

Correlation between the experience of occupational stress and the quality of a relationship from the point of view of women and men

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Abstract

Throughout history the relationship has been changing and as is the case with working habits it is largely influenced by the modern lifestyle and social influences. It is impossible to say if the quality of the relationship has improved or deteriorated, but one thing is certain: nowadays, each relationship is exposed to a number of factors that can affect the satisfaction of both partners. After all, few things affect a person's life as much as work and relationships.

The aim of the research is to determine if there is a statistically significant correlation between the experience of occupational stress and the quality of a relationship and if there is a statistically significant difference between men and women in how they experience occupational stress and how they perceive the quality of a relationship.

Keywords: *occupational stress, quality of a relationship, gender differences, woman, man*

Nowadays, occupational stress is more and more perceived as one of the key factors in developing illnesses and other problems (Badrick et al. 2007, Wang 2005), especially in Slovenia, where a staggering 45.6 % of employees believe

that their job negatively affects their health (Trbanc 2007). The modern family lifestyle is considerably different from what it was in the past, when it was dictated by the laws of nature and limited social needs. Today, a working day is not over when it gets dark and people have adapted to several natural factors, which enables them to work anywhere and at any time. Capitalism and globalization have brought along two other changes: virtually unlimited demand for new products and services, and unlimited availability of materials and resources, which enables the smooth running of work processes. As a result, employees are under ever greater pressure, also because of insecure social and economic conditions (Duffy et al. 2002, Ashford et al. 1989). The resulting trend in the developed world is chronic fatigue of workers, with different and far-reaching consequences. The aim of the research is to determine how occupational stress affects the quality of a relationship.

Throughout history the relationship has been changing and as is the case with working habits it is largely influenced by the modern lifestyle and social influences. The once rigid relationship framework has evolved to allow for different forms of relationships, each one of them challenging for both partners in their own way. It is impossible to say if the quality of the relationship has improved or deteriorated, but one thing is certain: nowadays, each relationship is exposed to a number of factors that can affect the satisfaction of both partners (Campbell et al. 2003). This paper will try to establish the degree to which occupational stress affects satisfaction in a relationship.

People spend a considerable amount of time at work. We also dedicate a lot of time to personal relationships, especially between partners/spouses. In addition to time, we dedicate other efforts as well, especially emotional involvement. Changes in the relationship or at work cause a strong emotional reaction and consequently affect the person's physical and psychological conditions. It is therefore perfectly expected that these two areas begin to overlap, correlate and become causally linked. After all, few things affect a person's life as much as work and relationship. The general tension caused by stress at work is transposed in the relationship and affects both partners. A possible correlation between occupational stress and the quality of a relationship interested some researchers, who explored the link between these variables from different perspectives, often concentrating on psychological, family and medical implications (e.g. Green and Pond 1983, Heller and Watson 2005). The results of the researches showed that there are other factors that may influence how a person experiences occupational stress or the quality of a relationship. Some researchers have also been noticing certain differences, for example in how men and women experience stress at work.

The differences between men and women is what we will be paying special attention to

It is common knowledge that certain differences at the workplace cause differences in how men and women experience workload (Jick and Mitz 1985). Some foreign researches have looked into how these factors actually affect occupational stress and if the experience of occupational stress ultimately results in statistically significant differences between the sexes (Lundberg 1996, Frankenhaeuser and Lundberg 1999). Extensive research in this field in Slovenia has not yet been carried out. This paper will attempt to compare the views of men and women on the basis of the given sample. The question of the difference between men and women in the relationship remains open and subject to numerous researches (e.g. Collins and Read 1990). How they perceive the quality of a relationship depends on factors that are largely shared by both partners, so it might well be that no major statistically significant differences will be identified.

Occupational stress and the quality of the relationship are largely subjective experiences that depend on numerous factors which people perceive differently. Occupational stress has different effects on different people and the same goes for relationships, where expectations differ as well. It is more important to emphasise differences between individuals rather than men and women. Identifying correlations between factors that can be largely measured on the basis of subjective estimates is a challenging task that demands smart planning and the use of appropriate tools. As long as all measurements and research are carried out so as to guarantee sufficient objectivisation of subjective factors, the results are reliable and useful. This is precisely why it is important to identify the procedures that can guarantee the most reliable results even before carrying out the practical part of the research. In doing so one can rely on the tools already developed and tested by researchers and which are now used to conduct research in the area of occupational stress and relationship quality.

In order to establish the theoretical basis for identifying the correlation between occupational stress and relationship quality from the perspective of men and women different sources will be consulted, especially relevant researches of Slovenian and foreign researchers. The paper will also provide an overview of the tools used for verifying the hypotheses in practice. Occupational stress will be measured using the tool for identifying and assessing occupational stress and its negative consequences (Novak et al. 2012), while relationship quality will be measured on the basis of the dyadic adjustment scale (Spanier 1976). These are tried and tested solutions that will cover all relevant factors and allow for a reliable presentation of statistically significant results.

Measuring occupational stress

Occupational stress will be measured using the tool for identifying and assessing occupational stress and its negative consequences (hereinafter: IDTS). It was developed by a team of researchers at the sociomedical institute of the Research Centre of the Slovenian Academy of Sciences and Arts. The IDTS is available to all researchers, but is primarily intended for employers who wish to measure the occupational stress of their employees.

The IDTS is in fact a form comprising 130 statements. The first part of the form contains questions aiming at obtaining information on the respondents that is not directly linked to the job, but allows to interpret the answers and prepare the final report. The statements are formulated in affirmative or negative form, while the respondent answers by selecting the degree of agreement or disagreement or the frequency associated with a statement. The statements are closed-type; i.e. the respondent may select one of the five degrees on the scale. In terms of contents the statements are about the experience of occupational stress. Some of them describe factual factors (e.g. I work in shifts), while others describe purely subjective experiences (e.g. At work I often want to prove myself).

The IDTS has been chosen to measure occupational stress because it includes very relevant statements. A direct question on how much occupational stress one is under would provide unreliable answers not based on the factors that really matter. The answers obtained in this way would be completely subjective and inconclusive. IDTS provides a comprehensive insight in how a person feels at work, as it explores various objective and subjective factors that affect occupational stress through different statements. The 130 statements cover also factors which may not be immediately obvious. They are based on an overview of Slovenian publications concerning occupational stress and an analysis of regional sociodemographic, health and economic statistics in relation to a broader framework of the occurrence of occupational stress and its negative effects (<http://dmi.zrc-sazu.si/sl/strani/stres-na-delovnem-mestu>). The results obtained with the IDTS allow for drawing reliable conclusions based on the segmentation of the answers – the IDTS provides an assessment of the intensity and scale of occupational stress in 17 areas (Dolenc and Šprah 2014). The results therefore tell us not only whether a person feels under stress at work or not, but also provide a detailed picture of the factors behind it and to what extent they affect the experience of occupational stress. This is useful in practice in order to plan changes aimed at reducing occupational stress, as the results can narrow down the factors to those which the employees find the most problematic. This paper will take advantage of the accuracy of the IDTS to compare the experience of occupational stress of men and women, as these differences ultimately apply to the experience of stress in general.

Measuring the quality of a relationship

The process of measuring the quality of a relationship must include both partners, especially if it aims at identifying gender differences. To achieve this the dyadic adjustment scale (DAS) is used, which allows for verifying the experience of the quality of different aspects of a relationship. The scale was developed by Graham Spanier in 1976 and has ever since been considered an excellent tool for measuring the quality of a relationship from the perspectives of both partners (Spanier and Thompson 1982, Eddy et al. 1991).

The DAS includes 32 questions/statements with single choice answers. For 27 questions the answers are measured on a six-degree scale, for 2 on a five-degree scale and for 1 on a seven-degree scale. One is a yes or no question. The questionnaire measures the quality of a relationship in four areas: satisfaction, consensus, cohesion, affectional expression. Points are awarded to the answers and the results can range from 0 to 151 points. The higher the score, the higher the quality of the relationship as perceived by the respondent. According to Spanier the threshold for couples in difficulties is 101 points.

The results of the DAS provide a general assessment of the quality of a relationship. No individual sub-scales are defined in the questionnaire, however, answers may be segmented in order to obtain information on how different aspects of a relationship are perceived. This approach is very useful in couples counselling, therapies and where there is an attempt to identify the causes of difficulties in a relationship and solutions. The DAS helps in narrowing down the problems and allows the therapist to draw up a therapy plan on the basis of its results. The DAS is not a one-dimensional tool for measuring the quality of a relationship in general, but a multi-dimensional tool that measures four specific areas. In this paper the DAS is used to obtain a general assessment of the quality of a relationship, as this information is sufficient for the purpose of identifying the correlation between occupational stress and the quality of a relationship. A more detailed analysis would help us understand the reasons for any differences in the experience of men and women, however, this is not the main objective of this paper.

Processing of results

By employing suitable methodological solutions, the IDTS and the DAS, we will obtain relevant data for identifying different correlations. Our work will concentrate on proving or disproving three hypotheses:

1. There is a statistically significant difference between men and women in how they experience occupational stress.

2. There is a statistically significant difference between men and women in how they perceive the quality of a relationship.
3. There is a statistically significant correlation between the experience of occupational stress and the quality of a relationship.

The first two hypotheses explore gender differences. We expect to find statistically relevant differences between men and women in how they experience occupational stress and how they perceive the quality of a relationship. The necessary information will be obtained from questionnaires and the final result will be compared to the respondent's sex.

The third hypothesis is not about gender differences, so the answers will not be differentiated by sex. We will try to determine whether there is a link between the experience of occupational stress and the perception of the quality of a relationship – for women and for men. In order to verify this hypothesis we will use the same answers as for the first two hypotheses. We expect to find a statistically relevant correlation between the experience of occupational stress and the quality of a relationship.

It is possible to verify the third hypothesis irrespective of the findings of the first two. We expect to prove that the link between the experience of occupational stress and the quality of a relationship will apply to both sexes, irrespective of whether different perceptions of any item are identified between them.

Research

The link between the experience of occupational stress and the quality of the relationship was verified empirically. The sample comprises 36 randomly selected participants. The condition for participating in the research was that the participants were in a relationship for at least one year before the research was conducted.

Sample

Of the 36 participants in the research, 15 (41.7 %) were men and 21 (58.3 %) were women. The majority (12 participants; 33.3 %) was living in a joint household for less than 5 years, 10 (27.8 %) between 11 and 15 years, 6 (16.7 %) for over 20 years, 5 (13.9 %) between 6 and 10 years and 3 (8.3 %) between 16 and 20 years.

The majority of the participants (19 participants; 52.8 %) had three children, 9 participants (25 %) had one child, 5 participants (13.9 %) had two children, 2 participants (5.6 %) had four children, and one participant (2.8 %) had six children. Even though having children was not a condition for

participating in the research, all participants had at least one. This was probably due to the fact that participation was conditional on being in a relationship for at least one year.

Method

Relevant answers were obtained on the basis of the mentioned questionnaires; IDTS and DAS. The questions from both questionnaires were combined in one questionnaire, which was divided in two parts and completed with instructions. Within the two parts the questions were divided in sets with specific instructions (where the response scale changed or where additional clarifications were necessary).

At the very beginning of the questionnaire we obtained some information on the participants, which is important for the analysis of the results and the credibility of the answers. We were interested in the gender, the number of years they lived in a common household and the number of children they had. The first two questions were closed-ended and the third (number of children) they were semi-closed-ended.

Analysis and processing of results

First we adequately segmented the answers – first we separately processed the three introductory questions, the questions from the IDTS questionnaire and those from the DAS questionnaire. In this part we concentrated on verifying the first two hypotheses – the differences between men and women when it comes to the experience of occupational stress and the quality of a relationship. From the results we identified two variables: occupational stress and quality of a relationship. The two variables were identified by separately evaluating the results of the two separate parts of the questionnaire. When it comes to the DAS questionnaire we reverse evaluated questions from 1 to 15 and 32 in order to match the others. By doing so we obtained results that express the one-dimensional value of the quality of a relationship. With the IDTS we used the same valuation and obtained the one-dimensional value of the experience of occupational stress. We thus obtained the values for both variables that we later used for further processing the results of the research. More detailed segmentation of the results of individual parts of the questionnaire in order to verify the first two hypotheses was not necessary.

After obtaining the variables on the basis of the results of the questionnaire we checked the normality of data distribution by using the two-sample Kolmogorov-Smirnov normality test. The test showed that the sample distribution

was normal. The normality test coefficient cannot be used for verifying the hypotheses, it just confirms the reliability of the obtained results.

Hypothesis 1: There is a statistically significant difference between men and women in how they experience occupational stress.

When verifying the hypothesis we first concentrated on the assumption that there are statistically significant differences between how women and men experience occupational stress (hypothesis 1). In order to verify this we used only the processed results of the first part of the questionnaire, i.e. the IDTS, and the information concerning the sex of the participants, obtained at the very beginning of the questionnaire. The results were divided in two parts according to the sex of the participants and then arranged by the number of points on the IDTS scale. On the basis of these values we calculated the average value for men and women, which allows for a comparison between the two sexes. We expected a considerable difference between the average values for men and for women, which would confirm our hypothesis. The results were as follows:

Sex		N	Average	Standard deviation	Standard error
Occupational stress	Men	15	324,0667	64,00275	16,52544
	Women	21	313,5714	46,46243	10,13893

Table 1: Comparison of the results of the measurement of the experience of occupational stress between men and women.

The results show that when comparing the experience of occupational stress between men and women there are no statistically significant differences. As expected, we noticed some minor differences, which are in line with the standard error and are not statistically relevant.

The hypothesis that there is a statistically significant difference between how men and women experience occupational stress can be disproved on the basis of the results. We discovered that the differences are not statistically significant.

Hypothesis 2: There is a statistically significant correlation between the experience of occupational stress and the quality of a relationship.

The second hypothesis was verified by means of the results of the second part of the questionnaire and as with the first hypothesis we used the information concerning the sex of the participants. In the second part of the questionnaire

we used the DAS scale. The results were evaluated with points ranging from 0 to 151, with questions 1–15 and 32 being reverse evaluated. The results were arranged and divided in two groups by sex. By doing so we obtained the values of the quality of a relationship from the perspective of men and women. We expected to find a statistically significant difference between the values measuring the quality of a relationship according to sex. The results were as follows:

Sex		N	Average	Standard deviation	Standard error
Quality of a relationship	Men	15	94,1333	15,92333	4,11139
	Women	21	95,4286	9,51615	2,07659

Table 2: Comparison of the results of the measurement of the quality of a relationship between men and women.

The results show that when it comes to the comparison of the quality of a relationship there is no statistically significant difference.

The hypothesis that there is a statistically significant difference between how men and women perceive the quality of a relationship can be disproved on the basis of the results. We discovered that the differences are not statistically significant.

On the basis of the results of the research we were able to disprove both hypotheses, which we verified by comparing the values of the answers to individual sets of questions.

Hypothesis 3: There is a statistically significant correlation between the experience of occupational stress and the quality of a relationship.

The third hypothesis is not focused on the results of one part of the questionnaire, but requires a synthesis of the results and the verification of possible correlations. In order to confirm the hypothesis we used the Pearson correlation coefficient – a useful tool for identifying links between two variables. In order to make efficient use of the Pearson correlation coefficient we first needed to check if the results distribution is normal, same as with the two other hypotheses, as well as the conditions of homoscedasticity and monotonicity and both were met. In this case the differentiation by sex is not important, as we are verifying the link between the experience of occupational stress and the quality of a relationship. For this reason, the answers will not be differentiated by sex.

By calculating the Pearson correlation coefficient we obtained the information about the connection between the variables »quality of a relationship« and »occupational stress«. The variable values used were the same as with the previous hypotheses.

		Quality of a relationship	Occupational stress
Quality of a relationship	Pearson correlation	1	-.220
	p-value (2-sided)		.197
	N	36	36
Occupational stress	Pearson correlation	-.220	1
	p-value (2-sided)	.197	
	N	36	36

Table 3: Pearson correlation coefficient and statistic relevance for the variables »quality of a relationship« and »occupational stress«.

The result in this case is only slightly more promising than with the previous hypotheses. The Pearson correlation coefficient is -0.220 , which points at a low rate of reverse or negative correlation between the variables. This means that the sample shows a trend where if the value of the occupational stress variable is higher, the quality of a relationship variable is lower and the other way round. This was the expected correlation when the hypothesis was formed. The value of the correlation coefficient 0.222 shows that the correlation rate is low, while the two-sided p-value shows that the correlation is not statistically relevant.

Based on the results we can therefore disprove the hypothesis that there is a statistically significant connection between the experience of occupational stress and the quality of a relationship. We discovered a minor connection, which, however, is not statistically significant.

Discussion

The results of the research showed that none of the hypotheses was proven to be correct. We first found out that there are no statistically significant differences between men and women when it comes to the experience of occupational stress and also that the same goes for the quality of a relationship. Finally, we compared both variables and discovered that there is no statistically relevant connection between the experience of occupational stress and the quality of a relationship.

The reasons that all hypotheses were disproved might be found in how the objectives of the research were set – some previously conducted researches showed that the links between occupational stress and the quality of a relationship are not straightforward. However, neither did they conclusively show that there are no differences. The hypotheses of this research have therefore been adequately defined.

The second reason might be the relatively small sample. The number of participants in the research was too small to ensure sufficiently reliable results for identifying statistically relevant differences and connections. The sample was sufficiently spread, however, if the sample was bigger, it might have shown even smaller deviations.

In order to finally disprove or confirm our hypotheses, the research should be repeated using a larger sample. The results obtained in this case would allow us to identify statistically significant differences and links, however, it is impossible to foresee the results of the research. We therefore suggest that the researching of the correlation between the experience of occupational stress and the quality of a relationship continues, possibly by conducting it on a larger sample.

The selection of research methods was adequate. We obtained relevant and useful information that might have shown reliable correlations, had the sample been bigger. The answers obtained with the IDTS and DAS in fact revealed much more than we needed for verifying the hypotheses. Since the experience of occupational stress and the quality of a relationship were evaluated on the basis of very accurate answers, we can be certain that the final values are as objective as they can be and the best possible source for making comparisons. The mentioned tools would be a good choice also for any future researches, as they provide sufficiently reliable values for all questions we are interested in.

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