MIND YOUR SPACE!
DESK SHARING WORKING ENVIRONMENTS
AND EMPLOYEE COMMITMENT
IN AUSTRIA

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ABSTRACT

This paper empirically examines the influence of desk sharing on the various forms of employee commitment. Previous literature has examined the influence of innovative workspace on employee satisfaction as well as the possible the benefits and disadvantages of desk sharing, but not the influence desk sharing may have on employee commitment. Our study examines the level of commitment in organisations that apply desk sharing compared to those with traditional office settings, finding that desk sharing does not necessarily have a negative influence on commitment. Indeed, desk sharing employees show higher level of affective commitment when applied moderately. However, a radical application of desk sharing leads to lower commitment; thus, when applying desk sharing it is important to consider the specific conditions, organizational needs as well as managerial example. The findings point to a number of implications relating to the application of desk sharing and other flexible office settings.

KEY WORDS

desk sharing, employee commitment, new ways of working, organizational change, flexible organisations

JEL CODES

M10, M12, M14

1   INTRODUCTION

Due to digitalization, the way of how we work in today's organisations is experiencing many changes. Organisations implement new ways of working that are characterized by flexibility of time and space, such as desk sharing (Anderson and Kelliher, 2009; Hirst, 2011). Literature suggests that flexible forms of working influence employee satisfaction (Anderson and Kelliher, 2009) and organizational identification (Millward et al., 2007), pointing

out that it might have negative implications to commitment (Hirst, 2011), however, this has not been addressed yet. This study addresses this gap and empirically examines the influence of desk sharing on employee commitment.

Globalization, technological changes and volatility of international markets are drivers for more complex environments in which today's organisations operate. Organisations are implementing innovative work environments in order to tackle this complexity by providing environments that stimulate creativity and innovativeness as well as satisfaction among employees (Covarrubias Venegas and Groblschegg, 2015b). The concept of *New Work or New Ways of Working* (NWoW) addresses how organisations can support their employees to unleash their full potential and thus increase performance to meet organisational objectives (de Kok, 2016). NWoW is a people centred approach, where freedom to determine how they work, where they work, when they work, what they work with and with whom they work is given, always within organisational limits (de Kok et al., 2013). Trust and freedom are two key aspects in NWoW. Three areas are described as central to NWoW, namely people, place and technology. The interplay of place and technology leads to working independently of time and place (Covarrubias Venegas and Groblschegg, 2015a). Desk sharing, also named hot desking, is defined by a situation where employees no longer have an assigned working space but share desks with colleagues. Desks are usually chosen on a "first come, first serve" principle (Daniels, 1994). In addition to mobile working, traditional office settings are being questioned too and new concepts such as activity-based working and non-territorial workspaces are employed (Brunia et al., 2016). Activity-based working describes an office setting where employees seek a desk/working station according to their needs, the task in question and the availability (Felstead et al., 2005). Arguments supporting these new office settings are often based on both cost savings and a higher degree of innovativeness and/or creativity of the employees (Felstead et al., 2005; Warren, 2006). Despite perceptions that

work is more collaborative and mobile, most workers around the world remain in traditional work environments, with an emphasis on hierarchy and desk-based work (Steelcase, 2016).

Flexible working environments are argued to have a positive impact on employee satisfaction (Anderson and Kelliher, 2009), particularly if employees have the possibility to choose their workspace based on the corresponding activity and personal needs (Bodin Danielsson and Bodin, 2008; Leaman, 1995). However, there is also contradictory evidence that desk sharing may have a negative influence on employee commitment (Hirst, 2011) and that the focus of the organizational identification of employees changes through desk sharing (Millward et al., 2007). Considering the various forms of commitment, this study examines the relationship between desk sharing and employee commitment. In order to give a comprehensive insight, we have integrated concepts such as managerial role model, age and organisational tenure in our analysis as explanatory variables.

This paper has several theoretical as well as practical implications. Previous literature has examined the influence of modern and flexible office settings as well as the advantages and disadvantages of desk sharing but neglected the direct examination of the possible effects on employee commitment, despite of the findings pointing to potential negative implications it may have (Hirst, 2011). Employee commitment is of particular interest for organizations as it influences organizational performance (Becker et al., 1996; Wright and Bonett, 2002), employee satisfaction (Kim et al., 2005) and the other way around (Matzler and Renzl, 2007), employee motivation (Altindis, 2011; Mowday et al., 1982) and turnover (Griffeth et al., 2000; Stanley et al., 2013). Besides, just recently it was found that NWoW workers more often share information (de Kok et al., 2013).

This study examines whether employee commitment in organisations with desk sharing is different from those with traditional office settings. Furthermore, we examine the level of application of desk sharing, the influence of managerial example, employee age and job tenure.

The paper is structured as follows. First, the current relevant literature regarding desk sharing as well as employee commitment are examined, followed by the hypotheses and method description. The final section describes the results and implications for research as well as practice.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Desk Sharing & Activity Based Working

The concept of desk sharing means that more than one employee are sharing a working spot or a table (Daniels, 1994). Desk sharing became popular in the 1990s with the increasing technological developments (Felstead et al., 2005). NWoW are characterized by the following aspects: Flexibility of working place and time, adequate technological support, changes in organizational systems and leadership and changes in the working culture (Blok et al., 2012; ten Brummelhuis et al., 2012; Covarrubias Venegas and Groblschegg, 2015b). A very developed form of desk sharing would be not only sharing of a working spot but connect the working environment to zones that are activity-based. This office layout is often referred to as activity based working, namely different offices and/or areas are designed for specific kinds of activities and tasks. Usually, these are areas are concentrated work areas, network areas where informal exchange with colleagues occurs, meeting rooms, project areas and areas for phone calls (Covarrubias Venegas and Groblschegg, 2015b). Early experiments showed that desk sharing may increase communication within a department (Allen and Gerstberger, 1973). Nevertheless, very often desk sharing is connected with a strong noise pollution. The further development into activity based working concepts where clearly areas for concentrated tasks exist weakened the critics. Interestingly, satisfaction with the office setting has even a bigger effect on well-being, performance, motivation and commitment than autonomy at work, whilst on the contrary dissatisfaction with the office setting considerably decreases commitment (Kim et al., 2016).

Besides, we expect that NWoW office layouts lead to a reduction in face time between colleagues as well as managers and their team members due to the given locational flexibility. Subsequently, not only the way we work together changes considerably, but also the commitment level towards teams and organisations.

But, in activity based office settings the desk is not a personal space for the employee anymore, instead employees seek a suitable area that supports the particular task they are currently working on (Felstead et al., 2005). Although desk sharing may be cost-effective and foster creativity and/or innovativeness (Felstead et al., 2005; Warren, 2006), it may prevent the employee's need for stability and thus be perceived as an insecure, unpredictable and therefore negative way of working (Felstead et al., 2005; Warren, 2006). Besides, employees may feel their individuality lessen or their social status threatened, as each working spot is identical and interchangeable (Case et al., 2006; Elsbach, 2003). Despite the rise of collaborative work globally, more workplaces are still configured with entirely private offices than those comprising completely open space configurations. Moreover, recent data shows that individual private offices continue to be a function of hierarchy: The more senior people are in their organization, the more likely they are to have their own private office (Steelcase, 2016). It could be argued that desk sharing might furthermore lead to a less hierarchical attitude within organisations if all employees are affected by these new office layouts. The managers' role as a "figurehead" (Mintzberg, 1989, p. 21) is explored in the management literature in different contexts as employees need a leader to identify themselves with (Bass,

1990). Still, employees in more senior roles are more likely to work in a private office (Steelcase, 2016). In this vein, we argue that for a successful implementation of desk sharing, the managers' role is central to its success and influences employee commitment.

2.2   Employee Commitment

85% of employees worldwide are not engaged or are actively disengaged in their job. In detail, the global aggregate from Gallup data collected in 2014, 2015 and 2016 across 155 countries indicates that just 15% of employees worldwide are engaged in their job. Two-thirds are not engaged, and 18% are actively disengaged (Gallup Consulting, 2013). Comparable surveys show similar data, such as one-third of workers in 17 of the world's most important economies being disengaged (Steelcase 2016). Besides, the Global Workplace survey found that organizations with an average of 9.3 engaged employees for every actively disengaged employee in 2010–2011 experienced 147% higher earnings per share compared with their competition in 2011–2012 (Alvino, 2014). Moreover, studies show that higher engagement levels are linked to a range of positive business outcomes, such as business/work unit profitability, productivity, employee retention and customer perceptions in good and bad economic times (Gallup Consulting, 2013; Harter et al., 2002).

Studies show that the possibility of choosing where to work based on the task increases significantly employee engagement. The most engaged and satisfied workers report having access to a variety of spaces and the autonomy to control their need for privacy (Steelcase, 2016). This leads to the assumption that activity based working environments can be considered as a positive driver to employee commitment.

Commitment can be understood as a multidimensional concept (Meyer and Allen, 1991) that steers a person's behaviour to a predetermined, ideal direction (Meyer and Herscovitch, 2001). Employees can show their commitment to organizations through forms of behaviour that are manifested in policies or rules (Meyer and Herscovitch, 2001). In our study, the three components of commitment described by Meyer and Allen (1991) are taken into account: affective, continuance and normative commitment. *Affective commitment* describes the emotional relationship between employee and organization and the employee's identification with the organizational values: employees with affective commitment want to stay in the organisation because of their positive experiences and awaited future aspects (Meyer and Allen, 1991). Affective commitment is connected with the employees' intrinsic motivation, the organisation's values and goals being relevant for the employee (Meyer and Herscovitch, 2001). Affective commitment can be increased through measures such as increasing perceived fairness and transparency in organization's processes and transactions (Meyer et al., 2002). Transformational leadership can influence employees' values, motivation and attitudes in order to pursue better organizational performance (Pundt and Nerdinger, 2012) and therefore increases employee commitment (Meyer et al., 2002).

Employees pointing to *normative commitment* stay in the organisation due to a feeling of obligation towards colleagues or tasks due to the internalizing of norms such as loyalty, however, this internalizing may be of cultural, organizational or familiar art (Meyer and Allen, 1991; Meyer and Herscovitch, 2001). Through NWoW the psychological contract between employee and organisation is diminished, as old structures such as an own office are being questioned and organizations cannot expect employees' unrestricted loyalty, which is why organizations aim at generating affective commitment (Millward et al., 2007; Rump and Eilers, 2013).

Continuance commitment refers to a level of commitment where employees stay in the organisation for monetary reasons, i.e. as long as the costs for leaving are weighted higher than staying (Meyer and Allen, 1991): Costs may apply for the lower valuation of the job market or for training or education. The level of continuance commitment depends on the number of the possibilities offered outside the current organization and the perceived applicability of the employee's qualifications

(Meyer and Herscovitch, 2001; Rego et al., 2004). For example employees with a lower level of education would point to continuance commitment, as they might not see many opportunities outside their current position (Rego et al., 2004).

Some findings suggest that desk sharing may lead to lower employee commitment (Hirst, 2011), as the employees have no longer the possibility to personalize their working space (Brown et al., 2005). Indeed, employees who are not satisfied with their working environment also show lower levels of commitment (Bauer, 2014). Besides, desk sharing may also have negative effects on teamwork (Hirst, 2011; Millward et al., 2007). Contrastingly, there is also evidence showing that desk sharing does not lead to lower identification with the organisation. Employees with a fixed working space identified stronger with their teams whereas those without identified more strongly with the organization as a whole (Millward et al., 2007). Thus, we expect that desk sharing has a negative impact especially on the affective commitment of employees. Given the above, Hypothesis 1 is formulated as follows:

H1. Affective employee commitment is lower in organisations with desk sharing compared to organisations with traditional office settings.

Level of Application of Desk Sharing

Organisations differ in terms of how broadly they apply desk sharing. Alternatives vary from desk sharing, where employees seek each day a working spot to so-called *touchdown areas*, which are designed for short time use only (Millward et al., 2007) or *hotelling*, where employees can book a working space in a corresponding area beforehand according to their needs (Schmalzl, Merkl, and Imbery, 2004). The level of application changes the communication and working processes; each variation requires clear policies, such as guidelines for the space bookings and common rules for where and for what kind of work each areas are meant for (Schmalzl et al., 2004). According to previous works (Elsbach, 2003), desk sharing might lead to de-individualization and thus a higher level of anonymity, which might have a negative impact on commitment. Consequently, a higher level of

application of desk sharing can be expected to lead to a lower employee commitment. Fig. 1 illustrates the operationalization of this variable, for example the highest level of application would mean that all employees pursue desk sharing, no assigned areas are available, that sanctions are in place in case the guidelines are not followed, and clean desk policy is seen as mandatory. Thus, Hypothesis 2 is formulated as follows:

H2. The higher the level of application of desk sharing in the organisation, the lower the employee commitment.

Managerial Example

As discussed above, managers represent "figureheads" and act as an example in the organization (Mintzberg, 1989, p. 15). This role as a "role model" is discussed in other management theories as well. For example, Bass (1990) finds that for transformational leadership it is important for employees to be able to identify themselves with their managers. Transformational leadership influences employee's values, motivation and attitudes regarding their performance (Pundt and Nerdinger, 2012) and it is also expected to influence employee commitment (Meyer et al., 2002). Managerial example reflects commitment, which is one of the critical success factors in implementing a modern workspace (Brunia et al., 2016). As affective commitment relates to the accordance of personal and the organisation's values, we assume to find differences especially regarding affective commitment. We expect managerial example to influence this relationship as follows:

H3. The level of commitment differs between employees whose managers also pursue desk sharing compared to those whose managers do not.

Additional Analysis

In the following section additional analysis which produced interesting results are reported.

Employee Age and Tenure

The office settings of the future need to be designed to support and retain also ageing workers in order to meet their specific requirements (Haynes et al., 2017). Indeed, age has been found to influence employees expectations and

attitudes towards organizations (Covarrubias Venegas and Kollinger-Santer, 2015). Furthermore, employee needs, such as the need for growth or security and commitment changes with age and satisfaction with job security is connected to commitment especially among older workers (Finegold et al., 2002). Additionally, affective and normative commitment are found to increase with age, whereas continuance commitment is connected to organizational position and tenure (Allen and Meyer, 1993). Thus, we expect a connection between age and commitment:

H4. There is a connection between employee age and level of commitment.

Besides, we examine differences in level of commitment between desk sharers and non-desk sharers when considering their tenure levels. Previous findings are somewhat inconclusive: Beck and Wilson (2000) suggest that affective commitment would decrease with longer periods of tenure, whereas Cohen's (1993) meta-analysis suggests that higher tenure levels also indicate higher level of commitment. We assume that employees who work already for a longer time in the organisation show higher level of continuance commitment due to the knowledge and emotional value invested.

H5. Employees with higher tenure show higher level of commitment.

3   DATA AND METHOD

The analysis in this paper is based on an online questionnaire conducted with the online tool GlobalPark. The original questionnaire was formulated after an extensive literature analysis. Commitment was measured using the validated scale by Felfe et al. (2014). The original items as well as our survey was conducted in German. Firstly, a pre-test was conducted. In this paper a stratified random sample was drawn, whereas the population consists of different, heterogeneous subsets with respect to office settings. Data collection followed purposive sampling. The authors sent invitations to selected groups of employees, attempting to target respondents with experience in desk sharing in different organizations. The field phase lasted from 05.11. to 15.12.2016. The questionnaire was opened by a total of 183 persons, 137 of whom started the questionnaire and 105 completed the entire questionnaire, consisting of 51 male and 53 females.

Tab. 1: Age structure of the respondents

% of respondents	Number of persons	Age group
22%	23	21–30
31%	33	31–40
34%	36	41–50
11%	11	51–60
2%	2	> 61

The sociodemographic of our sample show that the majority of the respondents (43.8%) have been employed for more than 10 years in their current organisation. 32.4% have been in the organisation for 1–5 years, 18.1% for 6–10 years and 5.7% for less than a year. 65.7% of the respondents are not in a managerial position, 32.4% work in lower or middle management and 1.9% in top management positions. Despite the attempt to reach an even distribution regarding employees in organisations with and without desk sharing, the shares are not even: 70.5% of the respondents work in organisations that have implemented desk sharing whereas only 29.5% work in organisations with no desk sharing. For further analysis weighting was applied (Hatzinger and Nagel, 2013).

Level of commitment: In order to measure the level of commitment, the validated scale with 14 items developed by Felfe et al. (2014) was used. Items are presented: Affective commitment (5 items):

1. I would be very happy to spend the rest of my working life in this organisation.

2. I don't feel emotionally connected to this organization.

3. I am proud to belong to this organisation.

4. I feel a strong sense of belonging to my organisation.

5. I think that my values fit with those of the organization.

Normative commitment (5 items):

1. Many people who are important to me would not understand or would be disappointed if I left this organisation.
2. Even if it would be beneficial for me, I would not find it right to leave this organization.
3. I would somehow feel guilty if I left this organization now.
4. it doesn't make a good impression to change organisations more often.
5. I would not leave the organization now because I feel obliged to some people in it.

Continuance commitment (4 items):

1. There would be too many disadvantages for me if I left this organization at the moment.
2. Too much in my life would change if I left this organization now.
3. I think I have too few chances at the moment to seriously consider a change of organization.
4. I have already put too much power and energy into this organization to think about a change now.

Level of application for desk sharing: The level of application of desk sharing was operationalized according to various aspects that where adapted to the questionnaire. In the thought of Millward et al. (2007), the question whether clean desk principle is applied or regulated altogether was sought as a criteria for the level of application of desk sharing. Further criteria of the level regards the existence of sanctions against the guidelines and the existence of such guidelines (Schmalzl et al., 2004). If there are assigned areas for certain teams or types of activities, "neighbourhoods", it is seen as a lower level of application of desk sharing, as employees tend to choose certain spot within the team (see e.g. Adams, 2013). Finally, whether desk sharing is directed at all employees or only at certain groups (Elsbach, 2003). Operationalization of level of application

desk sharing is applied as a criteria to measure the level of desk sharing.

Operationalization of the level of application of desk sharing are illustrated in Fig. 1 and Tab. 2. For example, a low level of application would mean a score of 4 where only single groups of employees are working in desk sharing environments, if assigned areas are available, if there are no sanctions for not following desk sharing guidelines and if there are no guidelines regarding clean desk after work. A high score, then, would mean that all groups are targeted, no assigned areas are available, sanctions for not following the guidelines exist and the working area may have to be cleared even during the day.

Tab. 2: Measurement of the variable "level of application of desk sharing"

	Target group	Neigbour-hoods	Sanc-tions	Clean desk
All	2			
Only single groups	1			
Yes		1		
No		2		
I strongly disagree			1	
I disagree			2	
Neither agree nor disagree			3	
I agree			4	
I strongly agree			5	
During the day				3
End of the day				2
No guidelines				1

Notes: Maximum points = 12, minimum points = 4.

The objective of the quantitative analysis of the present paper is to understand whether there are differences regarding level of commitment within a sample of employees working in traditional office settings compared to a sample of employees working in desk sharing office settings. Where data is normal distributed, a one-way ANOVA was used to test whether the mean values of these two independent groups differ.
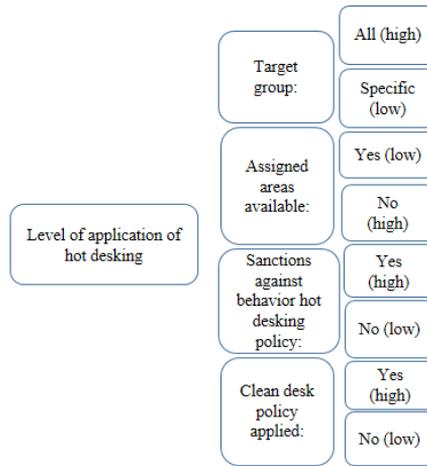
Fig. 1: Operationalization of level of application desk sharing

4   RESULTS

4.1   Employee Commitment and Desk Sharing

This part presents the empirical findings and describes the statistical tests applied. As for H1, we expected a different level of commitment between organisations that have implemented desk sharing and those with traditional office settings. As the sample was not equally large (70.5% of the respondents worked in organisations where desk sharing was applied, whereas 29.5% in organisations without desk sharing), for further statistical analysis the values were weighted (Hatzinger and Nagel, 2013, p. 68). A weighting factor was applied as follows: for employees in organisations with desk sharing: 50/70.5 (0.71) and for the ones without 50/29.5 (1.70). Tab. 3 illustrates the distribution.

Tab. 3: Employees in organisations with and without desk sharing after weighting

Prevalence	Absolute frequency (n)	Relative frequency (%)
Yes	52	50%
No	53	50%
Total	105	100%

The validated commitment scale by Felfe et al. (2014) was used as it is accessible in German language. Sample items for affective commitment include "I do not feel very emotionally connected with this organization" and "I am proud to be part of this organization". For normative commitment, sample items include "Many people who are important for me would not understand or would be disappointed, if I would leave this organization". For continuance commitment, sample items were e.g. "There would be too many changes in my life if I would leave this organization now" and "I have invested already too much energy in this organization to be able to think of changing a job". (Items originally in German, translation for this paper by the authors.)

For statistical analysis, the mean level of affective, normative and continuance commitment is measured and compared between the two different samples (different office settings).

Where data is normal distributed, a one-way ANOVA was used to test whether the mean values of the two independent groups differ.

To compare the two means of the groups, t-tests are used. In our case, an independent (unmatched) t-test is used, as the two samples are independent. After applying t-tests for the

mean values of all the forms of organizational commitment, the level of affective commitment, interestingly, was found to be significantly ($p = 0.01$) higher in organisations with desk sharing. Tab. 4 shows that mean values of respondents in organisations with desk sharing is higher than in organisations without.

Tab. 4: Dimensions of commitment and desk sharing

In my organisation, desk sharing is applied	Absolute frequency (n)	Mean	SD	SE
Affective commitment				
Yes	52	3.86	0.83001	0.11457
No	53	3.30	1.11652	0.15403
Normative commitment				
Yes	52	2.67	0.83805	0.11568
No	53	2.54	1.05786	0.14594
Continuance commitment				
Yes	52	3.07	0.87195	0.12036
No	53	3.27	0.78876	0.10882

4.2   Level of application of desk sharing

As for H2, we expected a negative correlation between the level of application in desk sharing and employee commitment. Desk sharing is considered as an independent variable and employee commitment as a dependent variable, both being metric. Starting from a bi-variate correlation, we first checked whether there are linear correlations. The relationship between the dependent and independent variable is most reminiscent of a snow flurry, but outliers are visible, therefore the Spearman correlation may be applied. Operationalization of this variable is illustrated in Fig. 1 and Tab. 2. H2 can be partly confirmed; as can be seen in Tab. 5, there is a negative, significant correlation between affective ($p = 0.001$) and normative commitment ($p = 0.05$) and desk sharing. For continuance commitment, the value is not significant ($p = 0.09$).

4.3   Managerial example

As for H3, following the literature we assumed that the role of managerial example influences the level of commitment, especially affective commitment in desk sharing environments. If employees are expected to work in desk sharing environments but their managers are exempt from this practice, a negative impact on employee commitment is expected. We expected a different level of commitment for employees whose managers pursue desk sharing than those whose do not, namely the latter being lower. After dividing our sample in two groups, namely with managers also in desk sharing environments and teams where managers still had their own offices, we tested this hypothesis by comparing the mean values of the two different groups.

As continuance commitment is not normally distributed, we applied Mann-Whitney U-Test, which shows that employees, whose managers also pursue desk sharing show a lower level of continuance commitment ($p = 0.01$). In the case of affective and normative commitment, we combine the mean values for the two groups and find that the employees whose managers also pursue desk sharing show higher affective commitment ($p = 0.04$). For normative commitment, the difference is not significant ($p = 0.46$). Thus, we were able to find significant differences about affective and continuance commitment.

This means that those employees whose managers also perform desk sharing have a higher average affective commitment and a lower mean value for continuance commitment than other employees do.

4.4   Age and organizational tenure

To measure H4, we compared both employees with and without desk sharing without weighting the sample. Affective and normative commitment are normally distributed, whereas continuance commitment is not, which is why we apply Kruskal-Wallis H-test to continuance commitment and to the other forms single factor ANOVA. The age groups are presented in Tab. 2. We found no significant relationship

Tab. 5: Correlations between application of desk sharing and commitment ($N = 74$)

Affective commitment		Var_Level of application of desk sharing	Mean_affective commitment
Level of application of desk sharing	Correlation coefficient	1.000	−0.294
	Sig		0.011
Mean_affective commitment	Correlation coefficient	−0.294	1.000
	Sig	0.011	
Normative commitment			**Mean_normative commitment**
Level of application of desk sharing	Correlation coefficient	1.000	−0.228
	Sig		0.05
Mean_normative commitment	Correlation coefficient	−0.228	1.000
	Sig	0.05	
Continuance commitment			**Mean_continuance commitment**
Level of application of desk sharing	Correlation coefficient	1.000	−0.2
	Sig		0.088
Mean_continuance commitment	Correlation coefficient	−0.2	1.000
	Sig	0.088	

between age groups concerning continuance commitment ($p = 0.39$), affective commitment ($p = 0.41$) or normative commitment ($p = 0.53$). The descriptive statistics show, however, that continuance commitment is at highest in the age group of 51–60 years and at lowest in the group of 61 and older.

4.5 Tenure

To measure H5, we compared more than two groups and employees with and without desk sharing possibilities, thus unweighted data is applied. We expected higher commitment for longer duration of employment. We compared employees that are in the organisation less than 1 year, 1–5 years, 6–10 years and more than 10 years. As continuance commitment follows normal distribution, we apply single factor ANOVA. For affective and normative commitment, we apply Kruskal-Wallis H-Test. For continuance and normative commitment, no significant differences are found between the groups regarding tenure. Concerning affective commitment ($p = 0.02$): the group of employees less than 1 year in the organisation show the highest level of affective commitment, followed by the group with more than ten years. Thus, H5 could not be confirmed.

5 DISCUSSION

This study attempted to examine whether employee commitment in organisations with desk sharing is different from those with traditional office settings. Furthermore, we examined the level of application of desk sharing, the influence of managerial example, employee age and job tenure. Previous works refer to desk sharing having a negative impact on employee commitment (Hirst, 2011). Surprisingly, our findings show that the level of affective commitment is even higher for employees with desk sharing than for those without. To get a better picture on possible reasons, we run some additional tests. With a χ^2-Test, we measured the desk sharers' wish of assigned working spaces, which the most employees would have liked to have.

However, they did not see it as a signal of appreciation from the organisation: to the question "I see it as a form of appreciation of the organisation to provide me a fixed working space" only 27% of desk sharers fully agreed compared to that non-desk sharers 41.9% who fully agreed. In addition, the measurement of scale level shows that most desk sharers do not see a fixed working space as a prerequisite of an organisation's appreciation. Another reason for the high level of affective commitment of desk sharers may be that they showed lower agreement on aspects such as "setting up personal objects or photos to my working space is important for me" and the majority (79.7%) of desk sharers found it easy to find their colleagues they needed to coordinate with. This suggests that desk sharing does not impede the coordination with colleagues, which is why it does not have a negative impact on affective commitment.

When examining the level of application of desk sharing we found that the more radically desk sharing was applied, the lower the values of employee commitment are. A possible reason for this might be that affective commitment aims at accordance of the employee's own and the organisation's values. Normative commitment regards to the moral commitment towards colleagues. Thus, both forms of commitment refer to the individual values and relationships. Taken that a high level of desk sharing lowers the level of expression of individuality and social context, it is comprehensible that also the expression of such commitment is lower. Continuance commitment relates to a cost-benefit analysis of the employees and their possible alternatives. These considerations are apparently independent and not related to the spatial organization of the working environment. The higher the level of application of desk sharing, the less possibilities there are to express individuality or team structures, which could affect the level of commitment.

Managerial example was perceived important when applying desk sharing. Desk sharing employees whose managers did not do desk sharing showed lower level of affective commitment, as it relates to the employees' identification of the organisation's values. This was also the case for continuance commitment. Our results imply that the identification with the organisation's values and its credibility decreases when the idea of desk sharing is not pursued in all organizational levels and if managers still have traditional office settings. Ultimately, it does not appear authentic if organisations hype equal standards but still make managers "more equal". For the importance of the equal standards speaks also that all the desk sharers whose managers also do desk sharing state that their managers follow the given desk sharing guidelines. Thus when applying desk sharing, practitioners should consider equal guidelines for all organizational levels; otherwise this may influence the levels of affective commitment and credibility of the organisation.

Regarding employee age, no significant differences between the age groups in commitment were found. As different age groups may have different expectations towards the organisation, it was expected that older employees might show higher continuance commitment due to the lack of possible alternatives in job market. One possible interpretation would be that the group of 51–60 sees their possibilities not as broad in the job market compared to younger employees. Thus, the cost-benefit analysis leads to weaker prospects for this group. The group of 61 and older is already close to retirement, thus for this group the future job prospects are not as relevant for this group and thus continuance commitment is also lower. It may be that other parameters such as career possibilities and education influence the employees' chances more than age.

Finally, it was examined whether the organizational tenure influences the level of commitment. The only significant difference is found in relation to affective commitment; this is due to that employees with shorter employment are not influenced by their previous experiences in the organisation. In the beginning new employees are motivated and content and perhaps some might have particularly chosen the organisation due to the coherence of the values. In the group of employment of more than 10 years it is assumed that employees have

already considered carefully whether they fit to the organisation. Consequently, a longer period of employment could contribute to higher level of affective commitment. Regarding the other forms of commitment, no significant differences were found. Thus, longer period of employment does not lead to higher normative commitment. This may be due to that normative commitment regards not only to the obligations towards the organisation but also moral thoughts about others' opinions on changing job. Changing job is not seen as a taboo anymore and in many branches even a necessity for professional development. This may be a reason why there was no effect regarding continuance commitment to be found. It does not only relate to the costs but also the potential alternatives that the employee sees in his/her current job situation.

To summarize, our findings imply that desk sharing does not necessarily have a negative influence on employee commitment. It seems that it should not only be considered whether to pursue desk sharing but to consider the conditions and people whom it regards, how are working spaces sought, who is working where, how do I find my colleagues etc. These aspects influence the employees' identification with the organisation. Furthermore, managerial example is important in acceptance of desk sharing.

6   IMPLICATIONS AND FUTURE RESEARCH

Our study has several important practical and theoretical implications. Firstly, we provide support for the finding that physical factors at the office, such as assigned desks, are not necessary important for the formation and focus of commitment (e.g. Millward et al., 2007). There is some evidence suggesting that desk sharing may have a negative influence on commitment (Hirst, 2011; Millward et al., 2007). Our study follows these indications but adds the important dimension of level of application of desk sharing and analyses how the managers influence commitment as well. Contrary to the suggestions of previous work, we find that desk sharers show higher level of affective commitment. However, the effect seems not to be as straightforward: desk sharing may lead to negative commitment if implemented too radically, if guidelines are missing or not followed or if the application lacks managerial support. This should be examined by future research in a wider empirical setting in order to find out how the level of commitment behaves in specific conditions and over a longer time. Second, we contribute to the literature on employee commitment by examining how the various forms of commitment changes in a setting of office settings, which has not been previously examined. Third, our findings show empirically that there is a connection between the level of commitment and the applied office setting, specifically desk sharing. This finding should be relevant for practitioners and all organisations considering their office settings, regarding the positive attributes of committed employees such as motivation, high performance and lower retention.

7   LIMITATIONS

Some limitations can be identified from our study, mostly stemming from the dataset. It cannot be omitted that due to convenience sampling, our results might be subject to bias (Bornstein et al., 2013) and can thus not be unconditionally generalized. Besides, the sample was rather small and exclusively examining employees in Austria. Furthermore, our empirical setting could not screen the reliability of combining two independent constructs, desk sharing and commitment.

This study provides fruitful avenues for future research. Firstly, the specific conditions on why and in what context does desk sharing influence on commitment, as well as the value added of desk sharing for employees. Secondly, the when, how and why do desk sharers or employees with assigned desks feel committed? How does this change over time? Thirdly, the longitudinal aspects of desk sharing are worth analysing, namely the change of commitment after implementing desk sharing in a specific organisation through case study design.

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