

## IMPACT ON PRESENTEEISM OF THE CONSCIENTIOUSNESS TRAIT: A HEALTH SECTOR CASE STUDY

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Our purpose in this study was to examine the relationship between presenteeism and the conscientiousness trait as an individual-level predictor of employee health and productivity. We used convenience sampling to recruit 168 Turkish health employees, who completed measures of conscientiousness and presenteeism. The findings revealed that in a work outcomes context, the conscientiousness trait was positively related to the noncompletion of work dimension of presenteeism, the focus of which is on work outcomes. However, the relationship between the conscientiousness trait and the distraction dimension of presenteeism was nonsignificant. Our findings have implications for managers and organizations, who should be proactive in taking preventative precautions to mitigate the possible negative effects of presenteeism behaviors.

*Keywords:* conscientiousness, Big Five personality traits, presenteeism, work outcomes, productivity.

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*Presenteeism* has been defined in numerous interrelated ways that are primarily focused on productivity loss effects (Johns, 2011; O'Donnell, 2009). For our study, we based the definition on Hummer, Sherman, and Quinn (2002) and Whitehouse (2005), that is, employees working less productively than usual owing to health problems (e.g., injury and illness) or other events (e.g., office politics) that distract from full productivity. Specifically, since the 2000s, presenteeism has gained interest from researchers in the US, the UK, and Europe in the fields of epidemiology, occupational health, and management (Simpson, 1998; Virtanen, Kivimäki, Elovainio, Vahtera, & Ferrie, 2003). In these studies, presenteeism has mainly been explored via two avenues (Johns, 2010). First is the behavioral approach, which was suggested by UK and European researchers. According to this approach, presenteeism is a result of job insecurity arising from downsizing and restructuring processes, and leads to various health problems (Worrall, Cooper, & Campbell, 2000). The second is the productivity-focused approach, which was suggested by US researchers and is mainly aimed at exploring how various illnesses or medical conditions affect employee productivity (Pohling, Buruck, Jungbauer, & Leiter, 2015). Studies in which the second approach is employed have generally been focused on examining the prevalence and frequency of presenteeism, job insecurity, and other job characteristics, as potential antecedents of, and the productivity-related consequences of presenteeism. Given the decreasing productivity effect that presenteeism has, managing it effectively could create a sustainable competitive advantage for organizations (Hemp, 2004). Therefore, we focused in this study on the latter approach, regarding productivity loss.

Because of its destructive effects on organizations in terms of productivity loss, the phenomenon of presenteeism is important for organizations to address (Yıldız, Yıldız, Zehir, & Aykaç, 2015). Despite this, with the exception of a few studies conducted in the organizational context (Hemp, 2004; Johns, 2010; Yıldız et al., 2015), scholars in the fields of organizational behavior and human resource management have devoted little attention to presenteeism. Although the literature on presenteeism is still in its infancy, it is growing rapidly. A few scholars have empirically investigated the determinants of presenteeism, some of whom have explored the role of individual factors (Deery, Iverson, & Walsh, 2012; Deery, Walsh, & Zatzick, 2014; Heponiemi et al., 2010; Johns, 2011). For instance, Deery et al. (2014) developed a moderated mediation model, in which conscientiousness served as a control variable, and found that the relationships among conscientiousness, presenteeism, absenteeism, organizational justice, and job demand (i.e., work overload, attendance enforcement, and understaffing) were nonsignificant. However, they did not address the predictive role of conscientiousness in relation to presenteeism. Similarly, Johns (2011) examined the antecedents and correlates of presenteeism, absenteeism, and productivity

loss attributed to presenteeism, and found that presenteeism was negatively associated with neuroticism. In addition, Johns emphasized the value of the behavioral approach to presenteeism (e.g., job security).

However, the number of studies in which the individual determinants of presenteeism has been explored remains small (Deery et al., 2014; Johns, 2011). Nandi and Nandi (2014) conducted a study with employees of a tea garden and proposed possible relationships among certain personality traits and presenteeism. Despite the theoretical rationale supporting their propositions, empirical proof was lacking. Therefore, we focused on clarifying whether or not the conscientiousness trait is an individual-level antecedent of presenteeism. Moreover, because our interest was centered on the work and psychological aspects of presenteeism (Koopman et al., 2002), rather than conducting a general evaluation, we examined two specific dimensions of presenteeism behaviors: noncompletion of work and distraction.

Researchers such as Judge, Higgins, Thoresen, and Barrick (1999) and Nandi and Nandi (2014) have shown that, compared to employees who are not conscientious, conscientious employees are more task- and achievement-oriented, prone to avoiding reflecting their displeasure, and dependable in their work. Consequently, they place more importance on their individual performance. In light of this, we aimed to determine the impact on presenteeism of the conscientiousness trait among employees in the health sector. Public hospitals were chosen because of the intensive workloads associated with healthcare institutions, which operate 24 hours a day, 7 days a week. Specifically, healthcare employees tend to go to work despite illness for various reasons (e.g., the fear of dismissal, the loss of a variety of compensations; Knani et al., 2015; Martinez & Ferreira, 2012). Our intention was to contribute to both organizational theory and practice by enhancing existing knowledge about the antecedents of presenteeism so that these behaviors can be more effectively managed. The main research question was “How does the conscientiousness trait affect employees’ presenteeism behaviors?”

## Theoretical Background and Hypotheses Development

### Presenteeism Behavior

In the literature, presenteeism is also known as sickness presence and *sickness presenteeism* (Böckerman & Laukkanen, 2010). Presenteeism entails attending work while ill (Knani, Fournier, & Biron, 2015; Yıldız et al., 2015), in contrast to *sickness absenteeism*, which involves not coming to work for reasons arising from health problems (Yıldız et al., 2015). There are numerous antecedents to presenteeism where strict management policies regarding attendance apply to prevent absenteeism (Munir, Yarker, & Haslam, 2008). These include strong

pressure from management (Dew, Keefe, & Small, 2005), the risk of violating ethical values regarding the disclosure of illness (Meerding, IJzelenberg, Koopmanschap, Severens, & Burdorf, 2005), time pressure to meet job demands (e.g., excessive workload; Caverley, Cunningham, & MacGregor, 2007), difficulty associated with finding a replacement, misfit of desired and actual working hours (Böckerman & Laukkanen, 2010), fear of being deprived of promotion (e.g., career opportunities), cultural barriers in the workplace, organizational norms (Munir et al., 2008; Simpson, 1998), health factors (e.g., high stress; Yang, Zhu, & Xie, 2016), job insecurity (e.g., temporal employment; Heponiemi et al., 2010), and workaholism (Schaufeli, Bakker, van der Heijden, & Prins, 2009).

In addition to the abovementioned antecedents, numerous scholars have focused on the actual costs of productivity and additional health problems associated with presenteeism (Aronsson & Gustafsson, 2005; Burton, Chen, Conti, Schultz, & Edington, 2006; Johns, 2010; Pohling et al., 2015). Some have even indicated that the costs of presenteeism surpass direct medical costs; that is, the resulting productivity losses were greater than the physical-oriented losses (O'Donnell, 2009; Zhang, Sun, Woodcock, & Anis, 2015). Nevertheless, it is difficult to detect and measure the productivity losses of presenteeism compared with those of sickness absenteeism (Noben et al., 2015). Given the destructive nature of presenteeism, we believe that managing and minimizing this behavior should be considered an organizational priority.

### **Conscientiousness Trait**

*Personality* is a concept consisting of the sum total of measurable traits and ways in which an individual reacts to and interacts with others (Robbins & Judge, 2013). Further, according to Mayer (2005), personality is “the organized, developing system within the individual that represents the collective action of his/her motivational, emotional, cognitive, social-planning, and other psychological subsystems” (p. 296). On the basis of personality theory, individual differences in personality contribute to the understanding of human behavior in organizations (Murphy, 2012). Therefore, to describe the personality characteristics in order to make predictions about behavior, a variety of personality models may be used. Of these, two prominent personality frameworks are the Myers-Briggs Type Indicator (MBTI; Myers & McCaulley, 1985) and the Big Five model of personality (Goldberg, 1995).

In contrast to the MBTI, the Big Five model enables better identification of personality as a whole and does not entail identifying the personality type of the individual with a single trait (Robbins & Judge, 2013). Therefore, we used the Big Five model in this study because it is generally seen as the most useful way to organize people's personality traits (Goldberg, 1995). The model consists

of five basic factors (Goldberg, 1995): extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Of these, *conscientiousness*, which is defined as a person's degree of organization, persistence, hard work, and motivation toward goal fulfilment (Zhao & Seibert, 2006), has been found to be the most important determinant of presenteeism (Nandi & Nandi, 2014). It is characterized by "three basic features: achievement orientation (hardworking and persistent), dependability (responsible and careful), and orderliness (able to plan and be organized)" (Judge et al., 1999, p. 624). For this reason, we included only the conscientiousness trait in the scope of our study.

### **Relationship Between Conscientiousness and Presenteeism**

Conscientiousness is a measure of reliability; hence, individuals who score highly on this trait tend to show skillful, orderly, organized, dutiful, determined, reliable, responsible, dependable, goal-oriented, self-disciplined, restrained, steadfast, deliberate, and punctual behaviors (Barrick, Mount, & Li, 2013; John & Srivastava, 1999; Murphy, 2012). Less conscientious individuals (vs. those who lack direction) are, by contrast, more easily distracted, less goal-oriented, careless, unreliable, and disorganized (John & Srivastava, 1999; Robbins & Judge, 2013). Conscientiousness has emerged as the major personality predictor of job performance in many professions (Judge et al., 1999; Murphy, 2012; Ones, Dilchert, & Viswesvaran, 2012; Zhao & Seibert, 2006).

Previous researchers have shown that some sources of pressure (e.g., management policies, ease of replacement, time pressure, job demands, workload, health factors, and job insecurity) are the most accepted antecedents of presenteeism (Böckerman & Laukkanen, 2010; Dew et al., 2005; Heponiemi et al., 2010; Yang et al., 2016). As such, it could be argued that conscientiousness should not be linked to presenteeism. The social cognitive theory of Bandura (1986) and Bandura, Barbaranelli, Caprara, and Pastorelli (1996) can shed light on our research logic. On the basis of this theory, employees have the ability to influence their own thoughts and behaviors through two mechanisms: self-regulation and self-condemnation. The *self-regulatory mechanism* refers to an internal database that consists of past moral standards and cognitive elements and serves as a filter before engaging in a behavior. If a behavior passes this filter, the *self-condemnation mechanism*, which refers to a disapproval process, comes to the fore. If this mechanism works smoothly, it restrains undesired behavior; however, if it is intentionally deactivated then these behaviors will be considered to be justified.

In light of the abovementioned theoretical and practical rationale, conscientious employees are considered to be task-oriented, responsible, dependable, goal-oriented, self-disciplined, restrained, and internally motivated to take action. They are also more prone to feel an obligation to fulfill their work or

task assignments than are employees who are not conscientious. In other words, the propensity toward deactivating self-regulatory and self-condemnation mechanisms to fulfill tasks or work is probably high in conscientious employees, regardless of whether or not they are ill. As mentioned, these employees may be aware of the deviant nature of going to work while ill; however, to avoid any of the pressure factors, they may intentionally deactivate their self-regulatory and self-condemnation mechanisms, and justify working while unwell as a necessary part of their working life. This would mean that conscientious employees are more likely to engage in presenteeism behaviors than are employees who are not conscientious; thus, we formed the following hypotheses:

**Hypothesis 1:** Conscientiousness will be positively related to the presenteeism trait of noncompletion of work behavior.

**Hypothesis 2:** Conscientiousness will be positively related to the presenteeism trait of distraction behavior.

## Method

### Participants and Procedure

We used convenience sampling to conduct the survey and obtain data from the participants, who were public hospital employees in Istanbul. The survey forms were distributed to 200 of these employees either through personal contacts or by online survey, and collected over the period of 3 weeks in January, 2015. Of the employees, 180 completed our self-report survey, 12 of whom were excluded from the research because their responses were incomplete (response rate = 84%). Thus, the final usable sample comprised 168 participants.

The demographic characteristics of our participants were as follows: 30% were female and 70% were male; 61% were aged from 18 to 35 years and 39% were aged from 36 to 50 years; 7% were doctors, 33% were nurses or midwives, and 60% were technicians; 19% had a postgraduate degree, 54% had an undergraduate degree, and 27% had an associate degree; 42% had been working in this field of employment for 1 to 10 years, 47% for 11 to 20 years, and 11% for 21 years or more.

### Measures

Except for the control variables, all survey items were measured on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

**Conscientiousness trait.** Conscientiousness was measured using the nine-item conscientiousness dimension of the Big Five Inventory, developed by John, Donahue, and Kentle (1991). The instrument was adapted into the Turkish language by Gümüş (2009), and was found to be both valid and reliable. An example item is "I persevere until the task is finished." Cronbach's alpha for the subscale was .83 in this study.

**Presenteeism.** Presenteeism was measured by using the six-item Stanford Presenteeism Scale, developed by Koopman et al. (2002). It consists of two dimensions, with three items each used to measure noncompletion of work (i.e., the level of work focus and achievement of work outcomes of presenteeism) and distraction (i.e., the degree of psychological focus and concentration of presenteeism related to work process; Koopman et al., 2002; O'Donnell, 2009). Example items of the distraction and noncompletion of work subscales are, respectively, "My health problems distracted me from taking pleasure in my work" and "At work, I was able to focus on achieving my goals despite my health problems" (reverse-coded). Cronbach's alpha coefficients were .88 and .90 in this study.

To create a Turkish version of this measure, we followed the back-translation procedure recommended by Brislin (1980). First, we translated the presenteeism scale from English into Turkish. Then, the scale was independently back-translated into English by a different translator. A few discrepancies in item meanings emerged during this process, and these were addressed in the Turkish translation based on the translator's advice.

**Control variables.** On the basis of past findings that these variables affect presenteeism, the participants' gender, age, tenure, and profession were included as control variables (Côté & Haccoun, 1991; Hackett, 1990; Heponiemi et al., 2010; Sturman, 2003).

### Data Analysis

Before testing the hypotheses, we first used SPSS version 22.0 to calculate descriptive statistics and conduct an exploratory factor analysis to verify the construct structure of the Turkish Big Five Inventory and Stanford Presenteeism Scale. Then, we used SPSS to test the impact of the conscientiousness trait on presenteeism by using hierarchical regression analysis.

## Results

We performed a factor analysis using principal components analysis with an extraction method and orthogonal varimax rotation with Kaiser normalization on the 15-item survey (Hair, Black, Babin, & Anderson, 2009). As with the English version of the survey, the analysis results revealed three factors. However, one item for the conscientiousness factor ("I am easily distracted") was dropped from this measure owing to a low factor loading. Factor loadings were then in the range of .51–.92. The Kaiser-Meyer-Olkin measure was used to verify the adequacy of the sample for analysis, which was .82. The result of Bartlett's test of sphericity was significant,  $\chi^2(91) = 1195.20$ ,  $p < .01$ . As a result, the three factors explained 64.29% of the total variance, comprising 27.55%, 19.90%, and

16.84% of the variance for conscientiousness, distraction, and noncompletion of work, respectively.

After verifying the construct validity, we tested the hypotheses. Initially, we ran a correlation analysis to investigate the relationship between the independent (conscientiousness) and dependent (noncompletion and distraction) variables. Results revealed that the conscientiousness trait had a weak positive correlation with noncompletion of work, as shown in Table 1. However, as there was no significant relationship between conscientiousness and distraction, Hypothesis 2 was not supported.

Next, controlling for gender, age, tenure, and profession to test Hypothesis 1, hierarchical regression analysis was conducted. In Step 1, we found that age as a control variable was positively associated with noncompletion of work. In Step 2, the results of the analysis, as presented in Table 2, showed that conscientiousness trait explained only 7% of the variance in the noncompletion of work. Overall, because the conscientiousness trait was found to be weakly but positively related to presenteeism originating from noncompletion of work, Hypothesis 1 was supported.

Table 1. *Descriptive Statistics, Correlations, and Reliabilities of Study Variables*

Variables	<i>M</i>	<i>SD</i>	1	2	3
1. Conscientiousness trait	4.18	0.55	(.83)		
2. Noncompletion	3.05	1.18	.219**	(.88)	
3. Distraction	3.61	1.17	.068	.415**	(.90)

Note. *N* = 168; \*\* *p* < .01 (one-tailed). Cronbach's alpha coefficients are listed in parentheses.

Table 2. *Effect of the Conscientiousness Trait on Noncompletion of Work*

Predictors	Step 1		Step 2	
	$\beta$	<i>t</i>	$\beta$	<i>t</i>
Control variables				
Gender	.03	0.41	.03	0.33
Age	.21*	2.14	.16	1.58
Tenure	-.02	-0.28	-.01	-0.16
Profession	.04	0.37	.05	0.53
Independent variable				
Conscientiousness		.21**		2.71
<i>R</i> <sup>2</sup>	.06		.10	
Adj. <i>R</i> <sup>2</sup>	.03		.07	
<i>F</i>	2.38		3.44**	
$\Delta R^2$	.06		.04**	

Note. *N* = 168; \* *p* < .05, \*\* *p* < .01 (two-tailed).



## Discussion

Presenteeism behaviors are a common and growing problem in organizational settings (Yıldız & Yıldız, 2013) because, as stated by Quazi (2013), employers require a healthy workforce to achieve productive outcomes. In contrast, an unhealthy workforce leads to significant productivity losses for the enterprise (Pohling et al., 2015). Employee productivity is a critical component in the strength and profitability of a hospital's overall performance (Delobbe & Lauzier, 2015; Quazi, 2013); however, pursuing presenteeism intentionally because of varying sources of pressure contributes to productivity losses and, in turn, reduces overall productivity (Böckerman & Laukkanen, 2010; Caverley et al., 2007; Heponiemi et al., 2010; Yang et al., 2016). Considering the detrimental effects of presenteeism, we concluded that effectively managing this behavior, and determining its predictors, is of vital importance for the success of an organization.

People with high levels of the conscientiousness trait are characterized as being organized, self-controlled, steadfast, and elaborative (Barrick, Mount, & Li, 2013). Further, conscientious employees are prone to completing work rather than leaving it for others to do; therefore, being ill is not a deterrent for them. Rather, they focus on accomplishing their goals, and overcoming the difficult tasks in their work. However, as previously mentioned, these conscientious employees are more likely to overlook the importance of their health when their work becomes part of the equation. At first appearance, this could be considered a desirable trait by managers or organizations; however, associated productivity-related losses have been reported by numerous past researchers (Aronsson & Gustafsson, 2005; Burton et al., 2006; Johns, 2010). In this sense, presenteeism may have negative consequences for both the organization and the employee. For instance, when a hospital employee comes to work despite ill health, his or her performance may deteriorate and result in reduced productivity (Delobbe & Lauzier, 2015; Zhang et al., 2015). Moreover, presenteeism may occur as a result of social pressure. Owing to these negative consequences, a variety of work-related accidents and new occupational health problems may emerge (e.g., chronic depression, chronic sinusitis, and injuries caused by inattention).

We compared our results with those of past researchers, who indicated that conscientiousness is a positive and significant predictor of presenteeism, based on the noncompletion of work. Although the positive association between these two variables was first revealed by Nandi and Nandi (2014), we expanded on this with hierarchical regression analysis to allow for prediction of outcomes. The correlational nature of our own study also means that conducting longitudinal research will be necessary in the future to establish causality.

Given the significance of productivity losses owing to presenteeism, organizational decision makers should take measures to provide practical guidance. First, organizations must identify and eliminate the sources of pressure that cause presenteeism by carefully considering very conscientious employees' health conditions and providing paid sick leave if necessary. Additionally, it would be advantageous to provide workplace well-being programs and interventions, and to offer health education and awareness sessions to improve employee health and increase productivity (Caverley et al., 2007). Managers and human resource management professionals should also inform employees that being at work while ill is an undesirable behavior (Yıldız et al., 2015), and should give examples of its possible negative effects. Further, conducting on-the-job training programs to raise awareness of this issue would be beneficial.

There are limitations to our study, the first being that the same source was used to gather data on both the predictor and criterion measures (common rater effect) at the same point in time (measurement context effect). Therefore, respondents' ratings of the covariation among particular traits and/or behaviors may lead to illusory correlations (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). In this situation, it is best to use Harman's (1976) single-factor test to statistically control for common method biases (Podsakoff et al., 2003). This analysis revealed three distinct components that accounted for 64% of the total variance. Thus, the result of the analysis indicated that common method bias was not a significant problem in our study. Other limitations are the scope of our study, which included only employees in the health sector, and the narrow focus of the content on conscientiousness and presenteeism.

These limitations offer opportunities for future researchers to utilize longitudinal study designs, collecting data from different sources (e.g., peers or supervisors) to examine the impact on personality of time effect and to determine whether or not an employee is actually conscientious. In addition, conducting a study with a sample that includes employees from different sectors (e.g., education, telecommunications) would be constructive. Future directions to extend this study could include testing additional outcome variables, such as in-role and extrarole (e.g., organizational citizenship) behaviors, and examining possible moderating or mediating variables, such as type of employment contract, type of sector (private vs. public sector), job engagement, and turnover intention.

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