

**ARTICLE**

# Why do employees attend work sick? The assessment and relevance of opposite presenteeism motivations

Thomas Van Waeyenberg 

Department of Organisation, Open University of the Netherlands, Heerlen, The Netherlands

**Correspondence**

Thomas Van Waeyenberg, Department of Organisation, Open University of the Netherlands, Valkenburgerweg 177, AT Heerlen 6419, The Netherlands.

Email: [thomas.vanwaeyenberg@ou.nl](mailto:thomas.vanwaeyenberg@ou.nl)

**Abstract**

Presenteeism, the act of attending work while sick, has gained significant research attention. However, the motivations driving this behaviour remain underexplored. This study seeks to contribute to this area by developing and validating a measurement tool that captures two distinct motivations for presenteeism: voluntary, stemming from personal choice, and involuntary, resulting from external pressures. Across four studies involving 1021 respondents from both the general working population and contexts known for high levels of presenteeism, the reliability and validity of an 8-item presenteeism motivation scale were established. Studies 1 and 2 confirmed the scale's two-factor structure and reliability. Study 3 further demonstrated its convergent, concurrent, and discriminant validity, as well as its ability to detect anticipated sex differences in presenteeism tendencies. Study 4 provided evidence towards criterion related validity, showing differential effects on employee well-being over time. Voluntarily presenteeism was associated with higher levels of work engagement and lower burnout rates, while involuntary presenteeism exhibited the opposite pattern. Additionally, the scale demonstrated measurement invariance across different working populations. The theoretical and managerial implications of these findings are discussed.

**KEYWORDS**

attendance decision, attendance-pressure, measurement, motivation, presenteeism, scale development, well-being

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### Practitioner points

- This study provides a novel measurement tool that can empower practitioners to pinpoint and monitor the motivations driving employees' presenteeism accurately.
- By employing this scale, practitioners can access valuable insights into the nature of presenteeism, aiding them in making informed decisions about whether to focus interventions on addressing voluntary or involuntary presenteeism tendencies.
- The scale serves as a valuable resource for organizations to evaluate the efficacy of their policies in handling sickness-related workplace challenges, while also enabling them to predict crucial well-being outcomes, such as work engagement and burnout.

## WHY DO EMPLOYEES ATTEND WORK SICK?

### The assessment and relevance of opposite presenteeism motivations

Presenteeism, referring to attending work while sick, is highly prevalent with estimates, suggesting that 30% to 90% of the workforce have engaged in it recently (Lohaus & Habermann, 2019). This behaviour has significant consequences, including negative impacts on employees' health (Skagen & Collins, 2016), and substantial costs for organizations and society (Miraglia & Kinman, 2017). Despite extensive research in this field, there remains a need to gain a deeper understanding of what drives employees' decisions to persist in working while being unwell (Lapierre & Cooper, 2023).

The crux of this gap is connected to the complexity of 'presentees' decision-making process, as well as to the mixed research findings. Notably, prior studies have revealed that higher levels of presenteeism are not only tied to stressful and demanding work conditions but also to positive work experiences (Miraglia & Johns, 2016). Furthermore, in addition to the compelling evidence highlighting the adverse consequences of presenteeism, an emerging body of research suggests that it can also serve a functional purpose (e.g., Boekhorst & Halinski, 2022; Lohaus et al., 2021). To address these equivocal findings, this study explores the motivations that underlie presenteeism, using the distinction between autonomous and controlled forms of motivation (Deci & Ryan, 2000) as a starting point. Specifically, this study introduces a conceptualization and measurement that distinguishes between two contrasting forms of presenteeism motivation, reflecting the extent to which attending work while sick is perceived as a willing choice (voluntary presenteeism) or as compelled by external pressures (involuntary presenteeism).

This study contributes to the knowledge of presenteeism in three key ways. Firstly, it surpasses previous research, which predominantly quantified the frequency of presenteeism using single-item measures (Lohaus & Habermann, 2019). Instead, this study assesses the motivations behind presenteeism, thereby potentially revealing different pathways leading to presenteeism and providing a basis for tailoring workplace interventions to address these. Secondly, there has been limited exploration of the intra-personal factors explaining presenteeism (Ruhle et al., 2020). This study bridges this gap by explicitly examining presenteeism motivation, building upon the scant body of research that acknowledges its role (e.g., Ruhle & Breitsohl, 2022) or empirically assessed it (e.g., Lu et al., 2013). Thirdly, this study not only uncovers different motivations behind presenteeism but also aims to demonstrate their relevance. By focusing on two indicators of employees' psychological and physical well-being, this study helps to reconcile the contradictory outcomes associated with presenteeism. Study 4 investigates work engagement and burnout, reflecting employees' identification and energy levels at work in a complementary way (Trógolo et al., 2020). It is expected that voluntary (vs. involuntary) presenteeism will be associated with better (vs. worse) well-being. While investigating work engagement and burnout is relevant in its own right (Lesener et al., 2020), linking opposite presenteeism motivations to these outcomes may

warrant tracking these motivations in practice, for which this study could pave the way by presenting a valid tool.

Upon outlining the existing perspectives on presenteeism, the subsequent sections follow a systematic scale development process (DeVellis, 2017). This process involves the conceptualization of voluntary and involuntary presenteeism and construction of the scale accordingly. Four studies are presented, each addressing distinct aspects of the scale's reliability and validity. Study 1 and Study 2 focus on examining the factor structure. Study 3 examines various facets of the scale's construct validity. Study 4 evaluates its predictive abilities. Lastly, measurement invariance testing is conducted to assess the scale's robustness across different groups.

## CURRENT PERSPECTIVES ON PRESENTEEISM

Presenteeism is considered the opposite of sickness absenteeism (Gerich, 2016) and can be defined as the act of attending work despite feeling sick (Karanika-Murray & Cooper, 2018). The factors predicting presenteeism are typically categorized into undesirable features associated with personal characteristics (e.g., poor health), work-related aspects (e.g., high role demands), organizational factors (e.g., strict absence policies), and the broader socio-economic environment (e.g., job insecurity; Lohaus & Habermann, 2019). Nonetheless, positive employee experiences, as indicated by high levels of satisfaction, have been recognized as playing a role in predicting presenteeism as well (Miraglia & Johns, 2016).

Similarly, the majority of longitudinal studies have focused on the negative consequences of presenteeism, including productivity loss (Zhou et al., 2016) and adverse effects on health and well-being (Skagen & Collins, 2016). In addition, however, scholars have reported several positive effects associated with presenteeism. Attending work while sick has been found to possess salutogenic properties (e.g., Gerich, 2019; Lohaus et al., 2021), to contribute to personal feelings of accomplishment (Biron & Saksvik, 2010), and to foster social relationships (Biron & Saksvik, 2009) and facilitate cooperation within the workplace (Boekhorst & Halinski, 2022).

## VOLUNTARY AND INVOLUNTARY PRESENTEEISM

The wide range of correlates associated with presenteeism suggests distinct motivational determinants. Initially, the literature viewed presenteeism as a consequence of pressures stemming from work-related factors, personal circumstances, or individual attitudes. For example, employees may feel compelled to come to work when unwell due to factors such as their belief in being indispensable, the financial threat of unpaid absences, or an overcommitment to their work (Hansen & Andersen, 2008). However, research has also identified less coercive factors that encourage employees to willingly choose presence over absence, rather than feeling obligated to do so. These factors include employees' affective commitment to the organization (Hansen & Andersen, 2008), coworkers (Caverley et al., 2007; Dew et al., 2005; Taylor et al., 2021), or clients (Gjæver et al., 2016). Integrating both negative and positive factors, Miraglia and Johns' (2016) meta-analysis points towards two pathways leading to presenteeism, thereby substantiating the notion of a motivational dichotomy in presenteeism. The first pathway encompasses positive factors, such as the presence of desirable resources, which motivate employees to engage in presenteeism as a means to express job satisfaction or reciprocate the support they have received in the workplace. The second pathway is characterized by high demands that exert pressure on employees to prioritize attendance over their own health.

Voluntary presenteeism is defined as the willingness to attend work sick out of personal choice and desire; involuntary presenteeism as the intention to attend work while sick due to external pressures that push or pull in that direction. This conceptualization aligns with Deci and Ryan's (2000) continuum of extrinsic motivation, which ranges from motivations primarily controlled by external pressures to those influenced by internal factors such as personal importance and values. The self-determination theory,

which underlies this distinction, posits that the extent to which individuals initiate actions voluntarily varies based on the fulfilment of their autonomy, competence, and relatedness needs. In the context of presenteeism, this may help to frame different expressions of presenteeism in a comprehensible way. For instance, attending work while sick out of a sense of personal devotion and passion (i.e., autonomy), to display one's abilities (i.e., competence), or to foster social connections (i.e., relatedness) can be considered the results of voluntary presenteeism. On the other hand, presenteeism arising from fear of missing work, falling behind, or facing negative consequences of absence policies would be less fulfilling of these basic psychological needs and therefore not self-determined (Gillet et al., 2020) and, thus, reflective of involuntary presenteeism. Moreover, conceptual work on presenteeism acknowledges the role of the work environment in influencing employees' needs differently, resulting in a variety of reasons for attending work while sick. Ma et al. (2018) listed these reasons from being fully externally controlled through rewards and punishments to entirely driven out of personal choice. For the sake of simplicity and in line the framework of 'excessive working' (Cooper & Lu, 2019), this study adopts a dichotomous distinction and profiles presenteeism motivations as either reflecting voluntary or involuntary actions.

Hinting the relevance of considering a motivational dichotomy of presenteeism, Lu and Cooper (2022) recently found that when employees' intrinsic work values drive them to attend work while sick, the negative effects of attendance pressures and presenteeism on employees' well-being and job functioning can be minimized. Conversely, in the absence of such intrinsic values, the opposite was observed. While research explicitly focusing on presenteeism motivation is limited, the existing studies align with this study's conceptualization. A qualitative study by Baker-McCleary et al. (2010) identified two sets of motives for presenteeism. Employees chose to attend work while sick out of professional loyalty, believing that no one else could perform their job, or to express concern for coworkers. On the other hand, employees could also feel pressured to attend work while sick due to a controlling management style, strict absence policies, or fear for job loss. A similar set of rationales is reported by Lu et al. (2013), who distinguished between approach motives (e.g., attending work sick to help the team) and avoidance motives (e.g., to reduce job insecurity) of presenteeism. Their study demonstrated that these motives are linked differently to subsequent work-related outcomes, with avoidance motives having less desirable implications (e.g., increased exhaustion) compared to approach motives. These recurring findings in the literature suggest that presenteeism encompasses both voluntary, deliberate choices and more pressured, involuntary decisions that have opposite consequences.

## SCALE DEVELOPMENT

Following Devellis's (2017) recommended procedures, a two-dimensional presenteeism motivation scale was developed. The items were constructed based on an established situational motivation scale (Guay et al., 2000) and the phrasing and examples used in well-regarded presenteeism measures (i.e., Aronsson et al., 2000; Lu et al., 2013). The resulting items intend to capture employees' work attendance motivation in the situation of impaired health. Specifically, the measurement of voluntary and involuntary presenteeism aligns with Guay et al.'s (2000) two 4-item scales. These scales assess the extent an action tendency is congruent with identified regulation (i.e., a form of autonomous motivation that is signalled by doing something valued and chosen by oneself) and external regulation (i.e., a form of controlled motivation that is signalled by doing something to obtain rewards or to avoid sanctions). While two additional forms of autonomous motivation (i.e., introjected and integrated regulation) proposed by Deci and Ryan (2000) were considered, they were excluded from measuring voluntary presenteeism. This decision was made because introjected regulation, rooted in internal rewards and punishments, bears similarity to external regulation. Additionally, integrated regulation implies partial internalization, which would be captured by the identified regulation estimates but not vice versa. To account for the critique that presenteeism is often formulated as dysfunctional (Johns, 2010; Lohaus & Habermann, 2019), suggestive language was avoided in formulating the items. For example, "At times I really should take sick leave" was neutralized to "At times I really could take sick leave." Subject matter

TABLE 1 Rotated (varimax) EFA results (Study 1).

Items	Factor	
	1	2
Voluntary presenteeism		
1. When I don't feel well, I force myself to go to work for my own good	.86	
2. It happens that I persevere to attend work with physical symptoms such as headache or backache because I think it would be good for me	.86	
3. At times I really could take sick leave, I sometimes choose to go to work	.90	
4. Even when I feel sick, I believe it is important for me to go to work	.91	
Involuntary presenteeism		
5. When I don't feel well, I force myself to go to work because I am supposed to		.73
6. It happens that I persevere to attend work with physical symptoms such as headache or backache because I think I have to		.90
7. At times I really could take sick leave, I sometimes don't have any choice other than to go to work		.94
8. Even when I feel sick, I feel forced to go to work		.78
Eigenvalues	3.17	2.91
% of variance	39.61	36.35
Cronbach's $\alpha$	.94	.91

Note.  $N=113$ .

experts provided feedback on the quality and clarity of the items, resulting in some revisions to enhance interpretability and eliminate jargon and double-barrelled language. The final formulation of the items is presented in Table 1. To facilitate respondents' understanding and engagement with the items, a brief conceptualization of presenteeism and instructions on how to respond to the items were developed. The instruction stated: "Sometimes employees decide to continue working despite ill health. Please indicate to what extent you agree with the following statements." Consistent with Guay et al.'s (2000) response format, a 7-point Likert scale was used for scoring the items, ranging from (1) strongly disagree to (7) strongly agree, with the original scale endpoints (e.g., corresponds exactly) modified to better reflect the provided instruction.

## STUDY 1

Study 1 aimed to assess the factor structure of the presenteeism motivation scale through an explanatory factor analysis (EFA).

### Sample and procedure

The data came from a sample of nurses, a profession known for a higher risk of attending work while sick due to a combination of professional passion and workplace pressures (Shan et al., 2021). Potential respondents were invited to participate in a web-based study through a social media interest group. An informed consent emphasized that participation was voluntary, anonymous, and targeted active nurses currently employed in a health care organization. Out of the 179 nurses invited, a total of 113 nurses completed the survey (response rate: 63%). The majority were female (96%), worked full-time (62%), and had a permanent contract (93%). The average age was 39.71 years ( $SD=11.97$ ), and their average work experience was 17.30 years ( $SD=12.15$ ).

## Results

An EFA was conducted on the eight items, using maximum-likelihood estimation without specifying a fixed number of factors. Orthogonal rotation (varimax) was applied to enhance the interpretability of the factors. The Kaiser–Meyer–Olkin measure indicated a high sampling adequacy for the analysis ( $KMO = .85$ ) and the  $KMO$  values for individual items ranged from .78 to .91, surpassing the threshold of .50. Furthermore, the inter-item correlations were significant according to Bartlett's test of sphericity ( $\chi^2(28) = 723.66, p < .001$ ).

The initial analysis revealed two factors with eigenvalues exceeding Kaiser's criterion of 1, which collectively accounted for 75.95% of the variance. This was further supported by the scree plot, which indicated a point of inflection that justified retaining the two predicted factors. The factor loadings after rotation, presented in [Table 1](#), exceeded its cut-off of .40 (Hinkin, 1998) and were considered very good based on stringent criteria (Tabachnick & Fidell, 2013). Each item loaded highly on only one of the two factors. The Cronbach's alpha ( $\alpha$ ) for the items measuring voluntary presenteeism was .94, while for the items measuring involuntary presenteeism, it was .91. This indicates strong internal consistency within each factor, with the items effectively clustering together to represent voluntary and involuntary presenteeism, respectively.

## STUDY 2

Study 2 aimed to validate the factor structure and assess the reliability of the presenteeism motivation scale in a new sample. The lavaan package (Version 0.6-15) in R (Rosseel, 2012) was used. Both confirmatory factor analysis (CFA) and exploratory structural equation modelling (ESEM) were employed. ESEM allows for the estimation of potential cross-loadings, providing more realistic and less inflated estimates of factor correlations than CFA (Marsh et al., 2014). To account for potential non-normality in the data, a robust full information maximum-likelihood estimator (MLR) was applied (Rhemtulla et al., 2012). The Geomin rotation was chosen for the ESEM due to its appropriateness when the loading structure is still uncertain (Asparouhov & Muthén, 2009). To evaluate the reliability of each subscale, McDonald's Omega ( $\omega$ ) was examined as an alternative to Cronbach's  $\alpha$ , as it is considered to provide less biased estimates of internal consistency (Hayes & Coutts, 2020). An estimate of .70 or higher was considered acceptable (McNeish, 2018).

The model fit of the CFA and ESEM was evaluated using established fit indices, including two goodness-of-fit indices (comparative fit index [CFI] and Tucker–Lewis index [TLI]) and two badness-of-fit indices (root mean square error of approximation [RMSEA] and standardized root mean square residual [SRMR]). Acceptable model fit was indicated by CFI and TLI values close to or higher than .90, and RMSEA and SRMR values close to or lower than .08 (Hair et al., 2014). Satorra–Bentler  $\chi^2$  difference tests (TRDs) were performed to compare model fits, accounting for non-normality in ordinal data (Satorra & Bentler, 2001).

## Sample and procedure

The sample was recruited using a snowball sampling technique through social media channels. Respondents were informed about the study's focus on sickness-related decision-making and were required to be employed with a minimum of 1 year of professional experience. The final sample consisted of 325 employees who participated in an anonymous web-based study. Around 49% identified as male. The mean age was 39.51 years ( $SD = 12.53$ ), and the mean organizational tenure was 11.02 years ( $SD = 11.45$ ). The majority was highly educated, with 29% holding a Bachelor's degree and 36% a Master's degree (or an equivalent). Seventy-eight *per cent* worked full-time, and 88% held a permanent contract. They worked in various sectors and for organizations with different sizes, with 40% classified as small- or medium-sized and the remainder as large (250 employees or more).

## Results

The CFA model, consisting of the two predicted factors with four items each, showed an excellent fit to the data:  $\chi^2 = 37.96$ ,  $p = .006$ , CFI = .986, TLI = .980, RMSEA = .058, SRMR = .040. The items loaded highly and significant on their intended factor ( $p < .001$ ), ranging from .83 to .88 for voluntary presenteeism and from .73 to .89 for involuntary presenteeism. The ESEM model ( $\chi^2 = 24.11$ ,  $p = .03$ , CFI = .992, TLI = .982, RMSEA = .055, SRMR = .016) showed a significantly better fit compared to the CFA model (TRd = 13.85,  $df = 6$ ,  $p = .028$ ). Parameter estimates indicated well-defined factors, with targeted loadings ranging from .71 to .88 ( $p < .001$ ), and negligible cross-loadings (ranging from  $|.01|$  to  $|.09|$ ). The estimated correlation between the two latent factors in the ESEM model was .21, slightly improving the differentiating of the factors compared to the correlation estimated by the CFA model (.23). The reliability estimates ( $\omega$ ) for voluntary and involuntary presenteeism in the current sample were .92 and .86, respectively, indicating high internal consistency for both subscales. These findings provide support for the hypothesized factor structure and internal consistency.

## STUDY 3

Study 3 aimed to evaluate the construct validity in a variety of ways, as recommended by Bagozzi et al. (1991). Convergent validity was investigated by analysing the correlations between voluntary and involuntary presenteeism and two commitment-related constructs: affective organizational commitment and overcommitment. Affective organizational commitment is defined as employees' "emotional attachment to, identification with, and involvement in the organization" (Meyer & Allen, 1991, p. 67). Overcommitment is characterized by "excessive striving in combination with a strong desire to be approved of and esteemed" (Siegrist, 2001, p. 55). Both constructs are associated with higher presenteeism (Miraglia & Johns, 2016) but reflect differences in the extent employees genuinely 'want to' reciprocate to the organization (Meyer et al., 2002) or have a rather inadequate coping style in dealing with the demands of the organization, feeling they 'have to' be excessively engaged (Siegrist et al., 2009). It was expected that voluntary presenteeism would positively correlate with affective organizational commitment, and involuntary presenteeism with overcommitment. Concurrent validity was assessed by examining the relationship between presenteeism motivation and its self-reported frequency. Both voluntary and involuntary presenteeism were anticipated to be positively associated with higher levels of presenteeism. Discriminant validity was evaluated by examining the distinctions between the two subscales and their differentiation from the commitment constructs.

## Sample and procedure

The sample consisted of teachers, a profession typically considered as a calling and vulnerable to presenteeism due to understaffing (Aronsson et al., 2000). A purposive sampling approach was used through the network of six master students who did their thesis project on teacher well-being. From the 300 teachers who received an invitation for a web-based survey, 230 (i.e., 77%) were returned. The sample included both male (20%) and female (80%) teachers, with a majority working full-time (73%) and holding a permanent contract (67%). Their average age and teaching experience were 38.83 ( $SD = 12.37$ ) and 16.28 years ( $SD = 12.53$ ), respectively.

## Measures

### Affective organizational commitment

Affective organizational commitment was measured using Meyer et al.'s (1993) 6-item scale, which was adapted to the school context for this study, and exhibits high reliability and construct validity (Meyer et al., 2002). A sample item is: "This school has a great deal of personal meaning for me." Responses had to be made on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). McDonald's  $\omega$  was .90.

### Overcommitment

Overcommitment was measured using Siegrist et al.'s (2009) 6-item overcommitment scale. A sample item is: "People close to me say I sacrifice too much for my job." The anchors for this scale ranged from 1 (strongly disagree) to 7 (strongly agree). McDonald's  $\omega$  was .92.

### Presenteeism

Presenteeism was assessed using a single-item measure (Aronsson et al., 2000; Aronsson & Gustafsson, 2005) that is frequently used in presenteeism research (Pohling et al., 2016) and yields great test–retest reliability (Miraglia & Johns, 2016). The item was: "Has it happened over the previous 12 months that you have gone to work despite feeling that you really should have taken sick leave due to your state of health?" Response options ranged from 0 (no, never) to 5 (yes, more than 10 times).

## Results

Consistent with the procedure outlined in Study 2, a CFA was conducted on all 20 items. The fit indices indicated an excellent fit of the measurement model to the data, with  $\chi^2 = 284.88$ ,  $p < .001$ , CFI = .958, TLI = .951, RMSEA = .059, and SRMR = .059. The factor loadings for the presenteeism motivation items were high (ranging from .80 to .89) and significant ( $p < .001$ ). The McDonald's  $\omega$  estimates for voluntary (.92) and involuntary presenteeism (.91) indicated great internal consistencies. The average factor loadings for affective organizational commitment and overcommitment were .76 and .80, respectively, with all factor loadings being significant ( $p < .001$ ). The model fit of the ESEM that allowed cross-loadings between the latent factors voluntary and involuntary presenteeism ( $\chi^2 = 280.18$ ,  $p < .001$ , CFI = .957, TLI = .949, RMSEA = .061, SRMR = .059) was comparable to the CFA model (TRd = 4.70,  $df = 6$ ,  $p = .74$ ), and indicated no significant non-target loadings.

Table 2 shows that the average amount of variance extracted (AVE) for all constructs exceed .50, indicating that more truth than error is captured by the items in their respective constructs (Fornell & Larcker, 1981). The correlation pattern provides further evidence for convergent validity. Consistent with the predictions, voluntary presenteeism correlated positively with affective organizational commitment ( $r = .40$ ,  $p < .001$ ) and negatively with overcommitment ( $r = -.23$ ,  $p < .01$ ). Involuntary presenteeism correlated positively with overcommitment ( $r = .55$ ,  $p < .001$ ) but was unrelated to affective organizational commitment. Additionally, voluntary and involuntary presenteeism were positively correlated with presenteeism ( $r = .34$  and  $.33$ ,  $p < .001$ ). These findings suggest that the tested presenteeism motivations converge with theoretically similar constructs and concur with the frequency measure of presenteeism.

Regarding discriminant validity, the AVE estimates were lower than the shared variance (i.e., the squared correlations) among all constructs. The highest shared variance was .30, between involuntary



TABLE 2 Descriptive statistics, AVE, correlations, and reliabilities (Study 3).

	AVE	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Voluntary presenteeism	.74	3.96	1.25	(.92)				
2. Involuntary presenteeism	.72	4.35	1.13	.10	(.91)			
3. Affective organizational commitment	.61	5.05	1.06	.40***	-.04	(.90)		
4. Overcommitment	.65	4.19	1.37	-.23**	.55***	-.14*	(.92)	
5. Presenteeism	—	3.14	1.28	.34***	.33***	.02	.21**	—

Note:  $N=230$ . Rounded to two decimal places, the  $\alpha$  and  $\omega$  reliabilities were identical and are reported on the diagonal in parentheses.

Abbreviations: AVE, Estimates of the Average Variance Extracted; *M*, Mean; *SD*, Standard Deviation.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .05$ .

presenteeism and overcommitment. The estimated factor correlation between involuntary and voluntary presenteeism was not significant (CFA  $r = .07$ , ESEM  $r = .06$ ), indicating no substantial overlap between these factors. Furthermore, the ESEM model was compared to alternative models where different factors were assumed to be one factor. Combining voluntary presenteeism and affective organizational commitment (TRd = 525.89,  $df = 3$ ,  $p < .001$ ), involuntary presenteeism and overcommitment (TRd = 269.21,  $df = 3$ ,  $p < .001$ ), or all factors (TRd = 831.22,  $df = 7$ ,  $p < .001$ ) resulted in significant decreases in fit. Overall, findings of Study 3 provide great support for the construct validity of the presenteeism motivation scale.

## Additional analysis

According to Sendén et al. (2016), women tend to have a higher inclination towards attending work while sick compared to men, due to feeling more pressure to minimize the workload of others. This provides an opportunity to examine whether the presenteeism motivation scale can discriminate between these two groups, indicating known-groups validity. Levene's tests of equality of error variances confirmed that the assumption of homogeneity of variance was met. The subsequent analysis of variance revealed that there was no significant grouping effect on voluntary presenteeism ( $F(1,229) = 0.78$ ,  $p > .05$ ) but did show that female teachers reported higher levels of involuntary presenteeism ( $M = 4.47$ ,  $SD = 1.13$ ) compared to male teachers ( $M = 3.87$ ,  $SD = 1.04$ ),  $F(1,229) = 10.99$ ,  $p < .01$ . This suggests that the scale is capable of capturing differences in the extent of involuntary presenteeism between these two groups and adds to the evidence supporting the construct validity of the presenteeism scale.

## STUDY 4

Study 4 aimed to assess the criterion-related validity and illustrate the relevance of the presenteeism motivation scale. Building upon the findings of Study 3, the relationships between presenteeism motivation, presenteeism, and two indicators of employee well-being were examined. Work engagement refers to a positive state characterized by high energy, dedication, and immersion in work activities (Schaufeli & Bakker, 2004). Burnout signifies a lack of energy and willingness to invest in work, accompanied by exhaustion and impairment in cognitive, emotional, and behavioural aspects (Schaufeli et al., 2020). While previous research has established links between presenteeism and reduced work engagement (Côté et al., 2021; Karanika-Murray et al., 2015) and increased burnout (Demerouti et al., 2009), the specific relationships between different presenteeism motivations and these outcomes remain unexplored. However, the theoretical assumption that self-determined behaviours enhance well-being (Gagné & Deci, 2005) suggests that presenteeism undertaken as a voluntary choice may be associated with better well-being outcomes compared to its involuntary counterpart. Moreover, research based on the job demands–resources model (Demerouti et al., 2001) indicates that resource-rich work environments

promote heightened work engagement, while demanding work context deplete energy, potentially leading to burnout (Bakker & Demerouti, 2017). Together with the observation that presenteeism can result from both challenging conditions (e.g., workplace stress; Van der Feltz-Cornelis et al., 2020) and favourable work experiences (e.g., adequate working conditions, Holland & Collins, 2018), this behaviour and its underlying determinants may reflect different motivational processes conducive to either work engagement or burnout, depending on the same contextual factors influencing the voluntariness of the presenteeism decision. This assumption can be examined through a mediation model, with presenteeism serving as the mediator between presenteeism motivations and employee well-being outcomes.

## Sample and procedure

The participants were contacted by five master students who wrote their thesis about presenteeism. At Time 1, 570 employees with a minimum of 1-year professional work experience were invited to participate in an anonymous web-based survey. To minimize dropout rates, respondents were informed that the study would involve two survey administrations. A total of 353 questionnaires were returned (response rate: 63%). The second measurement was conducted 3 months later, with this time lag chosen based on Podsakoff et al.'s (2003) recommendation to strike a balance. It aimed to reduce the salience of the predictor variables while measuring the outcome variables, without being too long to obscure any existing relationships between them. At Time 2, 262 useable cases remained (dropout rate: 26%, final response rate: 46%). Independent-samples *t*-tests revealed no significant differences in sample characteristics or measures of interest between Time 1 and Time 2. The initial sample was evenly split in terms of sex with an average age of 40.61 years ( $SD = 12.24$ ) and average professional tenure of 9.95 years ( $SD = 10.57$ ). Thirty-nine *per cent* held a Bachelor's degree and an additional 31% a Master's degree. The majority worked full-time (63%) with a permanent contract (84%). They were primarily employed in service-delivery (41%) or knowledge-based activities (38%), with smaller percentages working in manufacturing (19%) or extracting (2%) industries. The majority (58%) were employed in a large organization with 1000 or more employees.

## Measures

Presenteeism motivation and control variables were assessed at Time 1. At Time 2, measurements were taken for presenteeism, work engagement, and burnout.

Presenteeism was measured identical to Study 3. To measure work engagement, the 9-item Utrecht Work Engagement scale (Schaufeli et al., 2006) was used. This scale measures employees' vigour, dedication, and absorption at work with three items each. It has been shown to possess excellent psychometric properties (Schaufeli & Bakker, 2010). A sample item for vigour is: "At work, I am bursting with energy." Responses had to be given on a 7-point scale ranging from 0 (never) to 6 (always). McDonald's  $\omega$  was .94. Burnout was measured using the 12-item version of the Burnout Assessment Tool (Schaufeli et al., 2020). This scale assesses the four core symptoms of burnout (exhaustion, mental distance, emotional impairment, and cognitive impairment) with three items each. A sample item for mental distance is: "I struggle to find any enthusiasm for my work." Responses were given on a 5-point scale ranging from 1 (never) to 5 (always). McDonald's  $\omega$  was .91.

The analyses controlled for sex (0 = male, 1 = female) and age (in years) as they may influence presenteeism (Lohaus & Habermann, 2019), work engagement (Lesener et al., 2020), and burnout (Purvanova & Muros, 2010). Two additional control items were included in line with pioneering presenteeism studies (Aronsson & Gustafsson, 2005; Hansen & Andersen, 2008). One asked respondents to rate the amount of work that would be left undone in the case of absence from work (lack of replaceability, ranging from 1 = none or only a small proportion to 4 = virtually all), and the other one asked for their general health (ranging from 1 = very weak to 5 = very good).

## Results

### Preliminary analysis

Table 3 presents the summary statistics. The  $\omega$  reliability estimates were above .91. The variables showed the expected associations with each other, except for presenteeism and work engagement, which had a non-significant correlation. The control variables also demonstrated their relevance. Female respondents reported higher levels of involuntary presenteeism and presenteeism. Age was positively correlated with burnout. Lack of replaceability was associated with both voluntary and involuntary presenteeism. Better health was associated with lower levels of involuntary presenteeism, presenteeism, and burnout, as well as higher levels of work engagement.

The hypothesized four-factor measurement model, consisting of voluntary and involuntary presenteeism, work engagement, and burnout, was initially tested using a CFA. Considering the higher-order factor structure of both well-being indicators (Schaufeli et al., 2006, 2020), the model demonstrated adequate fit ( $\chi^2 = 710.85$ ,  $p < .001$ , CFI = .935, TLI = .928, RMSEA = .063, SRMR = .066). All items loaded highly ( $>.66$ ) and significantly ( $p < .001$ ) on their intended factors. The model fit of an ESEM ( $\chi^2 = 697.68$ ,  $p < .001$ , CFI = .936, TLI = .928, RMSEA = .063, SRMR = .064), which allowed cross-loadings between the voluntary and involuntary presenteeism items, was superior (TRd = 13.17,  $df = 6$ ,  $p < .05$ ) and retained for subsequent analyses.

### Structural model

Figure 1 depicts the results of the structural model and reports the standardized estimates. The model exhibited acceptable fit indices:  $\chi^2 = 895.54$ ,  $p < .05$ , CFI = .927, TLI = .916, RMSEA = .059, and SRMR = .061. The  $R^2$  values indicated that the model had substantial predictive power, with 26% of the variance in presenteeism, 13% in work engagement, and 33% in burnout accounted for by the model. Consistent with the predictions, both presenteeism motivations were positively related to presenteeism. Their direct relationships with the two well-being outcomes displayed opposite patterns. Voluntary presenteeism was positively related to work engagement and negatively to burnout. Involuntary presenteeism was positively related to burnout and negatively to work engagement. Presenteeism was positively related to burnout but not to work engagement.

To further investigate the indirect paths between presenteeism motivation and burnout through presenteeism, a bootstrapping technique (Preacher & Hayes, 2004) was used. This analysis estimated the unstandardized indirect effect and its standard error ( $SE$ ) based on 10,000 bootstrapped samples, proving a 95% confidence interval. The indirect effect of voluntary presenteeism was estimated as .05 ( $SE = .01$ ) with a confidence interval of .03 to .08. The estimated indirect effect of involuntary presenteeism was .03 ( $SE = .01$ ), with the confidence interval (.01 to .05) also excluding zero. These results provide support for the proposed model and criterion-related validity of the presenteeism motivation scale.

## MEASUREMENT INVARIANCE

The generalizability of the factor structure was examined across two groups: one characterized by high levels of presenteeism and the other representing the general working population.<sup>1</sup> For this test, the samples of nurses and teachers were combined into one group, while the remaining two samples formed the second group. Using a common sequence of measurement invariance tests

<sup>1</sup>An additional test of the measurement invariance was conducted across the four samples. The fit of the configural model was  $\chi^2 = 139.78$ ,  $p < .05$ , CFI = .980, TLI = .957, RMSEA = .093, and SRMR = .017. Metric invariance was supported ( $\Delta CFI = .008$ ,  $\Delta RMSEA = .001$ ,  $\Delta SRMR = .027$ ) but the other invariances were not.

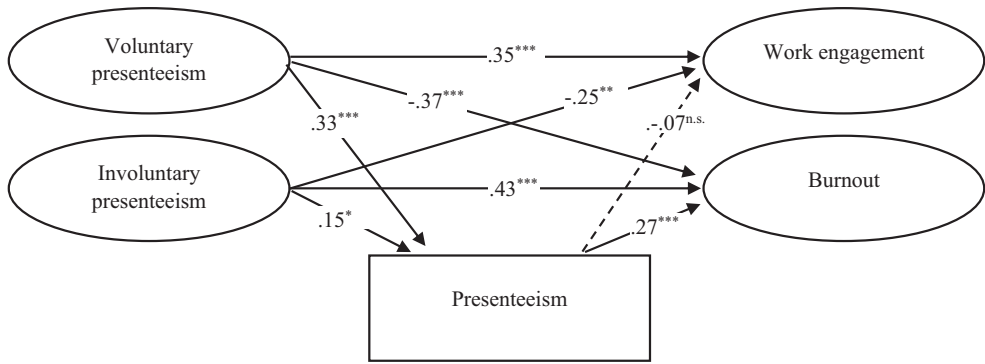
TABLE 3 Descriptive statistics, correlations, and reliabilities (Study 4).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Sex	.50	.50	—								
2. Age	40.61	12.24	.00	—							
3. Lack of replaceability	2.59	1.13	-.01	-.04	—						
4. General health	3.88	.78	-.09	-.07	-.03	—					
5. Voluntary presenteeism	4.05	1.41	.04	-.09	.11*	-.03	(.94)				
6. Involuntary presenteeism	3.61	1.32	.14*	-.10	.17**	-.17**	.41*	(.92)			
7. Presenteeism	1.16	1.22	.13*	-.11	.03	-.25**	.57***	.32***	—		
8. Work engagement	3.92	1.12	-.07	.01	-.04	.13*	.21***	-.13*	-.02	(.94)	
9. Burnout	2.12	.61	-.02	-.13***	.11	-.21**	-.04	.57***	.27***	-.46***	(.91)

Note: *N* = 353 for Time 1 measures and 262 for Time 2 measures. Rounded to two decimal places, the  $\alpha$  and  $\omega$  reliabilities were identical and are reported on the diagonal in parentheses.

Abbreviations: *M*, Mean; *SD*, Standard Deviation.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



**FIGURE 1** Results of the Structural Equation Model (Study 4). *Note:*  $N = 262$ ,  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$ ,  $n.s. p > .05$ . The measurement models and standard estimates of control variables are not reported for clarity. Lack of replaceability showed a positive relationship with involuntary presenteeism ( $\beta = .14^*$ ). General health was negatively related to involuntary presenteeism ( $\beta = -.15^*$ ) and presenteeism ( $\beta = -.23^*$ ).

(Millsap, 2011), ESEM initially estimated a configural model without imposing any constraints. The fit statistics ( $\chi^2 = 80.95$ ,  $p < .05$ , CFI = .987, TLI = .972, RMSEA = .074, SRMR = .014) indicated that the pattern of item loadings was similar in both groups. Subsequently, a series of increasingly constrained models were tested, starting with the assumption of equality in factor loadings (i.e., metric invariance), followed by intercepts (i.e., scalar invariance), residuals (i.e., residual invariance), latent variances and covariances, and latent means. In line with Chen (2007), relative changes ( $\Delta$ ) in CFI  $\leq .010$ , RMSEA  $\leq .015$ , and SRMR  $\leq .10$  (or  $\leq .030$  for metric invariance) were considered indicative of invariance. Constraining the factor loadings ( $\Delta$ CFI = .002,  $\Delta$ RMSEA = .008,  $\Delta$ SRMR = .013), intercepts ( $\Delta$ CFI = .008,  $\Delta$ RMSEA = .010,  $\Delta$ SRMR = .007), and residuals ( $\Delta$ CFI = .010,  $\Delta$ RMSEA = .007,  $\Delta$ SRMR = .003) resulted in minimal fit changes, supporting metric, scalar, and residual invariance. However, constraining factor variances–covariances ( $\Delta$ CFI = .001,  $\Delta$ RMSEA = .001,  $\Delta$ SRMR = .025) and latent means ( $\Delta$ CFI = .0178,  $\Delta$ RMSEA = .017,  $\Delta$ SRMR = .038) resulted in changes exceeding the recommended thresholds. These findings suggest that the items in the presenteeism motivation scale maintain their reliability across the examined groups, while also acknowledging that the variances and covariances of voluntary and involuntary presenteeism scores may differ.

## DISCUSSION

The main methodological implication of this study is the development and establishment of a valid, reliable, and relevant presenteeism motivation scale. The findings from Study 1 and Study 2 affirm the scale's effectiveness in capturing the intended constructs. Both measures demonstrated excellent internal consistency across diverse samples. The analyses conducted in Study 3 and Study 4 provide compelling evidence regarding the construct validity of these measures and their capacity to predict pertinent employee-level outcomes. Specifically, Study 3 supports the convergent validity of the two presenteeism motivation measures by establishing associations with related forms of commitment while maintaining their distinctiveness as separate constructs. The data further indicated that the scale can discern hypothesized differences in involuntary presenteeism across men and women. Regarding criterion-related validity, the results from both Study 3 and Study 4 suggest that opposite motivations to attend work while sick predict its frequency. Notably, voluntary and involuntary presenteeism exhibited unique predictive capabilities. Voluntary presenteeism was related to higher levels of work engagement and lower levels of burnout, while involuntary presenteeism was positively related to burnout and negatively to work engagement. Intriguingly, through their associations with presenteeism, both forms of presenteeism

motivation appear to ultimately forecast higher burnout rates. The following sections discuss various implications of these findings for theory and practice, as well the limitations and future directions that should be considered.

## Theoretical implications

This study responds to the call for a more balanced approach to understanding presenteeism (Lohaus et al., 2021) by examining both positive and negative drivers. It makes two noteworthy contributions to the literature. Firstly, the results shed new light on individuals' motivation for engaging in presenteeism, going beyond mere examinations of its frequency. This response aligns with the call to explore the psychological factors influencing presenteeism (Ruhle et al., 2020). The identification and examination of voluntary and involuntary presenteeism not only contribute to the limited quantitative work on presenteeism motivation (e.g., Lu et al., 2013) but also builds upon previous qualitative (e.g., Baker-McCleary et al., 2010) and conceptual (e.g., Cooper & Lu, 2019; Ma et al., 2018) efforts that have delineated contrasting presenteeism motives. Across four studies, the findings highlight the importance of viewing presenteeism as a situational attendance decision that can be either voluntary or reluctant, implicating employee well-being differently.

Secondly, this study builds upon Miraglia and Johns' (2016) proposed pathways to presenteeism by integrating elements from self-determination theory (Deci & Ryan, 2000) and investigating the subsequent outcomes associated with different presenteeism motivations. By taking this approach, this study enhances our understanding of presenteeism in a more comprehensive manner than what has been empirically established in previous research. The findings revealed positive and negative associations between presenteeism motivation and different types of commitment (Study 3), as well as with work engagement and burnout (Study 4). This consideration of presenteeism motivation may help reconcile conflicting reports about presenteeism correlates in the current literature. For instance, negative work experiences, such as those implied by overcommitment, are likely to exert pressure on sick employees to contemplate attending work. Given that involuntary presenteeism is expected to be less self-determined than voluntary presenteeism, it may hinder employees' need fulfilment, resulting in suboptimal functioning (Gagné & Deci, 2005). This explanation aligns with the results of Study 4, where involuntary presenteeism exhibited unfavourable associations with work engagement and burnout levels. Furthermore, assuming that involuntary presenteeism reflects high job demands, the detrimental associations between involuntary presenteeism and these two well-being indicators are consistent with previous studies applying the job demands–resources model to predict these specific outcomes (Bakker & Demerouti, 2017). Parallel to this, positive work experiences, as indicated by high levels of affective organizational commitment, may foster voluntary presenteeism by aligning employees' personal values and beliefs with the notion of presenteeism as appropriate organizational behaviour. While this alignment should initially enhance their functioning (i.e., work engagement) based on the same mechanism discussed above, it may indirectly harm their well-being (i.e., burnout) by imposing additional demands through increased presenteeism. Therefore, even though voluntary presenteeism may have certain functional aspects, it should be regarded as a maladaptive tendency.

## Practical implications

Given the persistent prevalence of presenteeism (Ferreira et al., 2022), it is important to consider the underlying motives driving this phenomenon. While implementing the scale introduced in this study within organizations may present practical challenges, a better knowledge surrounding this study's concepts can empower managers to vigilantly monitor presenteeism motivations and provide insights into how they can foster a sustainable and health-conscious workplace culture. Previous research has indicated that investing in workplace health programmes (Cancelliere

et al., 2011) or adopting Human Resource Management practices prioritizing employee well-being (Haque et al., 2019) can effectively mitigate presenteeism. Recognizing the diversity in presenteeism motivations can further help organizational decision-makers assess whether the emphasis should be on addressing attendance pressures or establishing clear expectations regarding appropriate workplace behaviour. Crafting an effective presenteeism policy may demand a delicate balance, aided by tools to monitor its effectiveness. This is particularly relevant when considering that well-intended strategies aimed at minimizing sickness absences (Karanika-Murray & Cooper, 2018) may inadvertently lead to increased presenteeism. Based on the findings of this study, workplace interventions may involve trade-offs among different presenteeism motivations. For example, while efforts to enhance employees' replaceability and general health may reduce involuntary presenteeism, they may simultaneously contribute to employees' affective organizational commitment, thus promoting voluntary presenteeism. Furthermore, maintaining awareness of employees' underlying motives for presenteeism can help anticipate potential issues related to work engagement and burnout. This, in turn, may prompt broader proactive initiatives to accommodate these concerns. This study underscores the urgency of this, especially in cases marked by high levels of involuntary presenteeism. It also highlights the need to be mindful of contexts characterized by voluntary presenteeism, as this may indirectly contribute to the development of burnout.

## Limitations and directions for future research

There are several limitations to consider in this work. Reflecting on the generalizability of this study, the data came from the general population and specific professional groups known for presenteeism (i.e., teachers and nurses). However, presenteeism motivations may exhibit unique characteristics in other settings, such as the hospitality industry (e.g., Chia & Chu, 2017), or vary across cultures (e.g., Gerich, 2016) and over time (e.g., Lohaus et al., 2021). Future research should test the presenteeism motivation scale in different work environments and account for the evolving nature of work, for instance, by broadening the conceptualization of presenteeism to encompass working sick regardless of location.

A second limitation is that the four studies relied on self-report measures and remain unable to establish causal relationships. To complement the proof of concept provided by this work, future research could include multi-source data and employ longitudinal studies. Another fruitful approach to draw causal inferences, which could expand the methodological toolkit of presenteeism scholars, is to utilize experimental vignette designs. This methodology allows for the investigation of workplace phenomena that are challenging to manipulate in real field situations (e.g., Yang & Dickinson, 2014). While it may not be feasible to use such designs to study presenteeism as a behaviour, they allow to gauge factors believed to influence presenteeism tendencies.

A third limitation is that there are various potential antecedents and correlates of presenteeism motivation that remain untested. Following the available evidence, Study 3 juxtaposed affective organizational commitment and overcommitment. It would be interesting to also test how continuance and normative organizational commitment correlate with different presenteeism motivations. Miraglia and Johns (2016) synthesized a range of other relevant presenteeism antecedents that could be explored in future research, including overall constraints on absenteeism (e.g., job insecurity), job demands (e.g., understaffing), and job and personal resources (e.g., supervisory support). Additionally, while the use of a frequency measure is common in presenteeism studies (Pohling et al., 2016), it may be beneficial to consider other measures of presenteeism in future research. Lohaus and Habermann (2019) discuss alternative instruments that operationalize presenteeism in terms of productivity loss. Moreover, Johns (2010) listed several other relevant individual consequences of presenteeism that could be investigated as outcomes of opposite presenteeism motivations. These variables pertain to employee productivity, tenure, and attendance, in addition to their well-being. Furthermore, it would be valuable to explore boundary conditions and moderators that influence presenteeism motivation. Considering that self-efficacy is associated with more volitional

forms of presenteeism, while neuroticism may induce fear and perceived pressure to engage in presenteeism (Lu et al., 2014), an interesting avenue for future research is to investigate how personality traits and/or states relate to different presenteeism motivations.

## CONCLUSION

Avoiding presenteeism is widely acclaimed critical for employees, organizations, and society as a whole. The present study developed and validated a scale measuring two opposite motivations underlying this behaviour. The findings provide great support for the reliability, validity, and relevance of a two-dimensional scale that distinguishes between presenteeism as a voluntary or involuntary choice. While both motivations appear to elicit presenteeism, they represent different constructs that seem to result in a matching response, influencing employees' well-being differently.

## AUTHOR CONTRIBUTIONS

**Thomas Van Waeyenberg:** Conceptualization; investigation; methodology; writing – original draft; validation; writing – review and editing; software; formal analysis; project administration; data curation; resources.

## CONFLICT OF INTEREST STATEMENT

There is no conflict of interest and no funding to disclose.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on reasonable request from the corresponding author.

## ORCID

Thomas Van Waeyenberg  <https://orcid.org/0000-0001-9479-5972>

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