation between the two constructs, since studies in the field of mindfulness often neglect investigating conscientiousness. Although few studies established a relation between conscientiousness and mindfulness, there is no research which examines this relationship in the educational field.

The present paper aims at investigating the relation between work engagement, mindfulness, and conscientiousness in the educational context. Although the single constructs have received increasing attention in academic literature, it is still not clear how mindfulness relates to work engagement and conscientiousness. Because research found that conscientious individuals are more mindful and that mindfulness is positively related to both conscientiousness and work engagement, this paper investigates to which extent trait mindfulness mediates the relationship between conscientiousness and trait work-engagement in teachers. More specifically, it will be researched if individuals with high conscientiousness are more likely to be mindful and thus display more work engagement. Therefore, the following hypotheses arise:

H_1: *Conscientious persons are more likely to be mindful.*

H_2: *Persons with high trait mindfulness experience higher work engagement.*

H_3: *Conscientious persons are more likely to experience higher work engagement.*

H_4: *Trait mindfulness mediates the relationship between conscientiousness and work engagement.*

Methods

Design and Procedure

In the current research, a paper-and-pencil and online survey study was conducted. The design of the study was quantitative and cross-sectional. It was examined whether there is a relationship between conscientiousness and trait work engagement and whether trait mindfulness mediated this relation.

The participants of this study were sampled based on convenience. Inclusion criteria were a minimum age of 18, current employment as a teacher in high school or primary school in Germany and a sufficient understanding of the German language. The participants were approached by first contacting the headmaster of the respective school. After agreeing to participate in the research, the headmaster received an information letter which was forwarded to all teachers in the council. Following, the teachers were able to decide for themselves whether they would like to participate in the research.

Additionally, the headmaster was offered to decide whether the online or the paper-and-pencil version of the questionnaire should be conducted. In total six German schools participated in the study. Out of the six schools, two schools preferred the paper-and-pencil version and four schools chose the online version. If the online version was preferred, the headmaster obtained the link to the questionnaire in an email. If the paper-and-pencil version was preferred, the researchers visited the school and distributed the questionnaire personally. The chosen version was then administered to the participating teachers.

An anonymous link to the questionnaire was also shared on social media (i.e., Facebook). The link was distributed in specific Facebook groups which enable teachers to exchange information and experiences. Teachers in the particular Facebook group were given a short description of the study and were invited to participate in the study.

The participants took part in this study voluntarily. After agreeing to participate in the research, teachers were first asked to sign the informed consent. Subsequently, the participants were asked to fill in a short demographics questionnaire which contained questions, for instance, about the number of hours they teach per week. Furthermore, they were asked to answer the questions for each of the four measured constructs. The study was reviewed and accepted by the BMS Ethics Committee of the University of Twente (request number 190462).

Participants

The sample consisted of 82 participants (M_{age}= 37.2, SD_{age}= 10.6). The participants were high school teachers and primary school teachers who were employed at different schools in Germany at the time of the research. In total, 23 per cent of the participants in the sample were male and 76 per cent were male. Additionally, 95 per cent of the participants were German and 5 per cent indicated another nationality. The hours which the participants taught per week ranged between 5 and 36 hours (M_{hours} = 21.3, SD_{hours}= 6.5).

Materials

Both the online and paper-and-pencil versions of the questionnaire consisted of 40 questions and covered the constructs of work-engagement, mindfulness, and conscientiousness.

For measuring work engagement, the Utrecht Work Engagement Scale was used (UWES; Schaufeli & Bakker, 2004.). The UWES consists of 9 questions and three subscales, namely of the subscale vigour (three items, e.g. "At my work, I feel bursting with energy"), the subscale dedication (three items, e.g. "My job inspires me") and the subscale absorption (three items, e.g. "Time flies when I'm working"). Participants were asked to indicate on a Likert scale from 1 *never* to 7 *always* how often they experienced the described situations at work. The participant's level of work engagement was obtained by computing the total mean score. A high total score reflected a high level of work engagement, whereas a low total score showed a low level of work engagement. As indicated in the literature, the UWES achieves a high reliability with a Cronbach's alpha of .93 and can be considered a valid questionnaire (Schaufeli & Bakker, 2004). This analysis revealed a Cronbach's alpha of $\alpha = .93$. Mindfulness was assessed by means of the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003). The MAAS measures the degree to which a person experiences mindfulness and includes 15 test items. The questionnaire consists of one scale (e.g. "I could be experiencing some emotion and not be conscious of it until some time later"). Participants were asked to answer the questions on a Likert scale from 1 *almost always* to 6 *almost never*. The degree to which participants experienced mindfulness was obtained by calculating the total mean score. Thereby, a high total score displayed a high level of mindfulness. Since the MAAS has a test-retest reliability of .81, it can be considered a reliable questionnaire. Additionally, the questionnaire has been validated in studies with college students and adults (Brown & Ryan, 2003). In the current sample, the MAAS achieved a Cronbach's alpha of $\alpha = .86$.

Finally, for assessing conscientiousness, the conscientiousness scale of the Big Five Personality Test was used (Satow, 2012). This scale examines a person's level of conscientiousness and consists of 10 questions (e.g. "I have a hard time breaking bad habits). Participants were asked to answer on a Likert scale from 1 *don't agree* to 4 *agree* whether they recognized the described characteristics in themselves. The participant's level of conscientiousness was obtained by computing the mean of the subscale score of the conscientiousness scale. A high total score showed a high level of conscientiousness. With a Cronbach's alpha of .77, this scale achieved a high reliability. Furthermore, the B5T has a sufficient factorial validity (Satow, 2012). When testing the reliability in the current sample, a Cronbach's alpha of $\alpha = .77$ was obtained.

Data analysis

The data were analysed by using the IBM SPSS statistics software (version 24). For the following analyses, an alpha level of .05 was used. Prior to the analysis, data of participants who did not finish the questionnaire were removed from the dataset. Correspondingly, data of 51 participants were excluded from the study because they did not complete the questionnaire, and the data of 82 participants were used for further analysis. Subsequently, an independent-sample-t-test was conducted to investigate whether the data of primary-school-teachers were comparable to the data of high-school teachers and could be included in the analysis. It was examined whether primary school teachers and high school teachers differed in their scores in work engagement, mindfulness and conscientiousness. A Pearson correlation analysis was performed to determine whether work engagement, mindfulness, and conscientiousness were related to each other.

Followingly, a mediation analysis was conducted to find out whether mindfulness mediates the relationship between conscientiousness and work engagement. Therefore, multiple regression analyses were performed consecutively by using the software PROCESS v3.3 (Hayes, 2017). It was decided that there was a mediation if the four criteria for mediation by Baron & Kenny (1986) were met. As a first criterium, there needed to be a relation between the independent variable conscientiousness and the dependent variable work engagement. Second, there had to be a relationship between the independent variable conscientiousness and the supposed mediator mindfulness as the dependent variable. The third criterium was that a relation was found between conscientiousness and mindfulness as the independent variables and work engagement as the dependent variable. Fourth, for a mediation effect, there needed to be a significant effect size of the indirect effect. It was decided that there was a mediation if there was an indirect effect which differed from zero (Field, 2014).

Results

Descriptives

The results of the following analyses are shown in Table 1 below. An independent-sample-t-test revealed that on average, primary school teachers did not score significantly different in work engagement, ($t(80)= 1.48$, $p= .14$), mindfulness ($t(80)= - .63$, $p= .53$), and conscientiousness ($t(80)= -1.48$, $p= .14$), than high-school teachers. On average the

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participants experienced work engagement frequently (once a week). Regarding mindfulness, on average, the teacher in the sample experienced mindfulness somewhat infrequently. For conscientiousness, on average, the participants responded that they agree a little to the conscientiousness statements. A correlation analysis revealed that mindfulness was significantly related to work engagement. There was no significant relation between the remaining variables.

Table 1
Descriptives of Teachers' and Pearson Correlation between variables.

	Scale	M	SD	r. 1.	r. 2.	r. 3.
1.Work engagement	1-7	4.95	.95	-	.33**	.13
2.Mindfulness	1-6	4.14	.68	-	-	.20
3.Conscientiousness	1-4	2.85	.44	-	-	-

Note. ** Correlation is significant at the .01 level (2-tailed).

Main analyses

A mediation analysis was conducted. A model of this analysis is shown in Figure 1 below. First, no significant relation between the independent variable conscientiousness and the mediator mindfulness was established, $b = .45$, $t(82) = 1.87$, $p = .06$. However, a significant relation between the mediator mindfulness and the dependent variable work engagement was identified, $b = .28$, $t(82) = 1.87$, $p = .00$. Second, there was no significant relation between the independent variable conscientiousness and the dependent variable work engagement, $b = .25$, $t(82) = 1.13$, $p = .26$. In the third step, there was no significant relation between the independent variable conscientiousness and the dependent variable work engagement, when the mediator mindfulness was included in the model, $b = .12$, $t(82) = .55$, $p = .58$. Fourth, since the relation between conscientiousness and work engagement was not significant in the first step, no significant indirect effect with mindfulness included in the model was found. Similarly, a measure for the indirect effect

yielded a bootstrapped 95% confidence interval that ranged between b = -. 02 and b = .32. Because this range included zero, there was no significant indirect effect of conscientiousness on work engagement through mindfulness. Therefore, the first hypothesis that conscientious persons are more likely to be mindful is rejected. The second hypothesis that individuals with high trait mindfulness experience higher work engagement is not rejected. Similarly, the third and fourth hypothesis that conscientious persons are more likely to experience work engagement and that mindfulness mediates the relation between conscientiousness and work engagement were rejected.
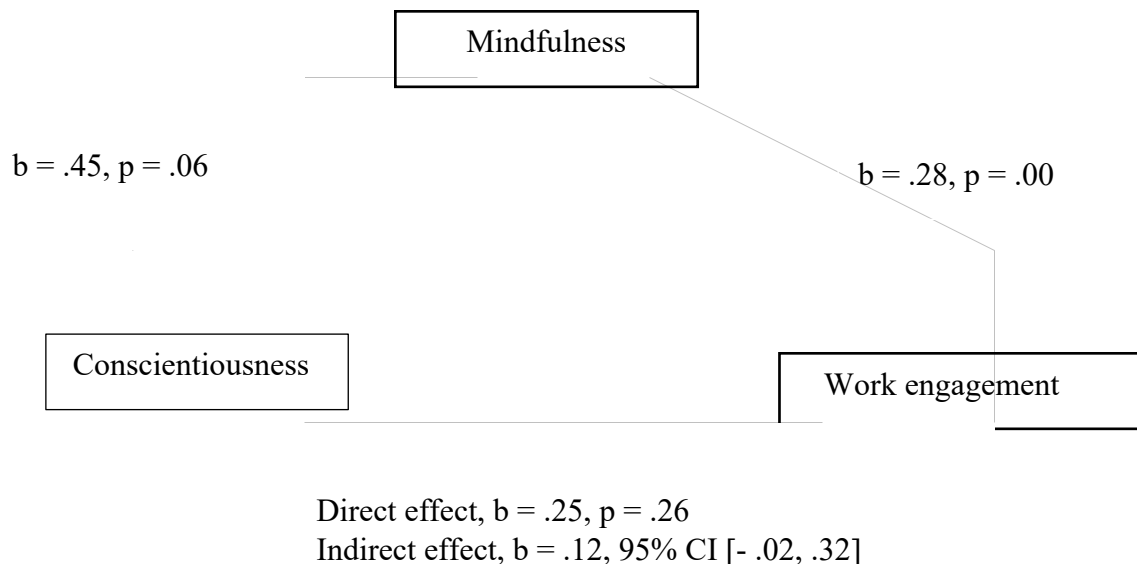
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                        ┌─────────────────────┐
                        │     Mindfulness     │
                        └─────────────────────┘

   b = .45, p = .06                              b = .28, p = .00

┌─────────────────────┐              ┌─────────────────────┐
│  Conscientiousness  │              │   Work engagement   │
└─────────────────────┘              └─────────────────────┘
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Direct effect, b = .25, p = .26
Indirect effect, b = .12, 95% CI [- .02, .32]

Figure 1. Diagram of the relationship between conscientiousness and work engagement with no significant mediation of mindfulness.

Discussion

The aim of the current study was to investigate the relationship between work engagement, mindfulness, and conscientiousness in teachers. Particularly, it was hypothesized that mindfulness mediates the relation between conscientiousness and work engagement. The results showed that there is a relationship between mindfulness and work engagement. However, no relationship between conscientiousness and mindfulness was established.

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Similarly, there was no relationship between the experience of conscientiousness and work engagement. Finally, mindfulness did not mediate the relationship between conscientiousness and work engagement in teachers.

The second hypothesis stands out because the finding that there was a relation between mindfulness and work engagement is in line with existing research. Leroy and colleagues (2013) described that individuals who are mindful are more likely to be engaged at work. These individuals seemed to utilize their mindful attitude to enhance their work engagement. Correspondingly, Malinowski and Lim (2015) found that the degree to which persons are mindful, predicted whether they show engagement at work.

Contrary to expectations and the first hypothesis, in the current study, no relationship between conscientiousness and mindfulness was found. Participants who were conscientious were not more likely to be mindful than participants who showed no conscientious attitude. This result deviates from the findings of past research. Barańczuk (2019) described in a meta-analysis that there was a relationship between the two concepts. Conscientious individuals tended to display a mindful attitude, compared to individuals who were not conscientious. The main aspect in which the current study and the research by Barańczuk (2019) differed, is that mindfulness was investigated in the context of emotion regulation. Barańczuk (2019) found a positive relationship between conscientiousness and adaptive emotion regulation strategies which included mindfulness, reappraisal and problem-solving. In the current study, mindfulness was not investigated as a strategy for emotion regulation but as a skill that individuals utilized to enhance their work engagement. Although participants in both studies may have utilized mindfulness for different purposes, both studies defined mindfulness as a process of focusing on the present moment (Barańczuk, 2019). Hence, it is unlikely that the different purpose for which mindfulness was used, explains the contrasting study results. Since very few studies are available which investigate the relationship between conscientiousness and mindfulness, further research is needed to clarify whether there is a relationship or not.

The third hypothesis stands out since the result that there was no relationship between conscientiousness and work engagement was frequently established in the literature. For instance, Scheepers and colleagues (2016) found a positive relationship between conscientiousness and work engagement. More specific, conscientiousness was respectively associated with the three components of work engagement, namely vigor, absorption, and dedication. Correspondingly, Janssens and colleagues (2019) acknowledged that conscientiousness was a predictive factor of work engagement. The main difference between

these studies and the current research is that the participants were employed in different fields of work. Scheepers and colleagues (2016) investigated the relation between conscientiousness and work engagement in individuals who were employed simultaneously as doctors and teachers in teaching hospitals. Jansen and colleagues (2019) examined the relationship in Belgian employees who worked in various sectors, for instance in the social health care. In the current study, the relationship between conscientiousness and work engagement was investigated in the teaching occupation. However, it is unlikely that the distinctive fields of work account for the different research results since the relationship between conscientiousness and mindfulness was already well established in a meta-analysis that investigated this relation in several contexts (Barańczuk, 2019). Therefore, the unexpected result of the current study that there was no relation between conscientiousness and work engagement in teachers should be reviewed by future research.

Contrary to the fourth hypothesis, the current study revealed that mindfulness did not mediate the relationship between conscientiousness and work engagement. Since at the time of the research, no studies were available which investigated a possible mediation effect between the described constructs, the results of this study are difficult to compare with existing research. Although research by Barańczuk (2019) indicated that there is a strong relationship between conscientiousness and mindfulness in the context of emotion regulation, in the current research, conscientiousness and mindfulness may be independent factors in their relation to work engagement. This is supported by the fact that in the current study, no evidence for a relationship between conscientiousness and mindfulness was established. Since the relationship between the concepts is not well examined, there may be other intervening variables besides mindfulness which are stronger related to work engagement and conscientiousness.

For example, one concept that is described in the literature on work engagement is intrinsic motivation. Intrinsic motivation is defined as a type of motivation that arises from within a person (Putra, Cho, & Liu, 2017). Research showed that intrinsic motivation is related to conscientiousness, mindfulness and work engagement. For example, mindfulness was found to predict intrinsic motivation in students (Ruffault, Bernier, Juge, & Fournier, 2016). Moreover, there is a relationship between conscientiousness and intrinsic motivation in college students (Hazrati-Viari, Tayarani Rad, & Saeed Torabi, 2012). Finally, Putra and colleagues (2017) described that intrinsic motivation enhanced the level of the three components of work engagement, namely vigor, absorption, and dedication, in hospitality workers. Hence, future research may review the role that mindfulness and intrinsic motivation

play in the relationship between conscientiousness and work engagement. Possibly, mindfulness and conscientiousness are not related but are independent factors. It is hypothesized that intrinsic motivation mediates the relationship between each of the two constructs and work engagement. It is suggested that individuals who are mindful, are more likely to be intrinsically motivated and therefore experience more work engagement. Conscientious individuals may be more likely to experience intrinsic motivation which makes them more engaged at work.

There were some limitations which need to be considered when interpreting the findings of this study. First, the cross-sectional design of the current study is a limitation. Cross-sectional research designs provide information about the prevalence of a particular characteristic at one point in time in a certain population (Setia, 2016). Correspondingly, in the current study, the relationship between work engagement, mindfulness, and conscientiousness in teachers was examined at a single moment. A major limitation of cross-sectional studies is that they do not yield information about the cause and effect in a relationship. Moreover, in cross-sectional research, it is difficult to estimate the direction of a relationship (Setia, 2016). In the current study, it was hypothesized that mindfulness mediates the relationship between conscientiousness and work engagement. However, due to the cross-sectional design of the current study, the directions of the relationships may be different than assumed. For instance, mindful individuals may not experience more work engagement, but engaged persons may be more likely to be mindful. This point is especially important in the current study since the relationships between work engagement, mindfulness and conscientiousness are not well established yet. Hence, further research is needed to investigate how these constructs are related and to clarify the directions of the relationships.

A second limitation was that the participants may have experienced social desirability. Social desirability occurs when individuals want to present themselves in a manner which they think is socially desirable (Pedregon, Farley, Davis, Wood, & Clark, 2012). In the current study, teachers may have evaluated themselves as more engaged, in particular when the questionnaire was administered personally. This is supported by the fact that, on average, the participants reported that they experienced work engagement frequently. Although it was stated that the participant's answers were recorded anonymously, teachers may have wanted to present themselves to the researcher in a favourable manner. Similarly, although it was explained that the participant's answers were handled with confidentiality and were not shared with the headmaster, participants may have wanted to demonstrate high work engagement to the headmaster.

Next to some limitations, the current study had several strengths. The most important strength lied in the investigation of the relation between work engagement, mindfulness, and conscientiousness in the educational context. Since at the time of the study, no research was available which examined the concepts in teachers, this study added to a limited body of literature on work engagement and its related concepts in the educational field.

Another strength of the current study was that it examined the relationships between work engagement, mindfulness, and conscientiousness. Until now, research investigated merely the separate constructs but there is still considerable uncertainty about how mindfulness relates to conscientiousness and work engagement. Since it was shown that mindfulness did not mediate the relationship between conscientiousness and work engagement, the current study provided more insight into the role of mindfulness as a mediator. Moreover, this research revealed that there was a relationship between mindfulness and work engagement and thus confirms the results of past research. This underlines that mindfulness is an important skill in education that should be considered when aiming at promoting employee's work engagement.

A further strong point of the current study was its focus on trait work engagement and trait mindfulness. Past research mainly did not specify whether the authors investigated trait or state work engagement and mindfulness or did not differentiate between state and trait characteristics. Thus, it often remained unclear whether a significant relationship between the two constructs referred to trait or state work engagement and mindfulness. The current study focused on how trait mindfulness relates to trait work engagement and conscientiousness and provided further evidence for a relationship between trait mindfulness and trait work engagement.

In conclusion, the current study aimed at investigating to what extent mindfulness mediates the relationship between conscientiousness and work engagement in teachers. Since mindfulness did not mediate the relationship between conscientiousness and work engagement, additional research is needed to clarify whether mindfulness is a mediator in this relationship or not. Future research may investigate whether there are other factors, for instance, intrinsic motivation, that are stronger related to work engagement and conscientiousness than mindfulness. Moreover, further research may examine how conscientiousness relates to work engagement because contrary to expectations, in the current study, no relationship between these concepts was established. Finally, although mindfulness is not a mediating factor between conscientiousness and work engagement, this study underlined the importance of mindfulness for promoting work engagement in teachers. Since

mindfulness as a skill can be enhanced by training, it is suggested to educate teachers about the relevance of mindfulness and to offer opportunities to practice mindfulness. By improving individual's mindfulness, teachers may utilize this skill in their working routine and thus improve their work engagement.

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