Occupational Stress in Secondary School Teachers

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Abstract

Stress at work is a phenomenon known to leave few unaffected. Fortunately, most people have established ways of managing the environmental stressors that they become exposed to on a regular basis. It is important to identify potential stressors for people to be able to develop effective coping strategies. Indisputably, the interaction between employees and their working conditions constitutes a source of numerous potential stressors that affect people (Colligan & Higgins, 2006). Generally, different occupations entail different levels of demands, burdens and responsibilities that may contribute to shaping either motivating or impoverishing working conditions. For instance, the health and working conditions of school teachers has established an area of growing concern over the last decade with increasing levels of job burnout (Chang, 2009; Pas, Bradshaw, & Hershfeldt, 2012), high levels of staff turnover (Atkinson, 2004) as well as lower rates of job satisfaction (Flanagan, & Flanagan, 2002).

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Introduction

Stress is a construct that has been conceptualized in many different ways and has been associated with both positive and negative effects on people's well-being. Selye (1956) originally described the phenomenon of stress as "the non-specific response of the body to any demand made upon it". Moreover, Selye (1974) proposed the differentiation between good stress (eustress) and bad stress (distress) to emphasize that not all stress should be considered harmful. However, it is when people experience long-term distress that it becomes harmful to health. Previous research has shown that excessive levels of stress puts people at increased risk of coronary heart disease (Rozanski, Blumenthal, Davidson, Saab, & Kubzansky, 2005), major depression (Kendler, Karowski, & Prescott, 1999) and may impair sleep quality (Knudsen, Ducharme, & Roman, 2007). In conclusion, excessive amounts of stress may contribute to adverse implications for people's health.

Occupational stress refers to the type of stress resulting from the inability to cope with demands from work and has shown to influence people's well-being. Building on Selye's (1956) definition of stress, occupational stress is instead described as the physical and emotional reactions that arise when people experience a lack of balance between the demands from their work and their ability to cope with and handle those demands (Leka, 2005; Tsutsumi et al., 2009;

Lath, 2010). In the present study we consider the specific definition of occupational stress or similar definitions such as work stress or job stress as they are often used interchangeably. High levels of occupational stress have shown to influence people's health negatively in several ways. Previous research suggests that high levels of occupational stress has several adverse effects on people's health such as higher levels of depressive symptoms (Melchior et al., 2007; Tennant, 2001), increased job burnout rates (Kyriacou, 1987; Chang, 2009), increased risk for coronary heart disease (Kivimäki et al., 2006) and decreased job satisfaction (Flanagan, & Flanagan, 2002).

According to previous research people's gender has shown to influence the experience of occupational stress. However, there are inconsistent findings regarding whether males or females are more prone to experiencing occupational stress (Galanakis, Stalikas, Kallia, Karagianni, & Karela, 2009). Some research points toward that males are more prone to experiencing occupational stress (Rosen, Wright, Marlowe, Bartone, & Gifford, 1999) whereas conflicting findings indicate that females are more susceptible to occupational stress (Matud, 2004). In a study by Antoniou, Polychroni and Vlachakis (2006) a significant gender difference in the experience of occupational stress among primary and high school teachers was found. In this case, female primary and high school teachers reported higher levels of occupational stress in comparison to their male counterparts. Although, gender differences in occupational stress among Swedish upper secondary school teachers has not been adequately investigated. To understand whether there are gender differences in the perception of occupational stress among teachers constitutes of an important consideration to account for when developing intervention programs.

Stress is a considerable issue within the teaching profession. Today in Sweden, the level of work-related stress is on the rise across occupations (Arbetsmiljöverket [AV], 2016; Härenstam, 2005). For the first time in Swedish history, work-related disorder caused by psychological strain is more prevalent than physical strain when considering all occupational groups (AV, 2016). According to recent statistics, stress and psychological strains are amongthe most common causes of work-related problems for both males and females in Sweden (AV, 2016). Furthermore, Swedish school teachers report high levels of stress-related symptoms and exhaustion when compared to other professions (Alkan Olsson, 2013; Arvidsson et al., 2012). In addition, roughly a fifth of Swedish upper secondary school teachers report experiencing work-related disorders due to physical load or stress and psychological strains (AV, 2016). Altogether, the Swedish teaching profession appears as an occupational group exposed to worrisome levels of stress.

There is a growing body of research identifying teaching as a stressful occupation and the underlying key stressors that cause this to be. Factors that have been related to stress among teachers include increased number of administrative tasks, obligatory staff meetings as well as insufficient time for tuition planning (Alkan Olsson, 2013; Lärarnas Riksförbund [LR], 2015). In addition, pupil misbehaviour, resource and time difficulties, unsatisfactory professional recognition and poor relationships with school management are factors of the work environment that have been linked to high levels of occupational stress among teachers (Borg, Riding, & Falzon, 2006; Skolverket, 2016). Moreover, nine out of ten Swedish upper secondary school teachers report that they experience their workload as unreasonable and approximately two thirds of teachers believe that it has a negative effect on their own students' academic performances (LR, 2015). While it is important to investigate stressful factors within the teaching profession, we argue that it is equally important to understand how the teachers themselves cope with these factors.

Physical activity

Physical activity is regarded as a healthy lifestyle habit and has been linked to several positive outcomes in both mental and physical well-being. The general conception of physical

activity is defined as “any bodily movement produced by skeletal muscles that requires energy expenditure” (Folkhälsomyndigheten, 2017). The term physical activity is a broad concept and includes activities such as performing day-to-day chores, transportation by foot or bicycle, physical effort at work as well as physical sports and exercise. In addition, World Health Organization [WHO] (2017) recommend that adults between the ages 18 and 64 should engage in at least 150 minutes of moderate to intense physical activity every week.

Leisure time exercise is a specific form of physical activity that is best described as activities that are planned and structured with the objective of enhancing or maintaining physical fitness (Caspersen, Powell & Christenson, 1985). Moreover, regularly engaging in high levels of physical activity and leisure time exercise has shown to have several positive effects on both physical and mental health in people. Specifically, physical activity has shown to reduce stress related symptoms in people (Clow & Edmunds, 2014), decrease anxiety (van der Zwan, de Vente, Huizink, Bögels, & de Bruin, 2015; Rebar et al., 2015), reduce depressive symptoms (Dinas, Koutedakis, & Flouris, 2011; Rebar et al., 2015) and buffer general fatigue (Strahler et al., 2016; Statens folkhälsoinstitut, & yrkesföreningar för fysisk aktivitet, 2003). Previous research also suggests that working adults who engage in moderate amounts of leisure time exercise are less likely to experience high levels of stress (Aldana, Sutton, Jacobson, & Quirk, 1996). However, the effects of leisure time exercise on occupational stress levels in upper secondary school teachers have not been closely investigated. Altogether, previous research indicates that physical activity and leisure time exercise provide several beneficial effects on people's health.

Previous research has provided inconsistent findings concerning the effects of engagement in physical activities on occupational stress. In a study by Sliter, Sinclair, Cheung, Mcfadden and Glazer (2014), the relation between work stressors and psychological strain among nurses was found to be moderated by the level of engagement in physical activity. Specifically, the negative psychological effects of work stressors were lower amongnurses who reported engaging in higher levels of physical activity, suggesting that physical activity plays an important role in reducing nurses experience of occupational stress. By contrast, Jex (1991) argues that the beneficial effects of physical activity on occupational stress levels are insignificant when personality factors such as internal locus of control, self- motivation and optimism are taken into consideration. Moreover, previous research indicates that men are more physically active than women (Azevedo et al., 2007). However, whether increased physical activity has stronger implications for males compared to females in preventing occupational stress has not been thoroughly determined.

Social support

The term social support composes an extensive concept that involves several types of subcategories. According to House (1981), the concept of social support is defined as "the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive social network". Furthermore, there are various sources from which people can receive social support. Common sources that people turn to for social support include family and friends, co-workers or significant others (Zimet, Dahlem, Zimet, & Farley, 1988; Taylor, 2011). A meta-analysis by Chiaburu and Harrison (2008) suggest that, in a work context, high levels of perceived social support from co-workers is linked to increased job satisfaction, job performance as well as job involvement. Moreover, perceived social support from supervisors or management has shown to mediate the effect of work stresson the intention to quit work (Firth, Mellor, Moore, & Loquet, 2004). In conclusion, the effectiveness of social support in a working context depends to a large extent on the source from which it is perceived.

Perceived social support has shown to have multiple beneficial effects on both

physical and psychological health in people. On one hand, high levels of perceived social support have been linked to beneficial effects on physical health such as strengthened cardiovascular, neuroendocrine and immune system functioning (Uchino, 2006). Above and beyond the positive effects on physical health, high levels of perceived social support have also been linked to an improved mental health in people including lower levels of anxiety and depression (Zimet, Dahlem, Zimet, & Farley, 1988) as well as lower rates of mental health disorders (Leavy, 1983). All in all, perceived social support appears to be an important resource largely associated with beneficial effects on people's well-being that employees and organizations alike can stand to benefit from.

In addition, the weight of evidence implies that perceived social support plays a considerable role in reducing the psychological impact of stress in people (Cohen & Willis, 1985; Cohen & McKay, 1984). According to Cohen and Willis (1985) buffering hypothesis the presence of a functional social support system shields people from and lessens the mental impact caused by stressful events. Thus, people who perceive that they have access to high levels of social support are provided a buffering effect against various stressors. In accordance with the buffering hypothesis, availability of work-related social support has shown to buffer against the harmful effects of occupational stress in people (Terry, Nielsen, & Perchard, 1993). Moreover, social support has shown to moderate the effect of occupational stress on job burnout in both males and females (Etzion, 1984). However, the potentially bufferingeffects of perceived social support on occupational stress among upper secondary school teachers in a Swedish context have not been adequately investigated.

Coping strategies and gender differences

There is evidence that men and women differ in their use of coping strategies to manage stress. According to Taylor et al. (2000), it is more common for women to employ emotion-focused coping strategies directed at dealing with the feeling resulting from the stressor rather than dealing with the stressor itself. Furthermore, the theoretical tend-and-befriend model suggests that the behaviour of seeking out social support is a more common female response to stress (Taylor et al., 2000). Previous research also indicates that women are more prone to seek social support during stressful situations than men, strengthening the notion of gender discrepancy related to the tend-and-befriend theory (Tamres, Janicki, & Helgeson, 2002). Similarly, other emotion-focused coping strategies such as systematic relaxation, physical exercise, self-distraction and releasing repressed emotions are strategies employed more commonly by women than men in order to reduce feelings of stress (Folkman & Lazarus, 1984). On the contrary, problem-focused strategies that aim to eliminate the underlying stressor have been found to more effectively reduce stress in men (Folkman & Lazarus, 1984). Altogether, previous research suggests that men and women appear to differ in the way they approach and cope with stressful situations.

Moreover, physical activity also appears to play a role in regulating the experience of occupational stress in upper secondary school teachers. Beyond the general stress reducing effects of physical activity the findings of our study provide valuable implications that engagement in leisure time exercise has similar effects on occupational stress for upper secondary school teachers (Clow, & Edmunds, 2014). However, in accordance with Jex (1991) physical activity did not appear to have as strong effects on occupational stress as social support and hardiness. We speculate that engagement in leisure time exercise may not provide the same long lasting beneficial effects that both hardiness and social support appear to contribute with. Potentially, it may be easier to improve a lifestyle habit such as engagement in leisure time exercise in comparison to altering one's personality disposition or extending one's current social network. Therefore, increasing one's amount of daily physical activity may present a more viable way for teachers to effectively cope with their feelings of occupational stress. In line with previous research by Azevedo et al.

(2007), we found that male teachers reported engaging in significantly higher amounts of leisure time exercise compared to female teachers. The difference in the amount of exercise may be a contributingfactor as to why male teachers in turn experience lower levels of occupational stress compared to female teachers. It remains for further research to more closely investigate whether gender differences in leisure time exercise can explain why female teachers experience higher levels of occupational stress.

Considering both Taylors (2004) as well as Lazarus and Folkmans (1984) ideas of gender differences in coping strategies we expected to observe significant gender differences in the respective effects of our selected predictors. However, when comparing the effects of physical activity, social support and hardiness separately between the genders no interactions were found for any of the factors. Thus, we reject our third hypothesis that physical activity, perceived social support and hardiness would influence the level of occupational stress for male and female teachers differently. These findings are contradictory to the suggested sex- specific effects of hardiness (Shepperd, & Kashani, 1991) with regards to stress. This is also contradictory to the notion that women employ emotion-focused coping in stressful to a larger extent compared to men (Lazarus & Folkman, 1984; Taylor, 2000). Our findings suggest that the effects of emotion focused coping strategies such as engaging in leisure time exercise or seeking social support appear to be equally effective in reducing stress regardless of gender.

Furthermore, considering that physical activity, social support and hardiness all appear to individually affect the level of occupational stress similarly for both genders we argue that the three components of our model are of equal importance for both male and female teachers in coping with occupational stress. In this sense, our study contributes to current research by emphasizing the selected factors for coping with occupational stress within the teaching profession for males and females alike.

Like most studies, we acknowledge that our study has some weaknesses that are important to be addressed. Firstly, the response rate is a considerable weakness in our study. What separates the respondents from non-respondents can only be left to speculation.

However, we find it probable that the teachers who were experiencing high levels of stresswere also less likely to take time out of their daily schedule to volunteer for our survey, resulting in a potential selection bias in the current study. Consequently, the average stress level of the population may be even higher than our results indicate.

Another weakness to consider is that the measurements selected for the current study have not been altogether satisfactory. We suspect that self-report is an inadequate measurement of physical activity. The inclusion of an additional objective instrument to measure movement over a period of time, such as a pedometer or an accelerometer, would have been preferable to more accurately describe the participants' level of physical activity (Sylvia, Bernstein, Hubbard, Keating, & Anderson, 2014). In addition, the internal consistency reliability of the hardiness measurement was not satisfactory as the items did not all load on their respective subscales, resulting in us being unable to make use of any of the three subscales. A possible reason for this may be that our Swedish translation of the measurement was inaccurate, indicating that further validation of the instrument is required. For these reasons, we recommend that interpretation of the hardiness subscales used in our study be utilized with caution.

Moreover, we recognize that the use of online questionnaires provides low control over data collection as we were unable to ensure that only teachers meeting the inclusion criterion have received and responded to the questionnaire. Lastly, due to the retrospective outline of the current study, no causal inferences can be made regarding the relationship between occupational stress and the suggested predictors. In consideration of the low sample size and convenience sampling method we are unable to generalize

the findings of the currentstudy to the target population.

Despite the weaknesses accounted for, the current study also has its strengths. One strength is that the integrated model used in our study combines a wide range of factors, resulting in a comprehensive approach to occupational stress. The findings contribute to identifying important factors that affect the perception of occupational stress. Another advantage of the current study is that the model is not limited to upper secondary school teachers but can be further applied and tested within other occupational groups. Subsequently,the results from various occupational groups can be compared to each other to further investigate whether physical activity, social support and hardiness affect occupational stress similarly across various occupational groups.

An additional strength of the current study is that it offers new insights regarding a pressing societal issue. Occupational stress among Swedish upper secondary school teachers affect not only the well-being of the the teachers themselves, but also the students they educate. Thus, we consider it a strength that the current study benefits not only the well-beingof the teachers but also the quality of education which they provide to their students.

Conclusion

Finally, our study has furthered the understanding for how these factors contribute to reducing stress in upper secondary teachers. Moreover, the findings of our study have applications for identifying and intervening with teachers who may be at risk of experiencing harmful levels of occupational stress. Previous research has mainly focused on the various aspects and working conditions of the teaching profession that cause elevated levels of perceived stress within the occupational group. By shifting the emphasis from aspects of the work environment to instead focus on factors within the teachers themselves, the current study contributes by offering new insights regarding how occupational stress can be approached. Considering that two thirds of teachers believe their stress to affect their students' academic performances negatively, occupational stress within the teaching profession is a considerable issue (LR, 2015). Consequently, by developing interventions that help managing the level of occupational stress among upper secondary school teachers we are able to contribute to improving students' academic performances in the long run. In the pursuit of preventing occupational stress, a great deal of factors must be taken into consideration. We find it likely that the teaching profession will remain a stressful occupational group for a foreseeable future. Nonetheless, we conclude by emphasizing the importance of continuing to explore ways of successfully coping with the stress at work. We believe that retaining a resilient mindset, keeping up with regular exercise and engaging withothers through social interaction may go a long way in reaching such a goal.

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