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Job characteristics, job attitudes and employee withdrawal behaviour: A latent change score approach

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Abstract

Employee withdrawal is a critical issue for organisations and has been the topic of extensive research. Although much turnover research used between-person designs, this study focused on the impact of within-person changes in job characteristics on job attitudes and withdrawal behaviour, using the challenge-hindrance stressor as our main theoretical framework. The focus was on the job characteristics workload (a challenge stressor), emotional demands (a hindrance stressor) and autonomy (a job resource) and on positive (dedication) and negative (organisational cynicism) job attitudes as process variables. Latent change score modelling based on data of 1530 Dutch employees collected in three waves across 2 years showed that changes in workload, emotional demands and autonomy resulted in changes in organisational cynicism, which, in turn, related to changes in turnover intentions, but not absenteeism. Changes in autonomy were related to changes in dedication, which, in turn, were associated with changes in turnover intentions, but not

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absenteeism. This study highlights the importance of investigating within-person changes in job characteristics in explaining changes in job attitudes and employee withdrawal behaviour. From a practical perspective, this study shows how job design affects dedication and organisational cynicism and hence can contribute to combat employee withdrawal behaviour.

KEYWORDS

absenteeism, challenge stressor, hindrance stressor, latent change score modelling, organisational cynicism, personnel psychology, the Netherlands, turnover intentions, work psychology

INTRODUCTION

Retention of experienced workers remains a persistent challenge for organisations in a competitive global environment. Especially at a time when the baby boomers are starting to leave the workforce and careers are becoming increasingly dynamic and self-constructed (Briscoe & Hall, 2006), organisations should be careful not to lose valued workers for the wrong reasons, such as aversive work demands. Employee withdrawal behaviour can have severe consequences for organisations owing to separation and replacement costs and lowered morale with the workforce (Allen et al., 2010). Already in the 1960s and 1970s, models were developed for explaining the role of job characteristics and job design for important work outcomes, such as job satisfaction and withdrawal behaviours (Grant et al., 2008; Lee et al., 2017). Subsequent studies have convincingly shown that job characteristics can impact employees' attitudes towards their work and the organisation and, consequently, affect employees' withdrawal behaviours (Griffeth et al., 2000; Holtom et al., 2008; Hom et al., 2012; Podsakoff et al., 2007).

This study aims to advance our insight into the interrelationships between job design, job attitudes and withdrawal behaviour and contributes to the literature in three distinct ways. First, in applying a focus on within-person changes, this study answers a call by Lee et al. (2017) to move away from the 'standard research practice' (Steel, 2002). Researchers are often inclined to focus on interrelationships between *levels* of job characteristics, instead of *changes* in job characteristics and how these affect outcomes (McArdle, 2009; Ployhart & Vandenberg, 2010; Taris & Kompier, 2014). As a consequence, these studies provide information about differences between people rather than differences within people (McArdle, 2009). In addition to levels of job characteristics (e.g. low versus high workload), employee reactions towards work may be affected by within-person changes in these job characteristics (e.g. deterioration versus amelioration of workload). A focus on these within-person changes in research models may further our understanding of the impact of job design on employee withdrawal behaviour, and this may support organisations in developing effective interventions. This study seeks to move away from the 'standard research practice' (Steel, 2002), which mainly uses cross-sectional research designs and static predictor scores. As Lee et al. (2017) argue, turnover theories (implicitly) assume that changes over time in distal antecedents (e.g. job characteristics) affect turnover via changes in proximal antecedents (e.g. job attitudes), but these assumptions on dynamic

mediation (Ployhart & Vandenberg, 2010) are seldom tested (for an exception, see Bentein et al., 2005; Chen et al., 2011). In this study, we used latent change score (LCS) models (Gollwitzer et al., 2014; McArdle, 2009), as these provide an important tool for analysing changes within persons and modelling growth. Applying an LCS approach increases our knowledge about how employee reactions are affected by decreases or increases in workload, emotional demands and autonomy and not merely by their level (low versus high workload, emotional demands and autonomy). We assumed that exposure to 1-year *changes* in the job characteristics under study provokes experiences of 1-year *changes* in job attitudes, and these, in turn, affect 1-year *changes* in employee withdrawal behaviour.

Second, this study develops a research model that integrates Podsakoff et al.'s (2007) conceptual model of challenge and hindrance stressor relationships with retention-related criteria and elements of the Job Demands-Resources (JD-R) model (Demerouti et al., 2001). Podsakoff et al.'s (2007) model builds upon a theory developed by Schaubroeck et al. (1989) but extends this by integrating challenge stressors and distinguishing these from hindrance stressors. Indeed, research indicates that these two types of stressors can have different effects (e.g. Beehr et al., 2000; Cavanaugh et al., 2000) and should not be considered as similar job stressors. Using the challenge-hindrance stressor framework (Cavanaugh et al., 2000; LePine et al., 2004, 2005), Podsakoff et al.'s (2007) meta-analytic study demonstrated that challenge and hindrance stressors were oppositely associated with turnover, and its proximal attitudinal precursors (job satisfaction and organisational commitment), underlining the importance of distinguishing these two types of job characteristics in withdrawal research. In our research model, workload represents a challenge stressor and emotional demands a hindrance stressor. Additionally, and building on the JD-R model (Demerouti et al., 2001), our model also includes a third type of job characteristic, that is, autonomy as a job resource. While recent research indicates that job characteristics can be classified into hindrance stressors, challenge stressors and job resources (Cavanaugh et al., 2000; Demerouti et al., 2001; LePine et al., 2005; van den Broeck et al., 2010), only a few studies have applied this triple classification of job characteristics when studying withdrawal behaviour. Our study includes all three types of job characteristics and focuses on the impact of these work conditions on employee withdrawal behaviour.

Third, whereas most research highlight positive attitudes (e.g. job satisfaction, organisational commitment and engagement) as mediating mechanisms between job characteristics and withdrawal behaviour, our study also includes a negative job attitude (organisational cynicism) as a process variable. This might advance our knowledge about the proposed differential impact of challenge and hindrance stressors on work outcomes, such as job attitudes (e.g. engagement) and employee behaviour (e.g. withdrawal). Indeed, in a more recent meta-analytical study, Mazzola and Disselhorst (2019*) warn that the 'adoption and general embrace' (p. 950) of the challenge-hindrance stress model (CHM) may be premature. In their broad evaluation of the CHM, they note that only some* studies successfully found support for *some* differential relationships of challenge and hindrance stressors with work outcomes, but almost none found full support. In general, research finds evidence for a negative relationship of hindrance stressors with, for example, job satisfaction or retention criteria, but the relationship with challenge stressors is mostly non-significant, whereas a positive impact is assumed (Mazzola & Disselhorst, 2019). Through the inclusion of both a positive and a negative job attitude, we aim to gain more insight into the differential relationships of both stressors, as challenge stressors may be more strongly and negatively related to negative job attitudes (with hindrance stressors showing a positive effect).

For that purpose, our study builds upon Podsakoff et al.'s (2007) conceptual model but uses different process variables: dedication instead of job satisfaction and organisational cynicism instead of organisational commitment. Dedication refers to a state of positive identification with and enthusiasm for one's job and has been studied as a dimension of work engagement within the JD-R model (Schaufeli & Bakker, 2004). Even more than job satisfaction, dedication expresses one's job involvement and hence may be more strongly related to retention criteria such as turnover intentions. Organisational cynicism refers to a negative attitude characterised by frustration and distrust directed against the employing organisation (Abraham, 2000; Dean et al., 1998; Reichers et al., 1997). Dedication and organisational cynicism represent divergent (positive versus negative) job attitudes at different levels (work versus organisation) and are likely precursors of withdrawal behaviours (e.g. Andersson & Bateman, 1997; Chiaburu et al., 2013). From a practical perspective, job (re)design interventions aimed at improving working conditions become even more beneficial when they contribute to both a rise in dedication towards work and a reduction in feelings of cynicism towards the organisation. From a theoretical perspective, the inclusion of both a positive (dedication) and negative (organisational cynicism) job attitude enables us to test whether challenge stressors relate positively to positive attitudes (with hindrance stressors showing a negative effect) and negatively to negative attitudes (with hindrance stressors showing a positive effect). This extension also meets a recommendation of Podsakoff et al. (2007) to consider additional mechanisms in turnover research, as they find that job satisfaction and organisational commitment only partially mediated the relationship between stressors and turnover/withdrawal.

The goal of the present study is threefold. First, we aimed to gain more insight into the relationships between the three types of job characteristics (job resources and challenge and hindrance stressors) and employee withdrawal behaviour. Second, we aimed to investigate mediating processes that might help explain the job characteristics—withdrawal behaviour relationship. We included both a positive (dedication) and a negative (organisational cynicism) job attitude in order to further our knowledge about the differential role of challenge stressors compared with hindrance stressors. Finally, we studied change-related phenomena within a longitudinal design, using LCS models (McArdle, 2009) that enables us to test the dynamics implicitly assumed in most theories on retention/withdrawal (Lee et al., 2017). Figure 1 presents the research model.

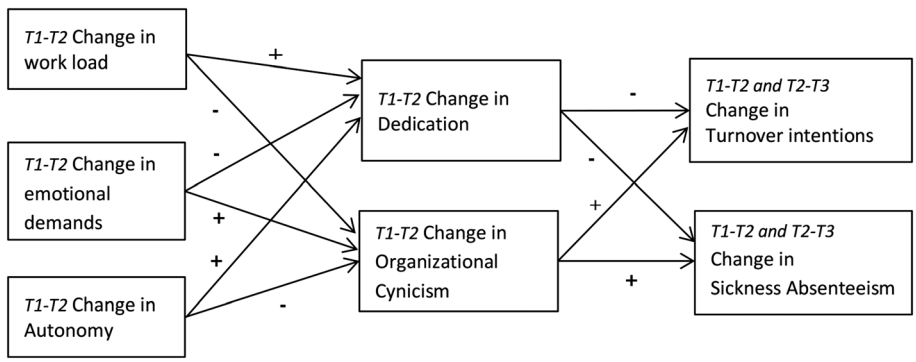

FIGURE 1 Research model

THEORETICAL DEVELOPMENT AND HYPOTHESES

The challenge-hindrance framework (Cavanaugh et al., 2000; LePine et al., 2004) and the JD-R model (Demerouti et al., 2001) served as our main theoretical framework for developing our hypotheses concerning the interrelationships between job characteristics (i.e. workload, emotional demands and autonomy), attitudes towards work and organisation (i.e. dedication and organisational cynicism) and withdrawal behaviour (i.e. turnover intention and sickness absenteeism).

The JD-R model posits that employee functioning and well-being are influenced by job characteristics, and these can be distinguished into job demands and job resources (Demerouti et al., 2001; Schaufeli & Bakker, 2004). Job demands (e.g. emotional demands) refer to those aspects of a job that require sustained physical and/or psychological effort and therefore are associated with certain physiological and/or psychological costs (Demerouti et al., 2001). Job resources (e.g. autonomy) refer to job aspects that are functional in achieving work goals; stimulate personal growth, learning and development; and reduce physiological and psychological costs (Demerouti et al., 2001). The JD-R model proposes two underlying psychological processes that relate these job characteristics to work outcomes: a motivational process linking job resources to positive work outcomes, for example, work engagement, and an energy-depletion process linking job demands to negative work outcomes, for example, burnout (Schaufeli & Bakker, 2004). This study focused on the motivational mechanisms affecting employee withdrawal behaviour. Research has generally supported the proposition (Bakker & Demerouti, 2007; Schaufeli & Taris, 2016) that job resources such as autonomy instigate a motivational process, resulting in a number of positive outcomes, such as work engagement (Schaufeli & Bakker, 2004), employee well-being (Bakker & Demerouti, 2007) and the intention to postpone retirement (Frins et al., 2016). Similarly, job demands have been related to burnout symptoms and emotional exhaustion, thus providing support for the energy-depletion process (Crawford et al., 2010).

Some studies however found that certain job demands that were thought to be stressful (e.g. workload) were positively evaluated and contributed to positive outcomes, such as work engagement, job satisfaction, organisational commitment and retention (Beehr et al., 2000; Mauno et al., 2007). Researchers have tried to address these inconsistencies by emphasising the role of employees' appraisal of job demands (Cavanaugh et al., 2000; LePine et al., 2005; Webster et al., 2011). Drawing on Lazarus' appraisal theory (Lazarus & Folkman, 1984), it has been argued that job demands can be appraised as either hindrance stressors (e.g. emotional demands and role conflict) or challenge stressors (e.g. workload and job complexity). Hindrance stressors refer to job characteristics or work circumstances that interfere with or hinder an individual's ability to achieve valued goals (Cavanaugh et al., 2000). Challenge stressors refer to job characteristics or work circumstances that, although potentially stressful, are viewed as rewarding work experiences that have associated potential gains and are well worth the discomfort that is involved (Podsakoff et al., 2007). Research has shown that hindrance stressors and challenge stressors relate differently to employee work attitudes, such as job satisfaction (Cavanaugh et al., 2000), turnover intention (Cavanaugh et al., 2000; Podsakoff et al., 2007), learning motivation and learning performance (LePine et al., 2004).

Podsakoff et al.'s (2007) model of challenge and hindrance stressor relationships with retention-related criteria explicitly distinguishes between both stressors. Building upon the challenge-hindrance stressor framework (Cavanaugh et al., 2000; LePine et al., 2004, 2005), the authors propose that, because challenge stressors are beneficial for personal development and

work-related accomplishment, and hindrance stressors conversely frustrate these, both stressors have a differential impact on job attitudes (e.g. job satisfaction) and employee behaviour (e.g. performance and retention). In their meta-analytic study, they assume and find that challenge stressors are positively related to job satisfaction and organisational commitment and negatively with turnover. In contrast, hindrance stressors show negative associations with job satisfaction and organisational commitment and a positive association with turnover.

However, in a more recent meta-analytical study, Mazzola and Disselhorst (2019) questioned the idea that challenge stressors promote performance and evoke positive emotions and attitudes. They found that challenge stressors generally were unrelated to positive work outcomes, such as job satisfaction or engagement, and did not help in retaining employees (Mazzola & Disselhorst, 2019). To gain more insight into the differential effects of the three types of job characteristics, our research model includes workload as a challenge stressor, emotional demands as a hindrance stressor and autonomy as a job resource (see Figure 1).

Effects of job characteristics on job attitudes

Job characteristics serve as important precursors of withdrawal behaviour because they can affect employees' attitudes towards their job and organisation. In the retention and withdrawal literature, research has convincingly shown that employees' attitudes, such as job satisfaction and organisational commitment, mediate the relationship between work conditions and withdrawal behaviour (Griffeth et al., 2000; Podsakoff et al., 2007; Tett & Meyer, 1993). The present study focused on dedication and organisational cynicism as likely mediators to the impact of work conditions on withdrawal behaviour (Randsley de Moura et al., 2009). Dedication—a state of positive identification with ones' job (Bakker & Demerouti, 2007)—can be considered a positive work-oriented outcome of the motivational process, whereas organisational cynicism represents a negative attitude towards the organisation and its management (Andersson & Bateman, 1997; Dean et al., 1998; Gkorezis et al., 2018; Naus et al., 2007), thus indicating a process of de-identification and distancing oneself from the organisation. Dedication and organisational cynicism can act as initiators of psychological withdrawal behaviour that differ in direction (positive versus negative) and level (work and organisation) and mediate the impact of job characteristics on physical withdrawal behaviour (Volpone & Avery, 2013). Owing to their different foci and content, dedication and organisational cynicism will serve opposite roles in predicting withdrawal behaviour.

As dedication reflects job involvement and identification with one's job, even more strongly than job satisfaction, we expect that Podsakoff et al.'s assumptions on the differential impact of challenge and hindrance stressors on job satisfaction apply to dedication as well. In their meta-analysis, Crawford et al. (2010) found that engagement, of which dedication is an aspect, was positively associated with challenge stressors and negatively related to demands that were appraised as hindrance stressors. In a nursing sample, Jenaro et al. (2011) observed that nurses' dedication was negatively related to stress associated with patient care (a job hindrance).

The JD-R model assumes that dedication will be enhanced by an increase in job resources (e.g. autonomy). Several studies (Crawford et al., 2010; van den Broeck et al., 2010) have supported these predictions for work engagement. In their meta-analysis, Crawford et al. (2010) found that engagement was positively associated with job resources. More specific, Frins et al. (2016) noticed how job resources (autonomy, task variety, support from colleagues and from supervisor) positively and strongly predicted dedication 1 year later. In a nursing sample, Jenaro

et al. (2011) found that nurses' dedication was positively related to supervisor and colleague support, which are generally considered job resources (Schaufeli & Taris, 2016). In a study by Hu et al. (2017), nurses and police officers who experienced a decrease in resources also reported a decrease in engagement.

Hypothesis 1a. Within a 1-year period, increases in emotional demands are related to decreases in dedication.

Hypothesis 1b. Within a 1-year period, increases in workload are related to increases in dedication.

Hypothesis 1c. Within a 1-year period, increases in autonomy are related to increases in dedication.

Organisational cynicism is reversed to dedication, as it indicates alienation and estrangement from the organisation, whereas dedication represents attraction and movement towards the job. Applying the challenge stressor–hindrance stressor model and the JD-R model to organisational cynicism, we therefore expected that an increase in hindrance stressors and a decrease in job resources will enhance this negative state. In a cross-sectional study, Naus et al. (2007) noticed high role conflict (a hindrance stressor) and low autonomy (a job resource) predicted organisational cynicism. Within a JD-R framework, Richardsen et al. (2006) found that police officers' cynicism related positively to work–home conflict (a hindrance stressor) and negatively to supervisor and co-worker support (job resources). Similarly, Gkorezis et al. (2018) found that high-performance work practices, which aim at the growth of resources such as knowledge, skills and motivation through stimulating job resources such as autonomy, alleviated nurses' cynical attitudes towards their organisation. Meta-analytic evidence (Chiaburu et al., 2013) showed that contextual characteristics that could be considered as hindrance stressors (i.e., psychological strain, contract violation and organisational politics) related positively to organisational cynicism, whereas characteristics that could be considered resources (i.e., perceived organisational support and organisational justice) related negatively to organisational cynicism.

The relationship between challenge stressors and organisational cynicism is more difficult to derive from the challenge stressor–hindrance stressor model and has probably not been addressed in previous research. Yet, it is likely that employees who experience increasing challenge stressors that will help them reach their goals, and benefit their personal development and work-related accomplishment (Podsakoff et al., 2007), will develop a more positive attitude towards and identify more strongly with the organisation than employees who experience decreasing challenge stressors (e.g. Gkorezis et al., 2018). We therefore assume that increases in workload, our challenge stressor, are associated with reductions in organisational cynicism.

Hypothesis 2a. Within a 1-year period, increases in emotional demands are related to increases in organisational cynicism.

Hypothesis 2b. Within a 1-year period, increases in workload are related to decreases in organisational cynicism.

Hypothesis 2c. Within a 1-year period, increases in autonomy are related to decreases in organisational cynicism.

Effects of job attitudes on withdrawal behaviour

As indicators of important employee's attitudes towards their work and organisation, dedication and organisational cynicism act as precursors of employee withdrawal behaviour, that is, sickness absenteeism and turnover intention. Sickness absenteeism refers to the pattern of missing work in which an employee is absent from work owing to sickness and health complaints. Sickness absenteeism is a complex phenomenon because it may include both voluntary absenteeism that derives from dissatisfaction and lowered work motivation and involuntary absenteeism owing to strains and a physical inability to work (Schaufeli et al., 2009). Turnover intention has been defined as the conscious and deliberate willingness to leave the organisation, and is considered the last in a sequence of withdrawal cognitions, and the strongest single predictor of actual turnover (Hom et al., 2012; Tett & Meyer, 1993). Although turnover intention does not necessarily lead to actual turnover behaviour, and the use of this research variable has therefore been criticised (Hom et al., 2012), this variable has several advantages for this study. First, if people actually leave the organisation at the end of the first period, establish cross-lagged effects at the end of the second period will not be possible. Second, turnover intentions indicate the inclination of an employee to withdraw from the organisation definitely; in contrast, absenteeism may be viewed as a way of 'escaping' the work context temporarily (Schaufeli et al., 2009).

Studies indicate that dedication and organisational cynicism serve as proximal antecedents of withdrawal behaviour. Schaufeli and Bakker (2004) found that engagement was negatively related to turnover intention, mediating the relationship between job resources and turnover intentions. With the use of a change-score approach, Schaufeli et al. (2009) concluded that increases in job resources predicted engagement, which, in turn, predicted registered absenteeism. Regarding organisational cynicism, Chiaburu et al.'s (2013) meta-analytic study showed a strong relationship between organisational cynicism and employees' intention to leave the organisation. In a nursing sample, Gkorezis et al. (2018) found a positive relationship between organisational cynicism and nurses' intention to leave. On the basis of this evidence, we expected that dedication and organisational cynicism would predict withdrawal behaviour. Because we had data on both T1 to T2 and T2 to T3 changes in withdrawal behaviour, we were able to investigate both cross lagged (relationships within the first one-year period) and lagged (spill over to the following one-year period) effects. Hence:

Hypothesis 3a. Within a 1-year period, increases in dedication are related to decreases in withdrawal behaviour (turnover intentions and absenteeism).

Hypothesis 3b. One-year increases in dedication predict decreases in withdrawal behaviour (turnover intentions and absenteeism) in the following year.

Hypothesis 4a. Within a 1-year period, increases in organisational cynicism are related to increases in withdrawal behaviour (turnover intentions and absenteeism).

Hypothesis 4b. One-year increases in organisational cynicism predict increases in withdrawal behaviour (turnover intentions and absenteeism) in the following year.

To summarise, our general assumption is that as work contexts become more challenging and resourceful, and less hindering, dedication at work increases, and organisational cynicism decreases. In turn, growing organisational cynicism promotes turnover intentions and sickness leave, while increasing dedication counteracts the occurrence of these withdrawal behaviours.

Change-to-change (versus level-to-level) effects

In evaluating or appraising work, an employee may consider the level of stressors or resources (low versus high) but also changes over time in these stressors or resources (growth versus decline) (Gao-Urhahn et al., 2016). Our hypotheses and underlying assumptions are mainly based on research that theorised and investigated level-to-level effects between the study variables, while this study aims to investigate change-to-change (Smith et al., 2013; Taylor et al., 2014) effects. We try to understand and investigate how individuals' experience of *change* in their work (in particular in the three work characteristics) affects *changes* in their attitudes and behaviour (instead of experiences of *levels*). In this study, change in a variable captures individual differences in both the magnitude and direction of change: Higher positive values reflect greater change in a positive direction over time, and higher negative values greater change in a negative direction over time (see Chen et al., 2011, p. 163).

The use of dynamic units of analysis, that is, within-person changes in the study variables, requires further theoretical substantiation. In order to investigate changes in job satisfaction, Chen et al. (2011) developed a theoretical framework that integrates theoretical perspectives, such as prospect theory (Kahneman & Tversky, 1979) and theories of spirals (Lindsley et al., 1995). First, Chen et al. (2011) propose that 'job satisfaction at an earlier point in time provides a reference point for interpreting job satisfaction at a later point' (p. 163), and, second, that 'job satisfaction is more salient to the extent it deviates more from prior job satisfaction levels' (p. 163). Together, this theoretical framework and the underlying principles suggest that within-person change in a variable (e.g. workload or dedication) captures deviations from a prior reference point in this variable, and this advances its cognitive saliency for the individual who experiences this change. The change (deviation) becomes (more) salient for the individual and therefore impacts behaviour above and beyond the level of the variable under study (see Chen et al., 2011, p. 164).

Figure 2 (see also Chen et al., 2011) illustrates the difference in investigating levels versus within-person changes in two of our study variables (see H1c). At T2, both Workers 1 and 2 experience the same level of autonomy. However, using T1 as a reference point, Worker 1 experienced a decline in autonomy and Worker 2 an increase. As a result, Worker 1 shows a decrease in dedication (paralleling the decrease in autonomy), and Worker 2 shows an increase in dedication (paralleling the increase in autonomy). Although their level of autonomy at T2 is the same, they show a different change in dedication as a consequence of their different deviation from the reference point at T1 (different trajectories: decrease vs. increase in autonomy). At the same vein, comparing Workers 2 and 3, both show an increase in dedication although Worker 2 experiences a higher level of autonomy than Worker 3. This results from their comparable trajectory (increase in autonomy) as their level of autonomy at T2 deviates favourable from the reference point (level of autonomy at T1).

Several theoretical contributions to the literature suggest that individual behaviour, interpretations of the current situation and expectations about situational changes in the future highly depend on the magnitude and direction of deviations in work characteristics and

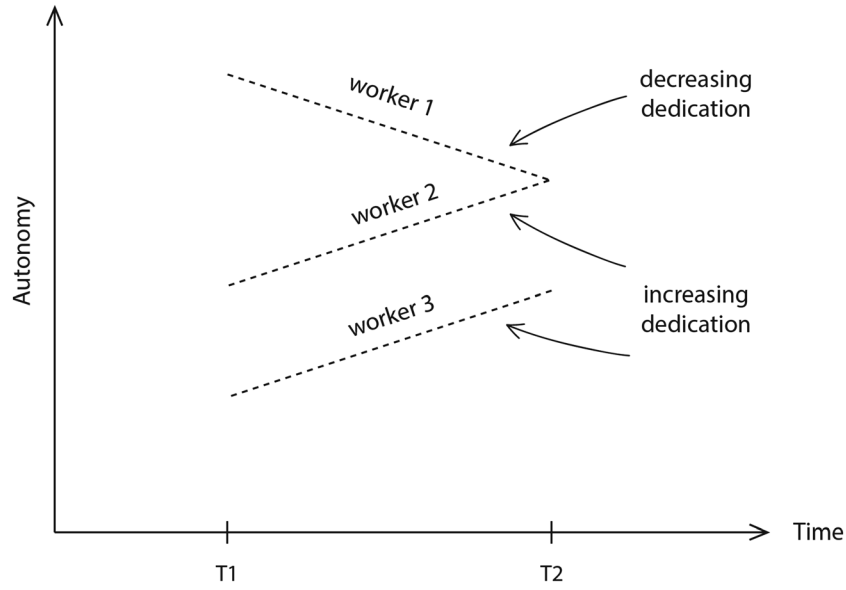

FIGURE 2 Illustration of change-to-change effects

associated attitudes at the point of reference. For example, Hsee and Abelson (1991), in line with theory of spirals, found that the degree of satisfaction with a specific outcome (e.g. workload or autonomy as the object of satisfaction) depends on both the absolute level of that outcome and the velocity of that outcome, that is, the extent to which this outcome changed (got better or worse).

Additionally, other theoretical accounts highlight the relative importance of changes above and beyond levels in these characteristics. First, the notion of cognitive saliency (e.g. Bentein et al., 2005) contributes to the plausibility of the idea that meaningful change in a variable over time, and not necessarily the level of this variable at some point in time, affects the awareness of and conscious dealing with this situation and, as a consequence, has greater relevance for associated behavioural outcomes. The underlying thought is that meaningful or significant change (e.g. tangible deviations from the reference point) increases cognitive awareness in the individual about the importance or urgency of this reality, while the experience of a relatively constant high or low level in this variable does not possess the same degree of cognitive saliency. For example, a tangible increase or decrease in workload advances the cognitive saliency of workload for the employee and, hence, triggers larger attitudinal and behavioural consequences than the experience of a relatively stable level of workload.

Second, as Taylor et al. (2014) note, departures from typical patterns of experience (e.g. stable situational conditions) and associated disruptions contain meaningful information beyond current and past experiences. Changes may be perceived as representing an upward or downward trend that will persist over time (Chen et al., 2011). These changes over time might fuel employee reactions to a greater extent than the initial level of situational characteristics at one specific moment. Consequently, for example, the response of an employee might be more strongly informed by a decline or growth in autonomy than by the actual

level of autonomy. Hence, one assumption to be investigated is that the experience of change in a situational work characteristic has a great influence on outcomes representing employee reactions, such as engagement, cynicism and turnover intentions. Supposedly, changes in this characteristic over time signal tendencies, such as amelioration or improvement, or conversely, deterioration or decline in the characteristic under consideration. From these tendencies, workers may derive information about future levels and trajectories in this job characteristic: Recent improvements in valued job characteristics promote expectations about future improvements that motivate employees to stay in the organisation, whereas recent deteriorations in these job characteristics feed expectations about future deteriorations that may motivate employees to search for alternative jobs. The direction and magnitude of change over time can evoke expectations on what one may experience in the (near) future (Taylor et al., 2014).

In sum, from a theoretical perspective, we assume that when a variable systematically changes in a particular direction (starting from a reference point), the trend in this change (1) becomes more cognitively salient, as well as (2) more effective and impactful through shaping employees' expectations about future work conditions. Consequently, a negative (positive) trend in a job characteristic leads employees to believe their situation at work will probably continue to get worse (better) in the future, and, in turn, these expectations influence employees' changes in intentions to leave (stay with) their organisation (Chen et al., 2011, 165).

METHOD

Procedure and participants

For the current study, we used longitudinal data from a sample of Dutch employees working in different organisations. Flycatcher, an ISO-certified online research company situated in the Netherlands, conducted the data collection in the context of their annual Work Experience Monitor (WEM) survey. WEM recruits respondents from a panel of approximately 15,000 persons who have expressed their willingness to participate in online surveys by Flycatcher. To guarantee the representativeness of the panel and sample, Flycatcher annually stratifies its respondents by gender, age and education, using reference data provided by the Central Office for Statistics of the Netherlands (CBS).

We collected data in the period from 2012 to 2014. We invited participants through email to take part in the survey. Participation was voluntarily. A few days later, a reminder was sent in order to ensure optimal response rates. At Time 1, 8070 wage earners received an online invitation to fill out the questionnaire. Only respondents that filled out the questionnaire were invited to participate in the next wave. The number of responses was 4221 at T1 (52.3% response), 2193 at T2 (52.0% response) and 1530 at T3 (69.8% response). This final group was used to test the research model; 45% were male; mean age was 45.16 years ($SD = 11.19$). Most respondents worked full time (54%) and held a degree from higher level (55%) and middle level educational training (35%); a few respondents had lower educational training (10%). Non-response analysis revealed that drop-outs were slightly younger ($M = 44.55$, $SD = 11.20$ vs. $M = 45.78$, $SD = 11.21$; $t(7704) = -255.66$, $p < .1$) and lower educated ($M = 2.26$, $SD = 0.74$ vs. $M = 2.28$, $SD = 0.74$; $t(7763) = -4.03$, $p < .1$) than the participants.

Measures

The questionnaire contained items of validated measures and, additionally, has been subject to rigorous validation research (Roberts, 2012).

Job characteristics

Previous research indicates that emotional demands can be considered a hindrance stressor (van den Broeck et al., 2010). We used a five-item scale for emotional demands from the validated Tilburg Workload Questionnaire (T-WPQ; Roe & Zijlstra, 2000). A sample item was 'my work is emotionally demanding' (1 = *never*, 5 = *almost always*). Cronbach's alpha was .84 at T1, .85 at T2 and .86 at T3.

Recent research (Cavanaugh et al., 2000; LePine et al., 2005; Webster et al., 2011) has shown that workload can be considered a challenge stressor. We measured workload with a six-item scale from the T-WPQ (Roe & Zijlstra, 2000). A sample item was 'I feel rushed during work' (1 = *never*, 5 = *almost always*). Cronbach's alpha was .87 at T1, .87 at T2 and .88 at T3.

Autonomy was included to indicate the level of job resources. We measured autonomy on a five-item scale of the M_DOQ10 (D'Amato & Zijlstra, 2008; Majer & D'Amato, 2001). A sample item was 'In my job I have a certain amount of autonomy'. Cronbach's alpha was .86 at T1, .86 at T2 and .87 at T3. Answers could be given on a 5-point Likert scale ranging from 1 (*fully disagree*) to 5 (*fully agree*).

Job attitudes

We measured dedication with two items from the dedication scale of the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2004). *As this research was part of a much larger study and in order to limit overload for participants (hence, the length of the questionnaire) and in accordance with ethical guidelines, we had to make choices about the number of items to include in the survey. As a result, we decided to measure dedication using only two items from* Schaufeli and Bakker *(2004). With the use of datasets from our previous research, we calculated in advance correlations between this 2-item scale and the original 3-item scale. These correlations ranged between .94 and .97 indicating that the 2-item scale largely covers the dedication construct.* A sample item was 'My work makes me proud' (1 = *fully disagree*, 5 = *fully agree*). Cronbach's alpha was .77 at T1, .78 at T2 and .79 at T3.

We measured organisational cynicism with five items from Naus et al. (2007). A sample item was 'How often do you suggest to colleagues, friends and acquaintances that you find your management to be incompetent' (1 = *never*, 5 = *almost always*). Cronbach's alpha was .82 at T1, .81 at T2 and .82 at T3.

Withdrawal behaviour

Turnover intention and sickness absenteeism were both measured with one item. We measured turnover intentions as 'During the last 12 months, how often did you consider to search for another job?' (1 = *no, never*, 2 = *yes, once and again*, 3 = *yes, often*). We operationalised

sickness absenteeism as the self-reported number of days of absenteeism due to sickness or health problems during the last 12 months.

Background characteristics

Age, gender and education were included in the structural equation modelling (SEM) analyses as control variables.

Analyses

We analysed the data using an LCS approach (McArdle, 2009; Toker & Biron, 2012). Using the R-package Lavaan (Rosseel, 2012) and AMOS 24 software package, confirmatory factor analysis and SEM were applied to investigate the measurement model and the structural research model, respectively.

Testing the measurement model and measurement invariance

First, we examined the measurement invariance across the three time points of the constructs in this study by applying a procedure proposed by van de Schoot et al. (2012), using the R-package Lavaan (Rosseel, 2012). We investigated measurement invariance in three different models. Model 1 tests configural invariance, which means that only the structure of the model is equal across time points, but all parameters are free to vary. The second model tests metric invariance in which the factor loadings are equal across time points. In the third model, we constrained both loadings and intercepts to be equal (scalar invariance).

LCSs for the predictors (workload, emotional demands, autonomy) mediators (dedication and organisational cynicism) and outcomes (turnover intention and sickness absenteeism) were applied in the structural research models to investigate our hypotheses.

Testing the structural model

LCS modelling was applied to analyse the proposed within-person changes over time (e.g. Gao-Urhahn et al., 2016; Taylor et al., 2014). LCS provides an important, relatively new approach to analyse longitudinal data that uses the strength of SEM with a focus on changes within persons (McArdle, 2009). We have used LCS modelling in different fields, such as human development, cognitive psychology and neuropsychology, to examine longitudinal relationships related to individual differences in change (Gao-Urhahn et al., 2016; Gawke et al., 2017; Smith et al., 2013; Taylor et al., 2014).

LCS facilitates the analysis of intra-individual change (e.g. an increase in workload or dedication between T1 and T2), as well as the investigation of individual (between person) differences in these changes. The difference between adjacent observations of a construct is included in the structural model as a distinct latent variable (Selig & Preacher, 2009). Following Toker and Biron (2012, pp. 703), the latent construct change in dedication between T1 and T2 is

denoted as $\Delta dedication_{[T1\text{-}T2]}$. This latent construct is a function of dedication at T1 and of the coefficient $\beta_{[T1]}$, which is the effect of dedication at T1 on change in dedication:

$$\Delta dedication_{[T1-T2]} = \beta_{[T1]} dedication_{[T1]}.$$

The construct $dedication_{[T2]}$ is a function of both dedication at T1 and the LCS of dedication.

$$dedication_{[T2]} = dedication_{[T1]} + \Delta dedication_{[T1-T2]}.$$

In the same way, the LCS were modelled for the three predictor variables ($\Delta workload_{[T1\text{-}T2]}$, $\Delta emotional\ demands_{[T1\text{-}T2]}$ and $\Delta autonomy_{[T1\text{-}T2]}$), the other mediating variable ($\Delta organizational\ cynicism_{[T1\text{-}T2]}$) and both employee withdrawal indicators ($\Delta turnover\ intentions_{[T1\text{-}T2]}$, $\Delta turnover\ intentions_{[T2\text{-}T3]}$, $\Delta sickness\ absenteeism_{[T1\text{-}T2]}$ and $\Delta sickness\ absenteeism_{[T2\text{-}T3]}$).

The empirical research model (see Figure 3) represented all relationships based on Hypotheses 1–4. Changes in the three predictor variables ($\Delta workload_{[T1\text{-}T2]}$, $\Delta emotional\ demands_{[T1\text{-}T2]}$ and $\Delta autonomy_{[T1\text{-}T2]}$) were related to changes in the two mediating variables ($\Delta dedication_{[T1\text{-}T2]}$, $\Delta organizational\ cynicism_{[T1\text{-}T2]}$). Additionally, in the model, changes in the two mediating variables ($\Delta dedication_{[T1\text{-}T2]}$, $\Delta organizational\ cynicism_{[T1\text{-}T2]}$) were, in turn, related to employee withdrawal indicators ($\Delta turnover\ intentions_{[T1\text{-}T2]}$, $\Delta turnover\ intentions_{[T2\text{-}T3]}$, $\Delta sickness\ absenteeism_{[T1\text{-}T2]}$ and $\Delta sickness\ absenteeism_{[T2\text{-}T3]}$). Our empirical model contained both a simultaneous effect on change in these employee withdrawal indicators covering the same 1-year period as the other constructs (from T1 to T2) and a lagged effect on change in these employee withdrawal indicators covering the next 1-year period (from T2 to T3).

This approach enabled us to investigate whether the effect of changes in precursors on changes in the employee withdrawal indicators transcends one time period and spills over to the next 1 year. Hence, the model test included both simultaneous and lagged effects of changes in dedication and organisational cynicism on changes in turnover intentions and sickness absenteeism. A major issue that has attracted increased attention from scholars relates to the duration of causal relationships and the appropriate time lags between study waves (e.g. Taris & Kompier, 2014; Zapf et al., 1996). With the use of multi-wave longitudinal designs, several researchers (Brauchli et al., 2013; De Lange et al., 2004; Dormann & Zapf, 2002; Ford et al., 2014) have tried to establish the optimal interval length, indicated by the strength of the associations at yearly intervals. de Lange et al. (2004) observed that the effects of job stressors were strongest for a 1-year interval, whereas Dormann and Zapf (2002) noticed that it took at least 2 years until effects were strongest. Taking a meta-analytic approach, Ford et al. (2014) found that lagged effects were generally small and that their magnitude increased over time for about 3 years before declining. Although these findings are not fully consistent, and may also vary with the variables under study (Taris & Kompier, 2014), they indicate that a 1- to 3-year period can provide much information about the occurrence of potential lagged effects. In the current study, a three-wave design with a yearly interval was used, allowing us to observe a 2-year period.

As suggested by Gollob and Reichardt (1991), all models included auto-regression effects and synchronous correlations between the latent variables. All models included the socio-demographic background characteristics (gender, age and education). To assess the fit of the

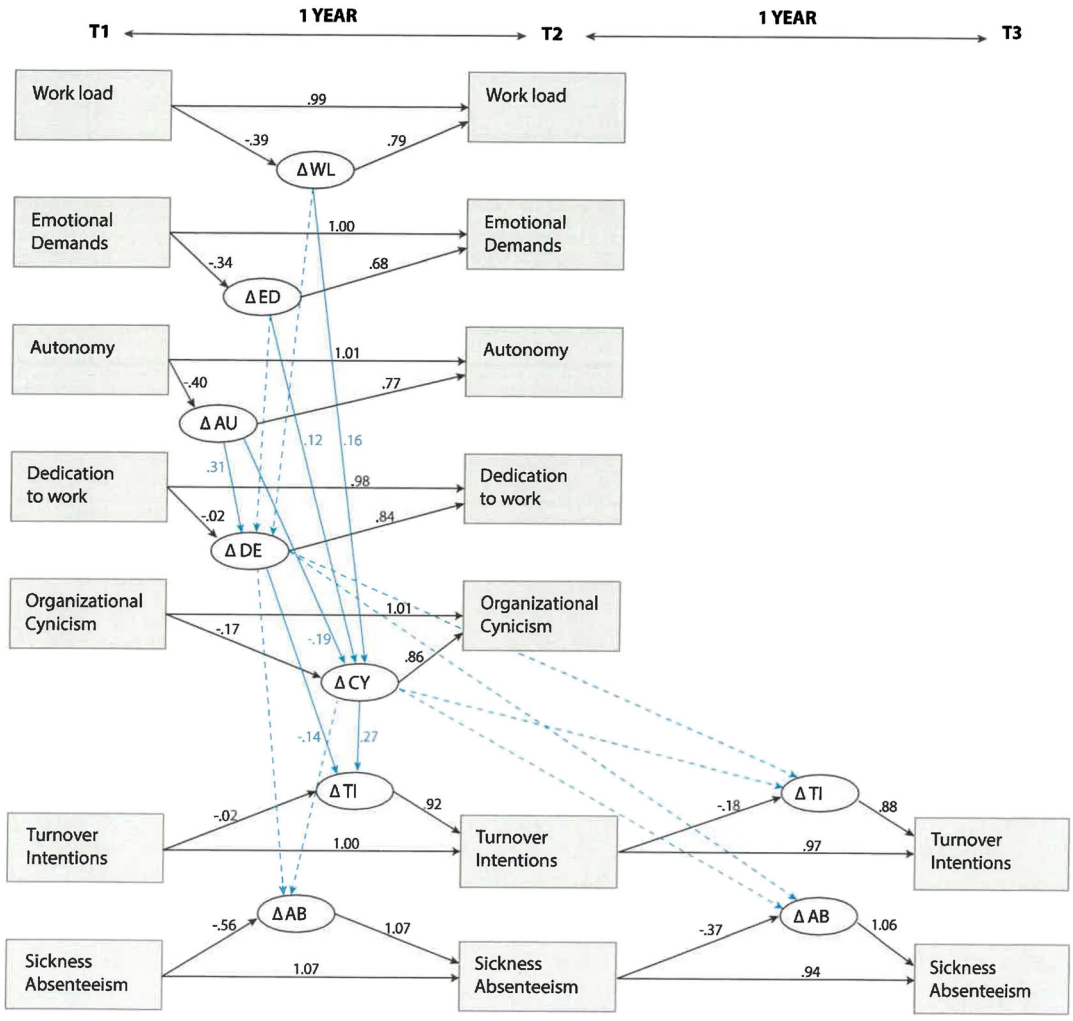

FIGURE 3 Empirical model ($N = 1530$). The significant standardised regression weights are displayed at the paths between latent change scores. Dotted lines represent non-significant paths. Not visualised but modelled are covariations between T1 variables, covariations between latent change score variables and paths controlled for age, gender and education. Δ = change in ..., WL = workload; ED = emotional demands; AU = autonomy; DE = dedication; CY = organisational cynicism; TI = turnover intentions; AB = sickness absenteïsme [Color figure can be viewed at wileyonlinelibrary.com]

empirical model, we examined different fit indices (e.g. Kline, 2005): the Chi Square (χ^2), the comparative fit index (CFI), Tucker–Lewis index (TLI) and the root mean squared error of approximation (RMSEA). Adequate fit is indicated when CFI and TLI exceed .95 and RMSEA is lower than .06 (Hu & Bentler, 1999).

RESULTS

Table 1 shows the study variables' correlations, means and standard deviations.

Measurement models and measurement invariance

Measurement invariance (van de Schoot et al., 2012) was assessed across the three time points of the constructs for workload, emotional demands, autonomy and organisational cynicism. Table 2 presents the fit indices of the models for each construct.

All likelihood ratio tests used to compare the nested models appeared to be not significant for each construct. The conclusion about measurement invariance of these four constructs is very clear. The differences in fit values were almost identical across all models, implying that the data showed scalar invariance for the constructs. As dedication consisted of two observed variables, the first two models were not identified. The model with scalar invariance constraints with 1 degree of freedom showed perfect fit: $\chi^2(df) = .02(1)$, CFI = 1.00, RMSEA = .000.

Structural models

The empirical model showed a good fit with the data ($\chi^2(df = 90) = 259.01$, $p < .001$; RMSEA = .035, CFI = .98, TLI = .97). Figure 3 presents the paths in the model and the corresponding regression coefficients. Hypotheses 1a and 1b were not supported; within a 1-year period, an increase in emotional demands from T1 to T2 did not lead to a decrease in dedication from T1 to T2, neither did an increase in workload from T1 to T2 lead to an increase in dedication from T1 to T2. However, and in line with Hypothesis 1c, an increase in autonomy from T1 to T2 led to an increase in dedication from T1 to T2 ($\beta = .31$, $p < .001$). With respect to changes in organisational cynicism, Hypotheses 2b and 2c were confirmed: An increase in emotional demands from T1 to T2 led to an increase in organisational cynicism from T1 to T2 ($\beta = .12$, $p < .001$), whereas an increase in autonomy from T1 to T2 led to a decrease in organisational cynicism from T1 to T2 ($\beta = -.19$, $p < .001$). However, an increase in workload from T1 to T2 led to an increase instead of a decrease in organisational cynicism from T1 to T2 ($\beta = .16$, $p < .001$), contradicting Hypothesis 2b.

Hypotheses 3a and 4a on concurrent associations between change in dedication and organisational cynicism on withdrawal behaviour were partly supported. As predicted, an increase in dedication from T1 to T2 affected a decrease in turnover intentions from T1 to T2 ($\beta = -.14$, $p < .001$), whereas an increase in organisational cynicism from T1 to T2 led to an increase in turnover intentions from T1 to T2 ($\beta = .27$, $p < .01$). However, increases in dedication and in organisational cynicism from T1 to T2 did not significantly affect a decrease/increase in sickness absenteeism from T1 to T2.

Finally, none of the included lagged effects was significant. Increases in dedication and in organisational cynicism from T1 to T2 did not affect a decrease/increase in turnover intentions from T2 to T3 or a decrease/increase in sickness absenteeism from T2 to T3. Hence, Hypotheses 3b and 4b were not supported.

DISCUSSION

This study applied LCS modelling to analyse whether and how within-person changes in workload (a challenge stressor), emotional demands (a hindrance stressor) and autonomy (a job resource) are related to within-person changes in dedication and organisational cynicism and

TABLE 1 Descriptive statistics and zero-order correlations between study variables

		M	*SD*	1	2	3	4	5	6
1	WL T1	1.86	0.74	--					
2	ED T1	1.52	0.75	.38**	--				
3	AU T1	3.74	0.73	−.05	−.09**	--			
4	DE T1	3.78	0.75	−.10**	.10**	.41**	--		
5	CY T1	1.35	0.74	.37**	.30**	−33**	−.38**	--	
6	TI T1	0.53	0.66	.21**	.11**	−.19**	−.37**	.51**	--
7	AB T1	1.95	1.24	.09**	.09**	−.13**	−.14**	.16**	.09**
8	WL T2	1.89	0.74	.69**	.29**	−.04	−.05*	.30**	.15**
9	ED T2	1.52	0.75	.29**	.77**	−.07*	.14**	.20**	.05*
10	AU T2	3.73	0.72	−.03	−.10**	.71**	.31**	−.27**	−.14**
11	DE T2	3.76	0.76	−.07**	.09**	.32**	.65**	−.33**	−.31**
12	CY T2	1.35	0.73	.28**	.23**	−.26**	−.29**	.64**	.34**
13	TI T2	0.50	0.65	.16**	.09**	−.18**	−.30**	.39**	.56**
14	AB T2	1.91	1.16	.06*	.07**	−.13**	−.08**	.14**	.05
15	TI T3	0.53	0.67	.18**	.09**	−.15**	−.23**	.32**	.48**
16	AB T3	1.91	1.23	.06*	.09**	−.11**	−.10**	.12**	.06*

TABLE 1 (Continued)

	7	8	9	10	11	12	13	14	15	16
1										
2										
3										
4										
5										
6										
7	--									
8	.07**	--								
9	.06*	.36**	--							
10	−.11**	−.08**	−.11**	--						
11	−.10**	−.08**	.10**	.42**	--					
12	.11**	.35**	.25**	−.34**	−.44**	--				
13	.07*	.16**	.08**	−.24**	−.43**	.50**	--			
14	.47**	.06*	.06*	−.12**	−.10**	.16**	.08**	--		
15	.04	.17**	.09**	−.17**	−.32**	.40**	.60**	.03	--	
16	.26**	.08**	.09**	−.14**	−.10**	.13**	.09**	.40**	.11**	--

Note: T1 = Time 1; T2 = Time 2; T3 = Time 3; WL = workload; ED = emotional demands; AU = autonomy; DE = dedication; CY = organisational cynicism; TI = turnover intentions; AB = sickness absenteeism

*$p < .05$.**$p < .01$.

TABLE 2 Measurement invariance test of work pressure, emotional demands, autonomy and organisational cynicism

Model description	$\chi^2(df)$	CFI	RMSEA	BIC
Measurement invariance test of work pressure				
Model 1 (no constraints)	555.5 (27)	.959	.113	63,782
Model 2 (loadings)	561.6 (37)	.959	.096	63,704
Model 3 (loadings + intercepts)	566.2 (47)	.960	.085	63,625
Measurement invariance test of emotional demands				
Model 1 (no constraints)	568.5 (15)	.942	.155	54,927
Model 2 (loadings)	579.0 (23)	.941	.126	54,870
Model 3 (loadings + intercepts)	586.7 (31)	.941	.108	54,810
Measurement invariance test of autonomy				
Model 1 (no constraints)	1123 (15)	.899	.220	50,587
Model 2 (loadings)	1127 (23)	.900	.177	50,524
Model 3 (loadings + intercepts)	1134 (31)	.900	.152	50,463
Measurement invariance test of organisational cynicism				
Model 1 (no constraints)	77.2 (15)	.992	.052	55,964
Model 2 (loadings)	81.8 (23)	.993	.041	55,901
Model 3 (loadings + intercepts)	87.7 (31)	.993	.035	55,839

Abbreviations: BIC, bayesian information criterion; CFI, comparative fit index; RMSEA, root mean squared error of approximation.

how these changes in turn had a (lagged) effect on changes in turnover intentions and sickness absenteeism.

Hypotheses 1 and 2 dealt with the relationships between changes in three types of job characteristics and employees' job attitudes towards their job (i.e. dedication) and organisation (i.e. organisational cynicism) as process variables linking job design to employee withdrawal behaviour. In line with the JD-R model (Bakker & Demerouti, 2007; Schaufeli & Taris, 2016), an increase in autonomy, our job resource, was positively associated with an increase in dedication (Hypothesis 1c) and negatively with a decrease in organisational cynicism (Hypothesis 2c). Workers who experienced an increase in job autonomy during a 1-year period demonstrated a growth in dedication to their work and a drop in organisational cynicism during this year. This finding confirms previous research that highlighted the pivotal role of job resources in the motivational process linking these to positive work outcomes, for example, work engagement (Bakker & Demerouti, 2017; Brauchli et al., 2013).

In line with the challenge-hindrance approach (Cavanaugh et al., 2000), Podsakoff et al.'s (2007) model of challenge and hindrance stressor relationships with retention-related criteria and with previous research (Schaufeli & Taris, 2016; van den Broeck et al., 2010), we assumed that job demands are not created equal. We expected that an increase in emotional demands (a hindrance stressor) would be related to a decrease in dedication, whereas increases in workload (a challenge stressor) to an increase in this process variable. However, our study showed that within-person changes in emotional demands and workload in a 1-year period were

unrelated to changes in dedication. No empirical support for Hypotheses 1a and 1b was found. This finding seems to confirm results from previous longitudinal research (e.g. Frins et al., 2016; Schaufeli et al., 2009) that job resources but not job demands play a pivotal role in the motivational process. Moreover, this finding is in line with an observation in the meta-analytical study of Mazzola and Disselhorst (2019) that the relationship of both hindrance and challenge stressors with engagement was nonsignificant.

Additionally, and again contrary to our expectations, our study showed a similar (and not a differential) association of emotional demands and workload with organisational cynicism. As expected, an increase in emotional demands was related to an increase in organisational cynicism, supporting Hypothesis 2a. Remarkably, a similar association was observed for a rise in workload. An increase in this challenge stressor affected an increase, instead of the hypothesised decrease, in organisational cynicism. During a 1-year period, employees who experienced a rise in workload developed more cynical attitudes towards their organisation. Hence, our research results support insights from the meta-analytical study of Mazzola and Disselhorst (2019, p. 957) who conclude that workload as a challenge stressor may 'represent an opportunity for challenge, [but] it is also very likely that individuals will also feel at least somewhat hindered by having large workloads and/or could feel overwhelmed enough to feel no challenge at all'. Our results show that while workload did not positively affect positive job attitudes (i.e. dedication), which is a central assumption of the CHM, it also did not reduce or mitigate a negative job attitude (i.e. organisational cynicism). With respect to both job attitudes, workload (our challenge stressor) had a similar, and not a different, effect than emotional demands (our hindering stressor).

The findings of our study highlight that experiencing changes in job characteristics affects the development of a cynical attitude towards the organisation characterised by negative feelings of frustration, disillusionment and distrust (Gkorezis et al., 2018; Naus et al., 2007). Cynicism towards the organisation increases when employees experience a rise in workload and emotional demands and a decrease in autonomy. This finding implies that organisations have a clear interest in smart and effective job design policies and practices. Job (re)design interventions aimed at improving working conditions do not only contribute to a rise in dedication towards work but also to a decline in or mitigation of feelings of cynicism towards the organisation.

Our predictions regarding employee withdrawal behaviour were confirmed for turnover intentions but not for sickness absenteeism. Employees who became more dedicated towards their job showed declining intentions to quit their job during a 1-year period. Likewise, decreasing cynical attitudes towards the organisation was associated with a reduction in turnover intentions. However, changes in dedication and organisational cynicism proved to be unrelated to changes in sickness absence. One explanation might be that attitudes towards the job and the organisation affect sickness absence frequency, but not absence duration, the measure for absenteeism used in this study. In their study, Schaufeli et al. (2009) found an impact of engagement on absence frequency but no effect on absence duration. Declining dedication and growing organisational cynicism might cause employees to be absent from work more often but for a relatively short time. Moreover, changes in dedication and organisational cynicism showed no significant lagged effects on changes in employee withdrawal behaviour (Hypotheses 3b and 4b). The effect of changes in dedication and organisational cynicism on changes in turnover intentions occurred simultaneously within a 1-year period and did not transcend to the following 1-year period.

Implications for theory and research

Our study has several implications for theory and research. First, our focus on temporal changes in withdrawal behaviour precursors, both distal (job characteristics) and proximal (job attitudes), enables us to analyse dynamics implicitly underlying most theories (Lee et al., 2017). Our study supports Podsakoff et al.'s (2007) model partially, as, in general, it demonstrates clearly how (in a 1-year period) changes in three types of job characteristics relate to changes in withdrawal behaviour through their association with changes in job attitudes, especially with organisational cynicism. Our findings indicate that employees' attitudes towards their work and organisation act as mediating mechanisms. Both dedication and organisational cynicism change in response to fluctuations in job characteristics, and both are significantly related to changes in employee withdrawal behaviour (i.e. turnover intentions).

Second, this study moved forward from the traditional approach characterised by cross-sectional design and static predictor scores and answered previous recommendations to examine antecedent change over time (Rubenstein et al., 2018) and analyse them in nontraditional ways (Lee et al., 2017). Most research in the field theorised and investigated level-to-level effects between the study variables, whereas this study investigated change-to-change (Smith et al., 2013; Taylor et al., 2014) associations in a 1-year period. Using within-person change scores as dynamic units of analysis, this approach gives more insight into how individuals' experience of *change* in their work affect *changes* in their attitudes and behaviour, instead of experiences of *levels*.

From a methodological perspective, this means a shift from the dominant inter-individual approach (aiming to explain differences in levels between individuals) towards an intra-individual perspective that enables to investigate the impact of the changes an individual experiences in a defined period. On the basis of our results, we can make inferences on whether and how an increase or decrease in a study variable is concurrently related to an increase or decrease in another study variable during a one period in time. For example, we found that—in a 1-year period—an increase in workload and emotional demands is related to a parallel increase in organisational cynicism, irrespective of how high or low that workload and emotional demands might have been (Taylor et al., 2014). Likewise, during this 1-year period, an increase in autonomy is associated with a rise in dedication and a decline in organisational cynicism, and these are, in turn, related to a decrease in intentions to leave the organisation, irrespective of the level of autonomy (e.g. at the reference point). This implies that, even at high levels of autonomy, an amelioration in this job resource has a beneficial impact on job attitudes and these, in turn, on intentions to stay on the job. And, even at low levels of autonomy, a decrease in this job resource has an unfavourable influence on job attitudes and these in turn on withdrawal behaviour. These insights entail practical implications, as the impact of job design interventions aiming for beneficial changes in work characteristics of an individual employee becomes more predictable and substantiated.

From a theoretical perspective, these results support propositions of Chen et al. (2011), prospect theory and theory of spirals. In particular, they confirm that when a variable systematically changes in a particular direction (starting from a reference point at T1), the trend in this change becomes more cognitively salient, as well as more effective and impactful through shaping employees' expectations about future work conditions. Changes in job characteristic over time seem to signal tendencies, such as amelioration or improvement, or conversely, deterioration or decline in these characteristics. From these tendencies, workers may derive information about future levels and trajectories in this job characteristic, and this affects their attitudinal and

behavioural reactions (Chen et al., 2011; Taylor et al., 2014). Hence, improvements in valued job characteristics promote expectations about future improvements that motivate employees to stay in the organisation, whereas deteriorations in these job characteristics feed expectations about future deteriorations that may motivate employees to search for alternative jobs. The direction and magnitude of change over time can evoke expectations on what one may experience in the (near) future (Taylor et al., 2014).

Third, our study extends Podsakoff et al.'s (2007) model through the inclusion of a negative, next to a positive, job attitude. Most research investigated the role of positive attitudes as process variables, for example, organisational commitment (Bentein et al., 2005; Podsakoff et al., 2007; Rubenstein et al., 2018). Bentein et al. (2005) assume that employees' adjustment to their level of organisational commitment is a function of the way they interpret and make sense of their work context. Hence, fluctuations in organisational commitment over time indicate how the relationship of an employee with the organisation evolves over time (Bentein et lal., 2005). The same holds for organisational cynicism, but in contrast to organisational commitment, which reflects a strengthening of the ties between employee and organisation, this negative attitude indicates a deterioration in employee–organisation relationships. As the focus of research into turnover is on *leaving* the organisation (instead of *staying*), the inclusion of *negative* attitudes, such as organisational cynicism, makes sense and might advance our understanding of this type of behaviour.

Fourth, our study extends Podsakoff et al.'s (2007) model through the inclusion of a job resource (next to a challenge and a hindrance stressor), which, together with the integration of a negative job attitude, enables a further test of the basic tenets of the CHM and JD-R model. From a theoretical perspective, our study confirms the important role of the motivational process as specified in the JD-R framework (Demerouti et al., 2001). Whereas previous research (e.g. Crawford et al., 2010; Demerouti et al., 2001; Frins et al., 2016) had supported the motivational assumptions of the JD-R model when investigating between-persons relationships between job resources and work engagement, our findings indicate that these assumptions are also valid when investigating within-person changes in job resources and their relationship with within-person changes in work outcomes such as dedication. This finding has important implications for job design practices.

Fifth and finally, with respect to the challenge–hindrance stress framework, our results do not empirically underpin the theoretically assumed differential relationships of challenge and hindrance stressors with work outcomes. Changes in workload and emotional demands are unrelated to changes in dedication, and both are associated with an increase in organisational cynicism. Consequently, and in contrast to CHM assumptions, our challenge and hindrance stressor show similar (and not different) relationships with the work outcomes under study. Moreover, our challenge stressor proved to be unrelated to our positive job attitude and positively (instead of negatively) to our negative job attitude. This finding has important implications for job design practices and for future research (Mazzola & Disselhorst, 2019).

Limitations and suggestions for future research

Applying LCS modelling on longitudinal data collected in a three-wave study with a 1-year time lag allowed us to investigate relationships between within-person changes in characteristics of the work environment, indicators of job attitudes towards work and organisation and employee withdrawal behaviour. Although this research design can be considered an important strength

of this study as it follows recommendations of Lee et al. (2017) and Rubenstein et al. (2018) to use temporal changes in turnover predictor scores, there are also a number of limitations that could be strengthened in future research. We measured all research variables using self-reports. Although the three-wave study design diminishes the risk of common method variance, it is still possible that common method bias occurred (Gawke et al., 2017). Future research could aim at the collection of more objective data, for example, registered sickness absenteeism data, or third party evaluations (e.g. from the partner) of turnover intentions.

Our study included three job characteristics, each representing one type: workload as a challenge stressor, emotional demands as a hindrance stressor and autonomy as a job resource. Future research could investigate other (and more) job characteristics to validate or fine-tune the findings in our research. In particular, the inclusion of other challenge (e.g. task complexity and cognitive demands) and hindrance (e.g. role conflict and work–home interference) stressors could provide more empirical evidence on the (similar versus differential) effects of these stressors on withdrawal behaviour.

Moreover, and in line with the literature (Cavanaugh et al., 2000; Mazzola & Disselhorst, 2019; Podsakoff et al., 2007), our study applied two specific stressors (i.e. workload and emotional demands) that were categorised within the challenge–hindrance dichotomy. However, classifying job characteristics or stressors into challengers versus hindrances may prove to be more complex than generally accepted. Indeed, stressors such as workload or cognitive demands may advance feelings of challenge and accomplishment, contributing to personal development and growth, but at the same time, they may also comprise an amount of hindering properties, especially at too high levels of these job characteristics. For instance, Karasek (1998) proposed that high, but *not overwhelmingly high*, job demands positively impact active learning in the workplace. This raises the question of valid measurement and analysis of challenge and hindrance stressors. In line with Lazarus' appraisal theory (Lazarus & Folkman, 1984), future research could focus on how employees appraise job stressors (Mazzola & Disselhorst, 2019), acknowledging the fact that a specific job characteristic may at the same time be appraised as challenging and hindering, and as a consequence, transcending the a priori classification into challenge and hindrance stressors.

We did not pay attention to non-linear relationships between our constructs. Previous research empirically supports assumptions about the curvilinear nature of the relationship between some of our study variables. For instance, Van Ruysseveldt and van Dijke (2011) found that an inverted U curve better describes the association between workload and workplace learning. This may also hold for the relationship between workload and dedication, whereas a relatively modest increase in workload may provoke a rise in dedication, whereas a steep increase may result in a drop in dedication. Future research could tackle issues related to non-linearity in relationships between (within-person changes) predictors, mediators and indicators of employee withdrawal behaviour (for other suggestions, see Mazzola & Disselhorst, 2019).

Future research might also deal with the existence of more complex mechanisms in the processes under study. First, future research could encompass multiple waves, adopting a time series approach with at least four or more waves. Research models could then include reversed or reciprocal effects and investigate gain and loss cycles (Salanova et al., 2010). Research that has provided support for the existence of gain cycles (Salanova et al., 2010; Schaufeli et al., 2009) has mainly focused on levels of and thus between-person differences in job resources and work engagement. Future research could apply LCS allowing to investigate whether within-person changes in job characteristics in one period affect within-person changes in dedication (or organisational cynicism) in the following period and whether these

changes, in turn, impact changes in job characteristics in the subsequent period. Second, to obtain an even more refined insight into the interplay between job characteristics and motivational outcomes such as identification towards the job, future research could opt to apply shorter time lags, for instance 3 or 6 months, instead of a 1-year period. This would at the same time enhance our understanding of the duration of causal relationships and help to determine the most optimal interval lengths between study waves (Ford et al., 2014; Taris & Kompier, 2014).

Finally, future research could clarify whether and how effects of changes in the study variables depend upon their initial level (e.g. Bentein et al., 2005; Chen et al., 2011). This issue pertains to the possible interaction between level and change in the variables included in the research model. For example, this research could give an insight into whether growth or decline in dedication and organisational cynicism is affected by the base level of challenge and hindrance stressors and job resources. Presumably, at high levels of workload, a decrease in workload might be associated with higher dedication, whereas at low or moderate levels of workload, an increase in workload has this dedication enhancing effect. In the same vein, an increase in autonomy might countervail organisational cynicism at low to moderate (but not at high) levels of autonomy.

Practical implications

This study highlights the importance of job design for employee's attitudes towards their job and organisation and how job design interventions can contribute to combat employee withdrawal behaviour. While previous research (Andersson & Bateman, 1997; Chiaburu et al., 2013) has focused on the role of organisational factors (i.e., organisational injustice, a lack of organisational support, badly managed organisational change) for employees' attitudes towards their work and organisation, this study demonstrates that changes in dedication and organisational cynicism are also associated with changes in aspects of employees' job. Our findings indicate that organisations need to pursue smart and effective job design policies to improve or remedy employees' attitudes and motivation. In addition, they need to monitor changes in job stressors over time. Especially in dynamic business environments, organisations' efforts to be adaptive and flexible can result in changes in job characteristics that have implications for employees' involvement with their job and commitment towards their organisation and subsequently for their intention to stay or leave the organisation. Supervisors, human resource managers and general management should keep abreast of these job changes, develop an open communication with their employees to stay informed about their working conditions, support them in resolving stressful circumstances and stimulate growth in job resources. Results of this study indicate that job design practices aimed at eliminating aversive working conditions and creating a more resourceful work environment contribute to an increase in positive and a decrease in negative attitudes towards the job and organisation and to diminished considerations to leave the company. Moreover, even at high levels of workload and emotional demands, a decrease in these stressors seems to be related to favourable changes in attitudes and withdrawal behaviour.

Additionally, as our study demonstrates, caution is required when manipulating or crafting job characteristics that are qualified in the literature as challenge stressors. As shown in the meta-analytical study of Mazzola and Disselhorst (2019), challenge stressors such as workload are stressful and are negatively related to several well-being indicators, while their

benefits (e.g. promotion of performance, positive emotions and attitudes, retention) seem to be questionable and need further empirical testing. As Mazzola and Disselhorst (2019) conclude, the potential negative consequences of challenge stressors may far outweigh potential gains, and consequently, job design interventions that increase or even ignore these challenge stressors may entail tangible unfavourable outcomes for both the organisation and the employee.

CONFLICT OF INTEREST

The authors do not have any interests that might be interpreted as influencing the research.

ETHICS STATEMENT

APA ethical standards were followed in the conduct of the study.

DATA AVAILABILITY STATEMENT

Data are available on request from the authors.

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