

## **The Relation of Self-Control Demands to Job Strain: The Moderating Role of Organisational Commitment**

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Drawing on recent theoretical developments in cognitive and social psychology, self-control demands were introduced as a new source of stress at work. Affective organisational commitment was expected to operate as a buffer in the relation between self-control demands and indicators of job strain. Data provided by 260 nurses in homes for elderly people revealed both significant relationships of self-control demands and commitment to a broad spectrum of strain indicators that included not only self-report measures (burnout, psychosomatic complaints, intentions of quitting), but also a measure of absenteeism. Self-control demands were positively related to all indicators of job strain, whereas the associations were negative for affective commitment. In addition, the results provided clear evidence for the buffer hypothesis of commitment. The positive relations of high self-control demands to all strain indicators were attenuated as a function of affective commitment. The results suggest that the buffer effect of commitment is mainly due to stress-contingent appraisal processes rendering highly committed employees less vulnerable to the adverse effects of high stress.

### INTRODUCTION

The present study relates to two current issues in the literature on work stress and strain. First, theoretical notions and experimental findings in basic research strongly suggest that demands on self-control act as a source of stress at work, the assumption of which has been largely neglected thus far (e.g. Baumeister, Vohs, & Tice, 2007). Indeed, first results from research in work settings have demonstrated the detrimental effects of coping with self-control demands on employees' job strain and well-being (e.g. Schmidt & Neubach, 2007). Given these results, the question arises as to whether any factors with a potential to protect employees against these adverse effects do exist. Several findings in basic research suggest that positive emotional states

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may compensate for the adverse effects of self-control demands (e.g. Tice, Baumeister, Shmueli, & Muraven, 2007).

The second issue is the hypothesised function of organisational commitment as a stress buffer. One well-established form of commitment represents its affective component, which is constituted by strong positive emotions of job holders towards their employing work organisation (e.g. Allen & Meyer, 1990). Going beyond prior studies and connecting both lines of research, the main question of this study was whether affective organisational commitment moderates (mitigates) the positive relations of self-control demands to indicators of job strain and absenteeism. The line of research on self-control is discussed first. Then, the literature on organisational commitment with a focus on its affective component is briefly reviewed. Finally, we integrate these two lines of research and develop the hypotheses.

## Self-Control Demands—a Source of Stress at Work

Today's work organisations are characterised by changing, highly dynamic structures and environments in which adaptability, flexibility, and self-management of employees are increasingly required (e.g. Cascio, 2003). The demands herewith associated cannot be met by automated and rigid patterns of behaviour, but do rather call for self-control efforts. According to a widespread notion, self-control can be defined as overriding or inhibiting automatic, habitual, or spontaneous action tendencies, urges, emotions, or desires that would otherwise interfere with goal-directed behaviour (see Baumeister et al., 2007). Thus, demands on self-control cause people to change the way they would spontaneously think, feel, or behave.

Although self-control is related to personal success in many domains of life (Tangney, Baumeister, & Boone, 2004), a growing body of evidence in basic research strongly suggests that exercising self-control is also associated with psychological costs that become manifest on both the level of behaviour as well as subjective experience (Muraven & Baumeister, 2000; Baumeister et al., 2007). In a series of experimental studies that demanded two successive acts of self-control (e.g. suppressing emotions and thoughts, attention control), self-control of performance on the second act was consistently impaired, even in a seemingly unrelated sphere of activity (see Hagger, Wood, Stiff, & Chatzisarantis, 2010, for a meta-analysis).

Whereas the vast bulk of studies on self-control focus on behavioural and cognitive performance, there is now an increasing body of evidence suggesting that chronically high self-control demands can also lead to psychological strain and impaired well-being. For example, in a longitudinal field study, Oaten and Cheng (2005) observed a significant increase in anxiety and emotional distress as well as depressive symptoms among students who suffered from academic stress over a month, as compared to a control group. Aca-

demetic stress is characterised by high self-control demands such as overcoming inner resistances or resisting distractions. These findings were replicated in several longitudinal studies with longer time intervals (Oaten & Cheng, 2007).

Muraven and Baumeister (2000) proposed a model of self-control to account for these and related observations. According to this model, different forms of self-control draw on a common regulatory resource, or self-control strength, which is limited and consumed in the process of exerting self-control. Consequently, one act of self-control should reduce the strength available for subsequent self-control efforts. The resource thus operates like a muscle that fatigues through exertion and becomes less able to function. In addition, the model assumes that people who frequently need to exert self-control without being able to replenish their self-control strength run the risk of becoming chronically deficient in self-control and in the long term suffer from strain and impaired well-being. Muraven and Baumeister (2000) coined the term “ego-depletion” to characterise this state of diminished self-control strength.

Given the adverse effects of self-control demands, recent studies have focused on procedures or mechanisms that might have the potential to moderate or counteract those effects. Since the control resource obviously does not remain depleted for ever (otherwise a total loss of self-control would be the long-term result), Tice et al. (2007) have raised the question how people can recover from ego depletion and replenish their control strength. Drawing on Fredrickson’s broaden-and-build theory of positive emotions (e.g. Fredrickson & Joiner, 2002) which assumes that positive emotions broaden people’s thought-action repertoires and thus facilitate coping with stress, Tice et al. argued that positive emotions may help people regain their self-control strength. Results from four experimental studies clearly confirmed this notion. After an initial act of self-control, participants who watched a comedy video or received a surprise gift performed just as well on various self-control tasks as non-depleted participants and significantly better than participants who experienced a sad mood, a neutral mood stimulus, or a brief rest period (Tice et al., 2007).

In contrast to this expanding line of basic research, aspects of self-control have hardly received attention in the literature on job-related stress and health so far. In order to fill this gap and to get access to self-control demands in work settings, Neubach and Schmidt (2006) have developed and validated a self-report scale that focuses on the control of spontaneous, impulsive response tendencies and associated affect states which otherwise would become manifest, for example, in states of irritability, impatience, or affect-driven, inconsiderate verbal utterances. The resulting measure reflects the extent to which a given job requires employees to suppress such spontaneous response tendencies and affect states in order to display controlled, restrained behaviour.

Neubach and Schmidt (2006) demonstrated that the six items of the instrument reflect a one-dimensional structure of self-control demands. Furthermore, Schmidt and Neubach (2010) showed that the measured self-control demands are relatively stable over time (6 and 24 months) and found the scale to be sufficiently sensitive to discriminate professional groups with different levels of self-control demands. More importantly, the measure of self-control demands has been revealed (both cross-sectionally and longitudinally) to be positively related to various indicators of job strain and well-being, like burnout, depressive symptoms, and absenteeism after controlling for biographical data, sample characteristics, and other established work stressors such as workload, role ambiguity, and lack of social support (Diestel & Schmidt, 2011; Schmidt & Neubach, 2007). All these observations reveal that coping with self-control demands is not only stressful in lab settings, but also in real-life contexts, such as people's workplace.

Following the line of reasoning in basic research outlined above, the relationships found between self-control demands and indicators of job strain and well-being raise the question whether there are work-related factors that may mitigate these effects. The observed lab findings on the moderating function of positive mood and emotions suggest that affective organisational commitment—a work-related attitude with strong affective roots—could be a promising candidate playing a similar buffering role in work contexts.

## Organisational Commitment as a Stress Buffer

During the past two decades, organisational commitment has emerged as a central concept in the study of work-related attitudes and behaviour (Allen & Meyer, 1990; Mathieu & Zajac, 1990). In general terms, the concept can be defined as a psychological bond or link between the employee and his or her organisation. Although early work in this field of research was characterised by various one-dimensional conceptions, organisational commitment is now widely recognised as a multidimensional work attitude (see, for overviews, Klein, Molloy, & Cooper, 2009; Meyer & Herscovitch, 2001). In addition, most modern theoretical approaches share the assumption that the affective dimension represents one of the basic components of the construct. Affective commitment refers to the employee's identification with, involvement in, and emotional attachment to the organisation.

Since the development of adequate instruments for measuring affective commitment (Mowday, Steers, & Porter, 1979; Allen & Meyer, 1990), extensive research has examined its antecedents, correlates, and consequences (see, for overviews, Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Whereas early studies have mainly focused on turnover, withdrawal cognitions, and absenteeism as organisation-

relevant consequences of commitment, in recent years the set of consequences has been expanded by indicators of job strain and well-being. Meyer and Herscovitch (2001) justified claiming the existence of such relations by the strong positive emotions which, according to them, constitute the core of affective commitment. Meyer et al. (2002) provided the first empirical evidence in favour of this assumption. In an overview of more recent studies, Meyer and Maltin (2010) have accumulated more evidence showing that affective commitment tends to relate positively to well-being and negatively to strain.

Apart from these direct influences, two theoretical perspectives have moreover led scholars to expect moderating effects of affective commitment on the relation between work-related stress and strain. Although both perspectives refer to the relationship between stressors, experienced strain, and health outcomes, they posit opposite directions of the moderating effect of affective commitment. According to the first assumption presented by Mathieu and Zajac (1990), highly committed employees experience the adverse effects of stress more than less committed employees. The first group suffers more from stressors because of their high investment in and identification with the organisation. Thus, affective commitment is expected to increase the vulnerability of employees to the psychological threat posed by strong work stressors (see Lazarus & Folkman, 1984).

By way of contrast, the second perspective holds that organisational commitment buffers the effects of work stressors on strain and health outcomes. This hypothesis has its roots in the widely shared notion of affective commitment as a psychological bond or link of the individual to the organisation (Meyer & Herscovitch, 2001). This bond gives employees a sense of emotional stability, security, and belonging that makes them more resistant to any kind of work stressor. Thus, in this view, affective organisational commitment is hypothesised to be a protective resource (Kobasa, 1982). In a social psychology context, Antonovsky (1979) argues in a similar vein that organisational commitment is a crucial resource that enables individuals to cope effectively with stressful events in their environment. Accordingly, an increase in this resource should reduce, not enhance, the adverse effects of those events.

Several studies have tested these competing hypotheses. In the majority of cases, evidence in favour of the buffering function was found. Affective commitment provided a buffering effect against the adverse impact of various work stressors such as organisational restructuring (Begley & Czajka, 1993), role ambiguity and role conflict (King & Sethi, 1997), stressful intrinsic and extrinsic job characteristics (Siu & Cooper, 1998), organisational politics (Hochwarter, Perrewé, Ferris, & Guercio, 1999), a composite measure of long working hours, conflicting job tasks, lack of social support, as well as incompatible home/work demands (Siu, 2002), and, finally,

quantitative and qualitative workload (Schmidt, 2007). Furthermore, various self-report measures of job strain were used as criteria in these studies including job satisfaction, mental and physical well-being, job tension, and burnout (see Meyer & Maltin, 2010).

Contrary to these findings, at least one study found only main effects of job stressors and affective commitment on self-reported strain, but no interaction effect between both predictors (Leong, Furnham, & Cooper, 1996). Finally, in a further study, commitment did not buffer the stressor–strain relationship but even strengthened that link (Reilly, 1994). However, it should be mentioned that in Leong et al.'s study a measure of job stress was used reflecting strong affective judgements on how stressful the job is perceived to be. Such affective judgements have for a long time been recognised as bearing the risk of creating spurious main effects, which in turn restrict the chances of demonstrating any underlying interactions with potential moderators (see Frese & Zapf, 1988). Furthermore, instead of focusing on affective organisational commitment, the study among hospital nurses performed by Reilly (1994) was based on a measure of professional commitment involving an employee's identification with a profession or career and an internalisation of the values associated with that profession. As suggested by identity theory (Burke & Reitzes, 1991), this form of commitment can be expected to strengthen the adverse effects of job stressors on strain since job stressors interfere with achieving professional goals and block role performance.

## Hypotheses

Connecting the research on self-control and affective organisational commitment, it is argued that affective commitment functions as a psychological resource helping employees to deal effectively with self-control demands at work. This argument derives from theoretically well-grounded findings on the adverse effects of self-control demands and the compensating role of positive emotional states on the one hand and the notion of affective commitment as a stress buffer on the other hand. Consequently, the aim of this study was to examine two major hypotheses:

First, self-control demands and organisational commitment exert unique main effects on indicators of job strain. Second, apart from these main effects, affective commitment moderates the positive relation of self-control demands to indicators of job strain such that the relation is attenuated as a function of commitment. Finally, the present study extends previous findings in considering not only self-report measures of strain, but also absence data, which represent an indicator of strain that is largely immune to the chronic common-method influences of self-report measures (see Podsakoff, MacKenzie, Podsakoff, & Lee, 2003).

## METHOD

### Participants and Procedures

A sample of 260 staff members of seven German nursing homes for elderly people volunteered to take part in the study yielding a 74 per cent response rate. All participants were involved in the daily care of elderly people, including physical care, medical support, and social activities. The mean age of the sample was 41.8 years ( $SD = 8.8$ ). Participants' average tenure in their present positions was 11.2 years ( $SD = 6.8$ ); 86.5 per cent were women and the majority of participants (69.5%) worked on a full-time basis.

The participants were recruited through announcements at staff meetings and memos sent by the directors of the homes. With the exception of absence data, all study variables were assessed by a questionnaire administered in small groups of about 15 persons during normal working hours. All participants were assured that their responses would remain confidential. Matching responses with individual absence data was made possible through an individual code number that remained in the hands of the researchers.

### Measures and Instruments

*Self-control demands* were assessed using the above-mentioned scale developed by Neubach and Schmidt (2006). The six items of the scale ask participants to indicate the extent to which their job requires them to suppress and inhibit spontaneous response tendencies and affect states in order to maintain controlled and restrained behaviour. Example items are, "My job requires me never to lose my temper" and "I am never allowed to lose my self-control at work". The items are scored on a 5-point intensity rating format ranging from 1 ("not at all") to 5 ("a great deal"). By averaging item scores, a total scale score was obtained.

For the measurement of *organisational commitment*, Allen and Meyer's (1990) eight-item affective commitment scale was used in a German translation by Schmidt, Hollmann, and Sodenkamp (1998). The scale reflects the affective attachment to and involvement in the organisation and is highly correlated with Mowday et al.'s (1979) commitment measure (see Allen & Meyer, 1990). A typical item is, for example, "I really feel as if this organisation's problems are my own". The scale has a 7-point response format, with anchors ranging from 1 ("strongly disagree") to 7 ("strongly agree"), and a total score was obtained by averaging item scores.

For the assessment of *job strain*, five measures were included: the two burnout dimensions of *emotional exhaustion* (nine items) and *depersonalisation* (five items) were measured by the Maslach Burnout Inventory (Maslach & Jackson, 1981, 1986) in a German translation by Büssing and Perrar (1992). Emotional exhaustion refers to feelings of being overextended and

drained by the emotional demands of one's work. Depersonalisation is characterised by a detached, indifferent, and cynical attitude toward other persons with whom one has to interact at work (Maslach, 1982). Example items are, "I feel emotionally drained from my work" (exhaustion) and "I have become more callous toward people since I took this job" (depersonalisation). All items are scored on a 7-point intensity rating scale ranging from 1 ("not at all") to 7 ("very strong").

The assessment of *psychosomatic complaints* was based on a 24-item instrument developed by von Zerssen (1976). Respondents are asked to report on the extent to which they experience various symptoms such as headache, insomnia, poor concentration, and nervousness. The 4-point response format covers a range from 1 ("not at all") to 4 ("a great deal"). The instrument has proven to be sensitive for indicating psychic overcharge resulting from a disequilibrium between individual coping capacities and environmental demands.

*Turnover intentions* were measured with a three-item scale developed by Hackman and Oldham (1975). Respondents are asked to indicate their agreement with statements such as "As soon as I find a better job, I'll quit here". The items are scored on a 4-point response format, with anchors ranging from 1 ("strongly disagree") to 4 ("strongly agree").

As a measure of *absence behaviour* an index showing time lost was used (the total sum of days absent from work). The corresponding data were drawn from personnel records and referred to a time period of 12 months after administering the questionnaires. Since the distribution of the time lost index revealed severe deviations from normality, all individual raw scores were subjected to a square root transformation (see Clegg, 1983). After that transformation the skewness measure ( $g_1$ ) for the time lost distribution was .32 and the measure of kurtosis ( $g_2$ ) was .88. Thus, the skewness and kurtosis of the distribution of the transformed data remained below the thresholds that are commonly seen as critical violations of the assumptions underlying conventional correlation and regression approaches (Geurts, Buunk, & Schaufeli, 1994).

## Statistical Analyses

The main and interaction effects of self-control demands and organisational commitment were examined by means of hierarchical moderated regression analyses performed separately for each criterion measure. In the first step, biographical variables (age, gender, tenure, working time) were introduced to control for their potential influences on the relationships under examination. In the second step, self-control demands and affective commitment were jointly added to the equation to examine their unique main effects. Finally, an interaction term computed as the cross-product of self-control demands



and commitment was introduced. The test for the interaction effect is based on the variance explained by the cross-product over and above that accounted for by the main effects of self-control demands and commitment. All predictors were standardised prior to calculating the cross-product term and conducting the analyses (see Aiken & West, 1991).

## RESULTS

Means, standard deviations, intercorrelations, and internal consistency estimates of all study variables are presented in Table 1. As can be seen, some of the biographical variables were significantly related to both the main predictor variables and some of the criterion measures. The association of self-control demands and commitment was weak, but significant. As expected, self-control demands were positively and commitment was negatively correlated with all strain measures considered.

The results of the hierarchical moderated regression analyses are summarised in Table 2. The biographical variables accounted for a statistically significant proportion of variance in at least the measure of intentions of quitting and the sum of days absent. In Step 2, self-control demands and commitment explained highly significant amounts of variance in all indicators of job strain. In all final regression equations, both self-control demands and commitment had significant beta weights indicating the expected relations. More important, however, the two-way interaction between self-control demands and commitment in Step 3 additionally accounted for significant amounts of variance in all criterion measures. The effect sizes ( $\Delta R^2$ ) of this interaction ranged from 2 per cent for the sum of days absent up to 6 per cent for the burnout dimension of emotional exhaustion.

Having established an interaction between self-control demands and commitment on all indicators of job strain in the underlying population, its specific form was analysed by the method recommended by Aiken and West (1991). Values of the predictors were chosen one standard deviation above and below the means. Then, for each criterion measure, simple regression lines were generated by inserting these values into the regression equation. The resulting plots are depicted in Figure 1. It is evident from the figure that self-control demands and commitment had a quite similar interactive influence on all indicators of strain, the form of which clearly confirms the hypothesised buffer function of commitment. For employees with low levels of commitment, the adverse impact of self-control demands was much more pronounced than for employees with high levels of commitment. In other words, the effects of high self-control demands on all indicators of strain were dampened with increasing affective commitment to the organisation.

With the findings shown in Figure 1, the obvious question arises whether commitment not only has the potential to mitigate the adverse effects of

TABLE 1  
Descriptive Statistics, Intercorrelations, and Internal Consistency Estimates of Study Variables

Variable	Scale		Intercorrelations											
	M	SD	1	2	3	4	5	6	7	8	9	10	11	
1. Age	41.83	8.76	—											
2. Gender <sup>a</sup>	1.17	0.37	-.20**	—										
3. Organisational tenure	11.22	6.82	.32**	-.28**	—									
4. Working time <sup>b</sup>	1.70	0.46	.25**	-.04	.26**	—								
5. Self-control demands	3.74	1.00	.00	-.03	-.05	-.13*	—							
6. Commitment	4.29	1.38	.16**	-.02	-.04	.06	-.16**	—						
7. Exhaustion	2.90	1.09	-.04	-.02	.02	.06	.29**	-.27**	—					
8. Depersonalisation	2.15	0.87	-.05	.02	.09	.01	.21**	-.31**	.62**	—				
9. Complaints	1.36	0.71	.13*	-.08	.10	.06	.17**	-.19**	.71**	.42**	—			
10. Turnover intentions	1.69	0.89	-.24**	.17**	-.01	-.06	.16**	-.51**	.46**	.35**	.29**	—		
11. Total days absent	20.00	22.89	.06	-.20**	.09	.03	.14*	-.25**	.43**	.30**	.47**	.23**	—	

Note: N = 260. Descriptive statistics of absence data represent non-transformed scores. Internal consistency estimates (Cronbach's alpha) are in parentheses on the diagonal.  
<sup>a</sup> Gender (1 = female, 2 = male), <sup>b</sup> working time status (1 = part-time, 2 = full-time). \* p < .05; \*\* p < .01.

TABLE 2  
 Results from Hierarchical Moderated Regression Analyses: Main and Interaction Effects of Self-Control Demands and Organisational Commitment on Indicators of Job Strain, Controlling for Background Factors

Regression steps and effect tested	Emotional exhaustion		Depersonalisation		Complaints		Turnover intentions		Total days absent	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
1. Age	-.04	.01	-.04	.02	.09*	.02	-.14**	.08**	.14	.04*
Gender <sup>a</sup>	-.04		.03		-.04		.12**		-.55**	
Organisational tenure	-.01		.09		.02		.05		.02	
Working time <sup>b</sup>	.13*	.14**	.03	.11**	.04	.07**	.01	.23**	.09	.08**
Self-control demands	.30**		.16**		.11**		.10*		.30*	
Commitment	-.23**		-.23**		-.12**		-.40**		-.63**	
Interaction	-.24**	.06**	-.12**	.03**	-.11**	.03**	-.14**	.03**	-.36*	.02*
R <sup>2</sup>		.21		.16		.12		.34		.14
F		9.35**		6.86**		4.80**		18.71**		5.84**

Note: N = 260. <sup>a</sup> Gender (1 = female, 2 = male); <sup>b</sup> working time (1 = part-time, 2 = full-time). \* p < .05; \*\* p < .01.

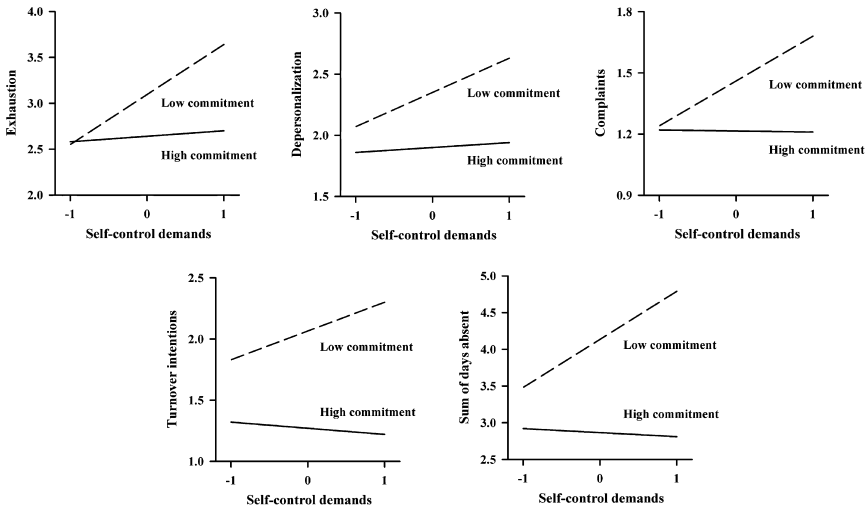


FIGURE 1. Interaction effects of self-control demands and organisational commitment on indicators of job strain.

self-control demands on strain, but may indeed even eliminate them. Simple slope analyses were performed to answer this question (see Aiken & West, 1991). The results of these analyses are summarised in Table 3. The regressions of all indicators of job strain on self-control demands were significantly different from zero at low levels of commitment (one standard deviation below mean). However, at high levels of commitment (one standard deviation above mean), the corresponding regressions were not significantly different from zero. Thus, the adverse effects of self-control demands were indeed eliminated with this level of commitment.

## DISCUSSION

The main aim of the present study was to test whether the positive relations of self-control demands to experienced strain and absenteeism are attenuated as a function of affective commitment. The conceptual background of our research draws on theoretical notions and empirical findings suggesting that (1) self-control demands are a source of stress at work depleting a limited regulatory resource, (2) positive emotions in general and affective commitment in particular may help people replenish that resource, and consequently (3) provide a buffer against the adverse effects of self-control demands.

In line with these suggestions the present results show that (1) self-control demands are positively related to a broad spectrum of strain indicators

TABLE 3  
Results from Simple Slope Analyses of Relations between Self-Control Demands with Indicators of Job Strain in Dependence on High and Low Level of Commitment

	$\beta$	t	p
Emotional exhaustion			
+1 <i>SD</i> commitment	.06	0.73	<i>ns</i>
-1 <i>SD</i> commitment	.54	6.28	<.001
Depersonalisation			
+1 <i>SD</i> commitment	.04	0.55	<i>ns</i>
-1 <i>SD</i> commitment	.28	3.96	<.001
Psychosomatic complaints			
+1 <i>SD</i> commitment	.00	0.00	<i>ns</i>
-1 <i>SD</i> commitment	.22	3.71	<.001
Turnover intentions			
+1 <i>SD</i> commitment	-.05	0.81	<i>ns</i>
-1 <i>SD</i> commitment	.23	3.59	<.001
Total days absent			
+1 <i>SD</i> commitment	-.06	0.28	<i>ns</i>
-1 <i>SD</i> commitment	.66	2.95	<.005

(including a measure of absenteeism) and (2) affective organisational commitment functions as a protective resource in two ways. First, affective commitment to the organisation is negatively associated with strain and thus goes along with increases in well-being. Additionally, commitment also moderates the stress-strain relationship, the form of which clearly confirms the hypothesised buffer function.

The moderator effects that were found provide support for the notion that affective commitment (as an organisation-related attitude with strong emotional roots) provides employees with feelings of emotional stability and belonging which enables them to resist the effects of stressors like self-control demands (Kobasa, 1982; Meyer & Herscovitch, 2001). In a similar vein and more specifically, Tice et al. (2007) have argued and found that positive emotional states facilitate dealing with self-control demands even in a depleted self. Accordingly, positive affect seems to play an important role in replenishing drained control resources.

As suggested by the few other studies that have demonstrated a moderating function of affective commitment (see e.g. King & Sethi, 1997; Hochwarter et al., 1999), similar mechanisms might be involved in buffering the adverse effects of other stressors such as, for example, role ambiguity, organisational politics, or qualitative and quantitative workload. Two recent studies on self-control provide indirect support for this assumption. In their study among employees of a civil service organisation, Schmidt and Neubach

(2007) demonstrated that the positive relations of role ambiguity to indicators of job strain are partially mediated by self-control demands. In addition, Diestel and Schmidt (2009) observed a similar mediating effect of self-control demands in the relationship between workload and strain. Consequently, coping with role ambiguity and high workload involves exerting self-control, the adverse effects of which are mitigated by positive emotional states in the form of affective commitment. Further studies are needed to corroborate this line of reasoning.

As in previous studies, the current findings indicate that work stressors such as self-control demands are only weakly, albeit significantly, related to commitment (see e.g. Begley & Czajka, 1993; Schmidt, 2007; Siu, 2002). This observation has important theoretical implications for an understanding of the mechanisms underlying the observed buffering effect of commitment. The absence of a strong correlation between self-control demands and commitment implies that highly committed employees do not cope with stressors by actively and directly limiting their exposure to these. Such active and direct coping is assumed to become manifest in a strong negative correlation between work stress and commitment. It is therefore more likely that the buffering effect of commitment is primarily due to appraisal processes which influence individual's responses to work stressors (see Lazarus & Folkman, 1984). As a result of these appraisal processes, highly committed employees may experience stress as less threatening and disturbing.

## Limitations and Suggestions for Future Research

Of course, the present study has certain limitations. First, most of the study variables were operationalised through self-report measures. Thus, common method variance or a self-report bias might have contaminated the relations observed (Podsakoff et al., 2003). However, using a measure of absenteeism as an outcome that reflected a similar pattern of relationships (including interactions) as did the self-report measures of burnout, psychosomatic complaints, and turnover intentions largely mitigated the risk of mutual contamination of the constructs (de Jonge & Dormann, 2006). Nevertheless, future research could gain more methodological clarity and practical significance by considering more objective measures, especially on demands on self-control. Although the scale used in the present study was found to be sufficiently sensitive to discriminate professional groups with different levels of self-control demands, future studies should attempt to apply more event-related and situation-based approaches for measuring self-control demands at work (Reis & Gable, 2000).

Second, following on from the previous issue, the question arises why self-control demands differ between the participants of our study that was

conducted in a specific occupational setting with similar working conditions (colleagues, tasks, patients, etc.). Thus, the variance of self-control demands might be determined e.g. by the state of the participants. However, given that our sample comprised seven different nursing homes, working conditions may vary between the homes, groups, and patients causing different levels of self-control demands. Moreover, in this sample, the mean of demands were relatively high as compared to other more heterogeneous samples (Diestel & Schmidt, 2011; Schmidt & Neubach, 2010), suggesting that health care for elderly people is generally associated with high self-control demands. Nevertheless, in order to assess self-control demands more validly, future studies should control for daily variations in job conditions and for the affective states of the participants (Ohly, Sonnentag, Niessen, & Zapf, 2010). In line with this argument, other professions should also be considered in order to test the external validity of the findings. Just such settings providing more natural variability in self-control demands than the present sample are worth examining.

A third limitation refers to the cross-sectional design of the study. Although a particular causal order of the variables was supposed, other causal directions or even reciprocal relations could be possible as well. For example, an alternative, reverse causal interpretation of the results might rest on the assumption that high levels of experienced strain let employees perceive self-control demands as more threatening than employees experiencing less strain. However, several longitudinal studies have provided strong empirical arguments against this hypothesis (for an overview, see Zapf, Dormann, & Frese, 1996). For example, drawing on a cross-lagged panel design, Diestel and Schmidt (2011) have found self-control demands to predict burnout and absenteeism over longer periods. However, the lagged effects of burnout and absenteeism on self-control demands at a later point in time failed to reach significance. In addition, the longitudinally assessed absence data reflected the implied causality and thus suggest that the self-report measures did operate in similar causal directions.

Drawing on domains of self-control manipulated experimentally in basic research, the present study used a measure of self-control demands reflecting the extent to which a given job requires employees to suppress or inhibit spontaneous response tendencies and associated affect states which would interfere with displaying controlled and goal-directed behaviour. Future research will have to identify other forms of self-control demands at work and analyse their unique and combined relations with indicators of job strain. As suggested by basic research, such other forms of self-control demands might include the overcoming of internal resistances at work, the resistance to distractions and temptations, and specific forms of emotion control, all serving a planful, goal-oriented behaviour (see Muraven & Baumeister, 2000).

## Theoretical and Practical Implications

From a theoretical perspective, the present results emphasise self-control demands as a largely neglected source of stress at work and organisational commitment as a likewise neglected protective resource, which has the potential to reduce strain directly and by way of buffering the effects of job-related stress. From a practical perspective, the findings reveal a further starting point for intervention strategies aiming at the prevention or reduction of strain at work. In addition to social support (Cohen & Wills, 1985) and control at work (Wall, Jackson, Mullarkey, & Parker, 1996), creating work environments in such a way that employees feel affectively committed to their organisation is a promising option for practitioners in order to prevent job strain and absenteeism in the case of high self-control demands.

With respect to enhancing affective commitment of employees, the most effective antecedents of commitment may help to derive specific measures. Consequently, perceived organisational support can be assumed to have the strongest beneficial impact on the development of employees' affective commitment to their organisation (see Meyer et al., 2002). This conclusion stands in accordance with Eisenberger, Huntington, Hutchison, and Sowa's (1986) argument that organisations wanting affectively committed employees must demonstrate their own commitment by providing a supportive work environment. Therefore, organisations and managers interested in promoting their employees' commitment can find guidance in the growing organisational support literature.

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