



ORGANIZATIONAL CLIMATE AND SLEEPING DISORDERS: THE MEDIATION ROLE OF WORKPLACE CONFLICTS' IMPACT

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Abstract

Sleep deprivation is one of the most important health problem in modern society and evidenced so far, on Romanian employees, have shown that 74% of them have been diagnosed with sleeping disorders (About Sleep Disorders, 2016). Despite this evidence, little attention has been given to the role of organizational factors and to the effects of workplace conflicts in triggering sleeping disorders among Romanian employees. The present empirical research addresses the relationship between organizational climate, the impact of workplace conflicts and employees' sleeping disorders. 151 Romanian employees (101/66.88% - female and 44/29.13% - male) participated at the present study by completing, in paper-pencil format, the questionnaires measuring organizational climate, workplace conflicts and sleeping disorders. The results showed that lower levels of organizational support, justice, decisions and assessment are correlated with sleeping disorders and workplace conflicts. Moreover, the direct relationship between organizational climate and sleeping disorders can be better understood when the impact of workplace conflicts is introduced as a mediator. The present study emphasize on the importance of understanding the role of workplace conflicts in employees' sleeping disorders and helps human resources professional to develop more efficient training programs designed to improve employees social competences (i.e. offering social support to their colleagues experiencing symptoms of sleeping disorders) and to increase knowledge referring to poor organizational climate-sleeping disorders relationship.

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Introduction

The consequences of sleep deprivation and sleeplessness have been noted as the most important health problem in our modern society (Yazdi, Sadeghniaat-Haghighi, Loukzadeh, Elmizadeh, & Abasi, 2014). These consequences include increased mortality, morbidity, accidents and errors, workplace absenteeism, decreased productivity, and deterioration of interpersonal and professional relationships (Brown, Berry, & Schmidt, 2013; Kyle, Morgan, & Espie, 2010; Metlaine, Leger, & Choudat, 2005). The prevalence of sleep disorders is common in university employees but is often under-diagnosed and insomnia is the most prevalent sleep disorders among adults (Yazdi et al., 2014). The estimated prevalence of difficulty in initiating and maintaining sleep is about 30% (LeBlanc, Beaulieu-Bonneau, Mérette, Savard, Ivers, & Morin, 2007). Sleep quality is an important clinical construct for being healthy (Yazdi et al., 2014). Poor sleep quality can be an important symptom of many sleep disorders and other medical diseases and might even have a direct effect on increased mortality (Kompier, Taris, & Veldhoven, 2012).

So far, In Romania the importance of sleep disorders among employees have received little attention. A study made in this area, between December 21th 2010 and January 11th 2011 on a sample of 3.100 Romanian employees, showed that 74% of them have become unproductive in their workplaces as a consequence of sleep deprivation. Furthermore, according to this study, male employees (52%) are more affected the female employees (48%) (About Sleep Disorders, 2016).

This study didn't revealed the organizational factors that may contribute to the appearance or to the maintenance of sleeping disorders.

Our study tries to fulfill this gap by exploring the relationships existing between four dimensions of organizational climate (i.e. support, justice, decisions, and assessment), the impact of workplace conflicts and employees'

sleeping disorders. Moreover, the study tests the mediation role of workplace conflicts' impact in organizational climate-sleeping disorders relationship

Organizational climate and employees' health problems - direct and indirect relationships

Organizational climate is a driving force in the organizational behavior which provides foundations to many physical and psychological phenomena to employees and workplace conflict is one of the major under considered phenomenon usually caused by the organizational climate (Qureshi, Rasli, & Zaman, 2014).

The organizational climate concept has been defined in different ways (Schneider, Ehrhart, & Macey, 2013) but most scholars tend to agree on the following two aspects of the climate concept. First, there is considerable agreement on the distinction between organizational climate and culture. Culture refers to the implicit underlying values, beliefs, and assumptions that guide employees' behavior (Schneider et al., 2013). Climate, in contrast, concerns the meaning employees attach to the tangible policies, practices, and procedures they experience in their work situation (Schneider et al., 2013). Second, organizational climate can be described either in terms of organizational features that can be applied to any number of contexts and industries, or in terms of specific features that are tied to the subject of interest (Bronkhorst et al., 2014).

A large number of empirical studies have focused on organizational factors that explain health problems of workers (Bronkhorst, Tummers, Stejin, & Vijverberg, 2014).

Direct relationship between organizational climate and health problems

Mitchie and Williams (2003) reviewed the literature up to the year 2000 and concluded that the empirical evidence is consistent to job demands-control (JD-C) model. According to this model, the most common work factors associated with psychological ill health are work demands (long hours, workload, and pressure), a lack of control over work, and poor support from managers.

Previous studies have shown that lower levels of organizational justice are associated with various health problems such as self-rated poor health (Kivimaki, Elovainio, Vahtera, & Ferrie, 2003), psychological distress

(Hayashi, Odagiri, Ohya, Tanaka, & Shimomitsu, 2011), depression (Ylipaavalniemi, Kivimaki, Elovainio, Virtanen, Keltikangas-Jarvinen, & Vahtera, 2005), and coronary heart disease (Kivimaki, Ferrie, Brunner et al., 2005). Kelloway and Day (2005) showed that organizational factors (e.g. interpersonal relationships at work, employee involvement, and a culture of support, respect, and fairness) influence health.

Elovainio et al. (2009) conducted a prospective study in order to investigate longitudinal relationships between organizational justice and employees sleeping disorders. The results evidenced that, in men, low organizational justice at phase one and at phase two was associated with overall sleeping problems, sleeping maintenance problems, sleep onset problems, and non-refreshing sleep at phase five and phase seven. In women, a significant association was observed between low organizational justice and overall sleeping problems and sleep onset problems. These results showed that perceived unfair treatment at workplace is associated with increased risk of poor sleep quality in men and women, one potential mechanism through which justice at work may affect health.

Hayashi, Odagiri, Takamiya, Ohya, and Inoue (2015), using a cross-sectional design, evidenced that subjects with low overall organizational justice had a higher risk for insomnia and two insomnia symptoms (i.e. sleep induction problems and sleep maintenance problems).

Indirect relationship between organizational climate and health problems

Wilson, DeJoy, Vanderberg, Richardson, and McGrath (2004) showed that organizational climate is related to health through its effects on job design, job future, and psychological adjustment.

Arnold and Dupré (2012) investigated the relationship between perceived organizational support and employees' health through employees' emotions. The results showed that negative emotions fully mediated this relationship while positive emotion partially mediated the relationship between perceived organizational support and employees' health.

Qureshi et al. (2014) found that there is a negative relationship between organizational climate and workplace conflict, on one hand, while on the other hand, an increased workplace conflict negatively affects employees' health due to affected sleeping hours. This study suggested that organizations should control workplace conflicts which may cause physical and psychological

effects on employees' health.

There are few studies that have investigated the relationships existing between organizational justice and health problems (Hayashi et al., 2015). Insomnia is one of the most common health problems worldwide (Ohayon, 2002). It can be related to a variety of physical and mental disorders, such as mood disorders, chronic pain, hypertension and diabetes (Piageon, 2010).

The present study explores not only the direct relationship between organizational justice and sleeping disorders, but also the indirect relationship between organizational justice and sleeping disorders through the impact of workplace conflicts.

Having as a start-point the work of Qureshi et al. (2014), the present study explores the relationships existing between organizational climate, the impact of workplace conflicts and employees' sleeping disorders. As previous research (Arnold & Dupré, 2012) evidenced that employees' negative emotions mediated the relationship between perceived organizational justice and health problems, we expect that the impact of workplace conflicts to mediate also the organizational climate-sleeping disorders because conflicts always triggers negative emotions in employees.

Aim of the present study

In the present study we investigate the role of organizational factors on employees sleeping disorders from the perspective of organizational climate within organization. The organizational climate approach concentrates on those aspects of the social environment that are consciously perceived by organizational members (Denison, 1996).

This study has two aims: (1) to explore the relationships existing between organizational climate (i.e. support, justice, decisions, and assessment), the impact of workplace conflicts and employees' sleeping disorders and (2) to test the mediation role of the impact of workplace conflicts on organizational climate-sleeping disorders relationship.

Hypotheses

Previous research (Kelloway & Day, 2005; Elovainio et al., 2009; Arnold & Dupré, 2012; Hayashi et al., 2015) showed that lower levels of organizational justice, support, decisions and assessment are associated with

higher levels of sleeping disorders and that workplace conflicts are associated with more sleeping problems. According with the previous research evidence, we advance our first hypothesis:

1. The four organizational climate's dimensions (i.e. support, decisions, justice, and assessment) are correlated with the impact of workplace conflicts and with sleeping disorders. The more the organizational climate is perceived as being low in support, justice, assessment and decisions the more employees will be affected by workplace conflicts and will experience more sleeping disorders.

Qureshi and colleagues (2014) showed that lower levels of organizational climate are correlated with higher levels of workplace conflicts and that higher levels of workplace conflicts are associated with higher levels of sleeping problems. Having, as a start point, the work of Qureshi and colleagues (2014), we advance our second hypothesis:

2. The impact of workplace conflicts will mediate the organizational climate-sleeping disorders relationship in that employees' sleeping disorders will increase when they are negatively affected by the experience of workplace conflicts in the context of poor organizational climate.

Method

Participants

151 (101/66.88% female employees and 44/29.13% male employees) employees from a Romanian university participated at the present study. From these 44(29.13%) employees work in administrative department, 87(57.61%) employees work in faculties and research centers, six (3.97%) employees works at the rector's office and eight (5.29%) employees work in other unities. Furthermore, three (1.98%) of them have under one year of experience, 13 (8.60%) of them have between one and three years of experience, five (3.31%) have between three and six years of experience and 124 (82.11%) have more than six years of experience. 57(37.74%) are university professor, eight (5.29%) are researchers and 53 (35.09%) are administrative employers and 18 (11.92%) have a leading position.

Instruments

Organizational Climate (Constantin, 2014) was measured with a local

questionnaire developed to measure 14 dimensions from which only four dimensions were used for the present study, such as: support is understood as the efforts of organization to provide with the appropriate organizational resources to ensure employees' performances, the organization's efforts to create good working conditions and the organization's efforts to develop an efficient reward system for performer employees (e.g. *Those who have serious professional initiatives can get the resources needed to implement these initiatives.*), justice is understood as being employees' perception on the justice with which some organizational decisions were taken and also justice referring to the way work-tasks were delegated and the way its employees are treated so that their dignity remain intact (e.g. *In order to get a job, professional competence is the only thing that counts.*), decisions refers to employees' ability to organize their daily work-tasks they way they want to and their ability to participate to organizational decisions processes (e.g. *I can organize my work tasks as I think it is better for the firm.*) and assessment refers to employees work tasks assessment according with objective and clear criteria, employees receiving feedback and solutions to improve their work performance (e.g. *I know the criteria by which my work is assessed*). These items were measured on a five-point Likert scale from which 1-to a very small extent and 5- to a very big extent.

Conflicts (Constantin, 2014) were measured through one question with yes or no answer (e.g. In the latest 12 month have you been exposed to conflicts at work?) and its impact was measured on a five-point Likert scale on which 1-very little, 2-little, 3-medium, 4-much, 5-very much.

Sleeping disorders (Constantin, 2014) was measured with the aid of four questions (e.g. *Have you experienced difficulties in sleeping during nights?*) with answers given on a five-point Likert scale where 1-all the time and 5-never.

Procedure

The survey method was used in order to gather the data. Participants took part at this research study by completing, in paper-pencil format, the questionnaires measuring organizational climate (i.e. decisions, justice, assessment, and support), workplace conflicts and sleeping disorders. The questionnaires were completed by the university employees between January and March 2015 with the agreement of university's rector. Each faculty

received the paper and pencil format of the questionnaires and the dean of each faculty informed the employees about the importance of this study and of their contribution. The questionnaires were completed by the employees in their free time. The completed questionnaires were returned to each faculty's secretary department which in its turn had to return them to Psychology Department before March 13th 2015.

We told participants that the results of this research will only be used for research purposes and that individual responses will not be made public and will not count on their annual performance evaluation. We also told participants that we can provide them their results if they want to and offer them more information about the aim of the present study after they have completed the questionnaires.

The results were computed with the aid of Statistical Program for Social Sciences (SPSS) 20 and AMOS 20. Statistics such as means, standard deviations, Pearson correlations were computed with the aid of SPSS 20. Standardized regression weights reporting the direct and indirect effects were computed with the aid of AMOS 20. Also, in order to determine the fit of the mediation model proposed, indicators such as Chi square (χ^2), RMSEA, NFI, CFI and IFI were computed with the aid of AMOS 20.

Results

First Hypothesis

1. The four organizational climate's dimensions (i.e. support, decisions, justice, and assessment) are correlated with the impact of workplace conflicts and sleeping disorders. The more the organizational climate is perceived as being low in support, justice, assessment and decisions the more employees will be affected by workplace conflicts and will experience more sleeping disorders.

Table 1. Means, standards deviations and Pearson correlations between organizational climate, sleeping disorders and conflict's impact

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Organizational support	2.76	.75	1					
2. Organizational justice	2.70	.86	.73**	1				
3. Organizational decisions	3.03	.79	.65**	.69**	1			
4. Organizational assessment	3.05	.86	.55**	.67**	.55**	1		
4. Impact of conflict	2.86	1.22	-.17*	-.18*	-.17*	-.13*	1	
5. Sleeping disorders	3.39	.81	.12*	.19*	.19*	.16*	-.20*	1

Note: N=151; *, p<.05; **, p<.01

The results present in table 1 shows that there are significant correlations among organizational climate (i.e. support, justice, assessment, and decisions), the impact of workplace conflicts and employees' sleeping disorders.

Support correlates significantly with sleeping disorders ($r=.12$, $p<.05$) and with workplace conflicts ($r=-.17$, $p<.05$). Justice correlates significantly with sleeping disorders ($r=.19$, $p<.05$) and with workplace conflicts ($r=-.18$, $p<.05$). Decisions correlates significantly with sleeping disorders ($r=.19$, $p<.05$) and with workplace conflicts ($r=-.17$, $p<.05$). Assessment correlates significantly with sleeping disorders ($r=.16$, $p<.05$) and with workplace conflicts ($r=-.13$, $p<.05$).

Furthermore sleeping disorders correlates significantly with workplace conflicts ($r=-.20$, $p<.05$).

According to these correlations, when a person receives organizational support in her professional activities, when she perceives her organization as taking fair decisions and as making fair assessments and when she has the possibility to make her own decisions regarding to her daily tasks, she will experience less sleeping disorders. Moreover, organizations high in support and justice, fair in their assessment processes and which allows employees to take part at the organizational decisions, are characterized by low workplace conflicts. Furthermore, the results showed that the impact of workplace conflicts is correlated with sleeping disorders. When the organizational climate is perceived as being characterized by lower levels of support, justice, assessment, and decisions, it is associated with higher risks of sleeping disorders among its employees. These results confirmed the first hypothesis.

These results are congruent with those obtained by Hayashi et al. (2015) and by Elovainio et al. (2009) which highlighted that poor organizational climate is associated with risk for insomnia, sleep induction and sleep maintenance problems.

The second hypothesis

2. The impact of workplace conflicts will mediate the organizational climate-sleeping disorders relationship in that employees sleeping disorders will increase when they are negatively affected by the experience of workplace conflicts in the context of poor organizational climate.

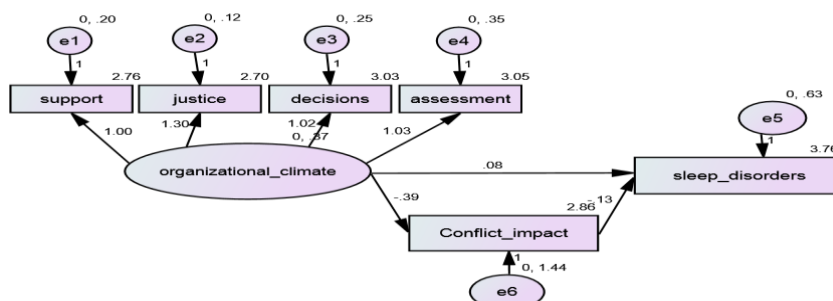


Figure 1. The mediation role of conflict on the relationship between organizational climate and sleeping disorders

The mediation model proposed in figure one presents a good fit of the model with these indicators: $\chi^2(8)=16.393$, $p=.37$; NFI=.954, IFI=.976, TLI=.934, CFI=.975, RMSEA=.040[.009; .067]. In the figure are presented the non-standardized coefficients.

The absolute and relative fit indicators reveal a good mediating model so that the direct relationship between organizational climate (i.e. support, justice, decisions, and assessment) and sleeping disorders is better understood when entering the impact of workplace conflicts as mediator.

The direct relationship ($B=.080/\beta=.060$) is bigger than the indirect effect ($B=.049/\beta=.030$) meaning that impact of workplace conflicts partially explains the organizational climate-sleeping disorders relationship. The impact of workplace conflicts isn't a significant mediator of this relationship. The second hypothesis is only partially confirmed. There may be an indirect effect of the impact of workplace conflicts in the organizational climate-sleeping

disorders relationship, but this indirect effect may be better understood if we take into account other mediators. Previous research (Arnold & Dupré, 2012) have shown that employees' negative emotions is a good mediator of organizational climate-employees' health relationship.

The direct relationship between organizational climate and employees' sleeping disorders evidence that poor organizational climate trigger sleeping disorders in employees, results which are congruent with those obtained by Hayashi et al. (2015) and by Elovainio et al. (2009). The results of the present study go further and analyze the impact of another organizational factor, in this case, the impact of workplace conflicts in organizational climate-sleeping disorders relationship but didn't obtained a significant mediation.

The results presented in this mediation model are different from those obtained by Qureshi et al. (2014) which showed that workplace conflicts is a mediator between organizational climate and sleeping disorders. According to their results, a poor organizational climate is characterized with high frequency of workplace bullying acts and with employees with higher risk of developing sleeping disorders.

Conclusions

The present study aimed at exploring the relationships existing between organizational climate, the impact of workplace conflicts and employees sleeping disorders, on one side and on the other, exploring the mediation role of impact of workplace conflicts in organizational climate-employees' sleeping disorders relationship.

According with the first aim of the present study, poor organizational climate is significantly correlated with employees' sleeping disorders and with high levels of impacts of workplace conflicts. Moreover, higher levels of workplace conflicts are associated with higher levels of sleeping disorders. The first hypothesis was confirmed.

Mitchie and Williams (2003) have shown that poor support from managers is associated with a decrease in employees' health. The results of the present study showed that poor support, justice, and assessment and the lack of participation to the decisions processes are associated with employees' sleeping disorders.

Kelloway and Day (2005) evidenced that negative interpersonal relationships (i.e. including high levels of workplace conflicts) are associated with employees health problems. The present study reveal similar results showing that the impact of workplace conflicts is associated with employees' sleeping disorders. Furthermore, Kivimaki et al. (2005) evidenced that low organizational justice is associated with coronary heart disease and Elovainio et al. (2009), using longitudinal designs, have shown that low organizational justice is associated with higher risk for insomnia and two symptoms of insomnia such as sleep induction problems and sleep maintenance problems (Elovainio et al., 2009). The results of the present study obtained similar results between low organizational justice and employees' sleeping disorders.

The second aim of the present research was to test the mediation role of the impact of workplace conflicts in organizational climate-sleeping disorder relation. Previous studies (Qureshi et al., 2014) have demonstrated that workplace conflicts experiences mediate the organizational climate-sleeping disorder relationships. The impact of workplace conflicts isn't a significant mediator so that the second hypothesis wasn't sustained by the empirical data. There are other organizational mediators that can better explain the direct relationship between organizational climate and sleeping disorders such as employees' negative emotions which were proved to be a significant mediator in Arnold and Dupré's (2012) study.

We didn't used a scale to measure workplace conflicts. We only asked employees if, in the past twelve months, they've experienced workplace conflicts and if they did experienced workplace conflicts we measured its impact on a five-point Likert scale. We didn't measured aspects of workplace conflicts such as the source of conflict, number of people involved in conflict, the period of conflict manifestation so that the impact of workplace conflicts didn't revealed to be a significant mediator. Future research should take into account this limit when testing the mediation role of workplace conflicts in organizational climate-sleeping disorders relationship.

In conclusion, the present research showed that the four dimensions of organizational climate (i.e. support, justice, decisions, and assessment) are significantly correlated with sleeping disorders. Lower levels of organizational climate are associated with an increased risk for developing sleeping disorders and with an increased frequency of workplace conflicts experiences.

Implications for practice

These results add value to the ones existing in the literature in that they can help human resources practitioner better understand the relationship existing between employees sleeping disorders, experiences of workplace conflicts and their relationship with organizational climate.

Understanding how organizational climate is associated with health outcomes is important because it provides information on how to prevent health problems appeared among employees.

Our results indicate that there is a need to give attention to group relationships and group behavior within organizations. Previous research (Kivimaki et al., 2005; Kivimaki et al., 2003) indicate that aspects such as co-worker support and cohesion among colleagues are very important in preventing illnesses among employees. There are provided various means to reduce illnesses such as decreasing competition among co-workers and creating a strong set of standards that encourages coworkers' positive interactions (Chiaburu & Harrison, 2008).

To conclude, we see a need to expand occupational health and safety policies to include the social and interpersonal conflict.

Study limitations

The present research has also several limits. Firstly, the study uses cross-sectional data to determine causal relationships between organizational climate, workplace conflicts and employees' sleeping disorders. These types of relationships can be better determined and understood if the study uses longitudinal data. Further research should take into consideration this aspect. Secondly, at this study participated only university employees so that the results can be generalized to the employees from universities. To understand better the types of relationships between these variables among general population of working people, further research should investigate it on a larger sample of different employees from different fields of work. Thirdly, the presence of workplace conflict was measured using a single-item (i.e. In the past twelve months, have you experienced workplace conflicts?) with a yes or no answer. In case they have experienced workplace conflicts, the impact of workplace conflicts was measured with a single-item using a five-point Likert scale to measure the impact of conflicts on employees. Future research should measure conflict using a more complex scale.

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