LIFE SCIENCES. Health Care Sciences

ORIGINAL RESEARCH

Social Identification's Role for Work and Family Life Balance

Issimova A. E.[1] ABCDEFG

Author's Contribution:
A – Study design;
B – Data collection;
C – Statistical analysis;
D – Data interpretation;
E – Manuscript preparation;
F – Literature search;
G – Funds collection

[1] *National Defense University named after the First President of the Republic of Kazakhstan – Yelbasy, Kazakhstan*

Background and Aim of Study:	*The research work considers whether workplace stress had a negative association with university teacher's family functioning, and if a social identification might a moderator role for this relationship.* *The aim of the study: to define the social identification's role for work and family life balance.*
Material and Methods:	*The data were collected from participants (university teachers) with the scales (Perceived Stress Scale; Brief Family Relationship scale and The Three-Dimensional Strength of Group Identification scale) of multiple – choice questionnaire. Moderation analysis was conducted by using multiple linear regression analysis.*
Results:	*Author concludes that the impact of workplace stress on family functioning is dependent on individual's social identification level with their family group. It is because the bivariate analysis results showed that workplace stress was a negatively affected to the family functioning (p<0.05). Moderation analysis indicated that the impact of workplace stress on family functioning is dependent on individual's social identity level with their family members. The interaction between social identification and workplace stress was significant (p<0.05), that means social identification moderated the relationship between workplace stress and family functioning. Workplace stress would not negatively effect on family functioning (p>0.05) that individual's whose social identification with their family was high. In contrast, lower identification with family had more significant negative impact from workplace stress on their family functioning.*
Conclusions:	*Social identification plays a significant effect for individual's work and family life balance. Individual's high social identification with their family is an effective coping method with workplace stress and, moderates the relationship between workplace stress and family functioning.*
Keywords:	*workplace stress, family functioning, coping, social identification.*

Introduction

Although there are studies have found several methods for dealing with workplace stress, finding effective coping methods with faculty member's workplace stress that impacted on their family functioning has still stayed a significant question. 'Coping' has been described by Lazarus & Folkman (1984) as 'thoughts and acts that people use to manage specific external or internal demands of stressors'.

The theoretical analysis has shown that social identification is a significant variable coping with workplace stress. According to research in the social-psychological platform, social identification is 'central to people's experiences of and reactions to, social and environmental stressors' (Haslam, O'Brien, Jetten, Volmedal, & Penna, 2005). 'Social identification' has been defined by Taifel (1978), 'an individual's self-concept which derives from his knowledge of his membership'. Considering this, Ellemers, Koetekaas, and Ouwerkerl (1999) study social identification divided into three components, a cognitive component, an evaluative component and an emotional component. These components have significant effect on members' social perception, feeling and behaviours (Taifel & Turner, 1979) which is based on individual's workplace stress on family functioning.

In addition, Avanzi et al. study (2018) with samples Swiss teachers found that strongly identified teachers receive more support from other members of group, and consequently lead them lower job burnout which is develops from workplace stress. Similarly, Zellars and Perrewe (2001) study examining influence of affective personality to emotional social support and job burnout suggested that individuals who engage conversations that focus on positive aspects of job report less burnout. It is because, interactions with a positive content is a significantly related to individual's job burnout (workplace stress) decrease, thoughts and feelings that linked with increased perceptions of personal self (Zellars & Perrewe, 2001) which play role for individual's relationship with their family.

The issues of prevention of mental disorders and their impact on the mental health of the individual were studied by Melnyk and Stadnik (2018).

Various aspects of training of future specialists in higher education were studied by Melnyk and Pipenko (2018). Specifically, family social identity's role discovered Baider, Ever-Hadani, Goldzweig, Wygoda, and Peretz (2003) study, and had shown that individual's stress buffering is directly related to their family, more specifically family support which is based on family member's social identification level. They identify couples who were experiencing high psychological distress reported lower levels of perceived family support than the normal levels of stress. This concept is confirmed by findings reported by Billings and Moos (1982) study, and authors concluded that work related stress on family relationship is directly associated with individual's family support. Despite men work stressors having greater impact, supportive social resources, such as family support provided more reduction for the effects of workplace stress on family functioning.

In addition, Kiecolt-Glaser et al. (1993) study, by examining couple's production of stress hormones and low family relationships, found that women produced two particular stress hormones such as cortisol and norepinephrine during the discussion. Moreover, Kiecolt-Glaser et al. (1993) research indicated that couples with satisfying family relationship tended not to infections catch, and they confirm the findings by Beck (1984) that only a positive family interaction may reduce individual's stress, but relationships that involve a negative norms contribute stress (Kiecolt-Glaser et al., 1993).

Considering suggestions, social identification and its role for buffering individual's workplace stress is clear, in the present study there is the first attempt to research social identification as a moderator for decreasing workplace stress's negative impact on family functioning with samples in Kazakhstan. In addition, Wang, Repetti, and Campos (2011) found a relation between job stress and family social behavior and concluded that workplace stress affects family functioning in terms of talking and display of negative emotions. There was a significant correlation between these factors (r=0.30, p<0.05). The current study there takes account of these correlation coefficients, and proposes that if workplace stress affects family functioning, social identification would be a significant predictor moderating the relationship between workplace stress and family functioning of Kazakhstan teachers.

Thus, the main hypotheses formulated as following:

H. 1. Workplace stress would be negatively associated with family functioning.

H. 2. Social identification would be a moderator in a relationship between workplace stress and family functioning. Workplace stress's negative impact on family functioning dependent on individual's social identification level with their family group.

The aim of the study. To define the social identification's role for work and family life balance.

Materials and Methods

Data were collected from participants with the scales of multiple – choice questionnaire. The first scale that measured their workplace stress, participants were required to respond on questionnaire evaluated their feeling and thought during the last months at work. The second scale was about how participants perceive the quality of their family life. The last questionnaire was concerned with social identification with their family through scale that consists of three aspects of social identity, including ingroup ties, cognitive centrality and ingroup affect.

Types of scales are presented in Figure 1.

Workplace stress.

The workplace stress variable was measured by the Perceived Stress scale (PSS) that consists of 10 items (Cohen & Kamarck, 1994). They were asked questions (see Table 1), rating their feeling or thought in the last months at work in a certain way on a scale ranging from 0 to 4 (0 – never, 1 – almost never, 2 – sometimes, 3 – fairly often, 4 – very often).
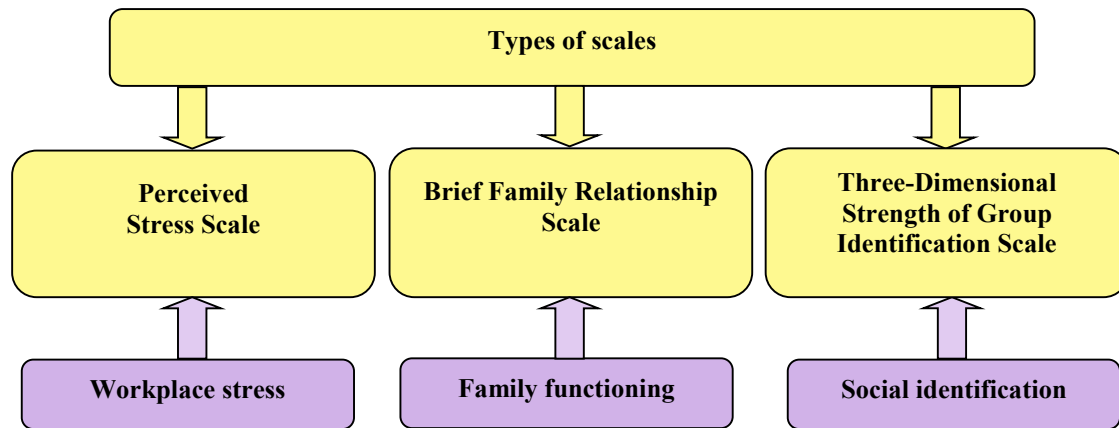
Figure 1. Types of scales for measuring of workplace stress, family functioning, and social identification of participants.

Table 1. The questionnaire for measuring of workplace stress (by Cohen and Kamarck).

Questions	Coefficient alpha
How often were you being upset because of something that happened unexpectedly?	0.754
How often did you have a feeling that were unable to control the important things in life?	0.779
How often did you feel nervous and stressed?	0.786
How often did you find that could not cope with all the things that had to do?	0.780
How often were you angered because of things that happened that were outside of control?	0.795
How often did you feel difficulties were piling up so high that could not overcome them?	0.790
How often did you feel confident about your ability to handle personal problems?	0.789
How often did you have a feeling that things were going way?	0.787
How often were you able to control irritations in life?	0.824
How often did you feel that were on top of things?	0.783

Workplace stress was calculated by reversing the scores of the questions firstly, and then adding the scores for each item. Higher score indicated high level of perceived workplace stress. The reliability score for PSS in this study was α=0.805.

Family functioning
Participants family functioning rate were measured by the Brief Family Relationship scale (BFFS) that was developed by Fok, Allen, Henry, and Team (2014). To measure participant's perception of the quality of their family identification, they were asked to complete the questions (see Table 2) by rating with 4-point rating scales: 0 – strongly agree, 1 – agree, 2 – disagree, 3 – strongly disagree.
Lower score indicated the higher family functioning. In the present study a Cronbach alpha for BFFS was 0.905.

Social identification
The Three-Dimensional Strength of Group Identification scale is an instrument developed by Cameron (2004) that measured participant's social identification level with their family. The scale consists of 12 items assessed participants 3 aspects of social identification: ingroup ties, cognitive centrality and ingroup affect. Responses are rated on 7 points rating scales from 1 (strongly disagree) to 7 (strongly agree). The negative direct half of the items on the scale were required to reverse scoring before analysis. Higher scores indicated participant's high social identification with their family. The Cronbach alpha coefficient for 12-item on the Three-Dimensional Strength of Group identification scale in the current study was 0.796.

Table 3 shows the Cronbach alpha coefficients for three scales.

Analyses of data
The hypotheses interaction between workplace stress and family functioning, social identification as a moderator for the association workplace stress with family functioning was analyzed by using Multiple linear regression analysis. The predictor variable was workplace stress and a moderator variable was social identification. These variables were manipulated with participants in the same groups. The dependent variable was a family functioning.

Procedure
Ethical approval of this study was gained from the Ethics Committee at the University of Exeter. They were informed about conducting research with university teachers about their work and family life. Before the completing data, participants were asked to read an information sheet with a consent form. They were informed of their right to withdraw from the study at any time. Furthermore, they receive instructions about their tasks during the study that would complete three types of questionnaires, which the time length for answering the questions of studies takes overall thirty minutes. In addition, they were informed via a consent form that there might be a few risk associated with the questionnaires for example, possible discomfort when answering some of the personal questions, and asked to sign the consent form whether they agreed to participate the study.

IJSA

Table 2. The questionnaire for measuring of family functioning (by Fok, Allen, Henry, and Team).

Questions	Coefficient alpha
In our family we really help and support each other	0.889
In our family we spend a lot of time doing things together at home	0.900
In our family we work hard at what we do in our home	0.902
In our family there is a feeling of togetherness	0.890
My family members really support each other	0.886
I am proud to be a part of our family	0.885
In our family we really get along well with each other	0.879

Table 3. The Cronbach alpha coefficients for the scales.

Scales	Cronbach alpha
Perceived Stress Scale	0.805
Brief Family Relationship Scale	0.905
Three-Dimensional Strength of Group Identification Scale	0.796

Results

Testing the hypotheses showed that there was a positive correlation coefficient between workplace stress and family functioning (r (82)=0.26, p<0.05). The negative correlation coefficient suggested that increasing participant's social identification, might lower effect of workplace stress on their family functioning (r (82)= -0.25, p<0.05).

Testing the question whether the nature of the relationship between workplace stress and family functioning was changed through a function of social identification. Examining the moderation effect started with the value whether both workplace stress and a moderator variable had a significant effect on family functioning, and as results showed that workplace stress variable was not significantly predicted on family functioning in this model (β=-0.57, t (79)=-6.19, p<0.05) which suggested, social identification influences on decrease workplace stress's affect on family functioning.

Furthermore, there was a significant difference in workplace stress's impact on family functioning when the interaction term by social identification level was added. The workplace stress variable was not significant, with the interaction between high social identification and workplace stress included model (β= -0.021, t (3.78)=-0.18, p=0.86). When the interaction between low social identification and workplace stress was included in the model, workplace stress was significant (β=0.41, t (3.78)=2.34, p=0.022).

In addition, there was correlation between workplace stress and family functioning r=0.60, for the participants whose social identification with their family low. In contrast, a correlation coefficient between workplace stress and family functioning was reported r=0.42, for the people whose social identification with their family were high. It can be seen that, the coefficient of the interaction between social identification and workplace stress was statistically significant for the moderation of workplace stress's negative impact on family functioning. The coefficients with workplace stress were not significant when a high social identification variable was added to the model. However, workplace stress was a significant variable on family functioning, with the low social identification interaction term. Finally, workplace stress's negative association with family functioning was dependent on individual's social identification level with their family members. Thus, predicting hypotheses were confirmed.

Discussion

Considering this, the result of the research conducting with participants – faculty members concluded that workplace stress had a direct negative effect on their family functioning. This supported analysis of qualitative questionnaire responses. It can be seen the results that individual's workplace stress's strong relation with their family might looks as through their feelings, thoughts, moods and abilities to cope with workplace stressors. This was particularly clear in responses to questions about an inability to control important things in their life, and thought about something unexpected happening at work. This finding is consistent with a previous study by Wang, Repetti, and Campos (2011) that individual's workplace stress impacts on their family by their moods, thoughts, and coping behaviours. Participant's low family identification might appear as a decrease in a sense of supporting each other, spending less time together and a low feeling of togetherness.

This tendency might be reasoned by following factors: firstly, it would depend on their job type. In fact, there is a high demand for teaching at university, in spite of the average level of income. Mainly, faculty members have motivation to work an academic environment by their scientific interest. In addition, teacher's stress might be linked with their job conditions. Secondly, cultural differences of participants might be influential factors for their workplace stress which has impact on family functioning. In countries where the majority of the population is Muslim the female has a choice of about working, but they are responsible for family members 'caring, having children, organization family support, and consequently keeping family stability. In fact, female's work load may be divided into two parts depending on cultural differences, before and after marriage. Despite being a successful worker in education and academic fields, they prioritize their family conditions, but it is clear from previous findings females' role as a worker is also a significant factor for their work-life balance. This attitude might influence

individual's sensitivity to workplace stressors which are related to their family functioning.

However, there a high level of perceived stress indicated only among married female participants, excluding males. This finding contradicted the previous conclusion of Wang et al. (2001) that suggested men display more negative emotion as a result of workplace stress, report high neuroticism and express more active and more negative social behavior, but these patterns were not identified in women. However, the result has similarity with the Pennebaker's (1982) conclusion that women are more likely to report symptoms of physical and emotional discomfort than men. This could be participant's in particular, females' cultural, demographic features. Moreover, it probably impacts of their combination and attempt to satisfy two environment responsibilities. This result would be a significant factor for future research, as similarly Seiffge-Krenke, Aunola, and Nurmi (2009) study about changes in stress perception and coping suggested that for workplace stress perception situational factors are more impactful than the levels of perceived stress.

On the other hand, as Barnett and Baruch (1985) study concluded that working has play more significant effect to female that impacted on their family relationship than male. In contrast, Pleck (1985); Rosalind, Lois, and Grace (1987) both study suggested that men are more psychologically involved in their families than their work roles, and their well-being is dependent on family. Thus, workplace stress's impact on family functioning among female's were clear, whereas participant - male's workplace stress might be influenced by female's workplace stress's affect on their family relationship.

The Multiple linear regression analysis results showed that the direct effect of workplace stress on their family functioning reduced under the social identification's moderating condition. It is because social identification changes the mechanism depending on individual's social identification level with their family. In fact, the nature of the workplace stress's impact on family functioning changed as a result of the inclusion of interaction between social identification and workplace stress. This means, the effect of workplace stress to family functioning was not significant in the presence of individual's high level social identification with their family. It is because when individual's social identification with their family was high, their cognitive appraisal about family was central, and their ingroup ties affected among members of family that caused to decrease workplace stress's affect on family. For instance, when their ingroup ties increase, members of their families help and support each other, spend a lot of time doing things together at home, also work hard at what they do in their home. This feeling of togetherness might lead to them increasing their family ingroup effect that was expressed they were proud to be a part of their family; getting along well with each other members which consequently, guiding family as a central an individual's mind. Furthermore, cognitive appraisal is central to theories of psychological stress (Wang et al., 2011). Moreover, as outlined previous studies, when individuals perceive themselves as part of that group, increase the feeling that they are supported which has a significant role for decreasing workplace stress's influence to family functioning (Haslam & Reicher, 2006).

In fact, there individual's whose social identification with their family was low, showed poor family relationship patterns, such as having difficulties to form a bond with other members, and decrease sense a family as a central part their self-image. Individual's social recourse from their family is a key variable in establishing their confidence in their ability to cope with stress (Klink, Byars-Winston, & Bakken, 2008). Because when members have identity and categorize as one group, this may influence their protecting group members from adverse reactions to strain and perceptions, increase a sense of support and responses for workplace stress (Haslam et al., 2005). Furthermore, social interaction might shape individual's psychological development by norms, roles and rules (1979) by reducing their stress. Previous finding by Haslam and Reicher (2006) claimed that when there is lower a sense of social identification among members of the group, this reduces the ability to resist the stressors. In addition, social identification variable interacts significantly with workplace stress on family functioning variable in the prediction of moderation for workplace stress effect, consistent with interactional model of personality theories (Endler & Magnusson, 1976). Consistent with such theories, 'actual behavior is determined by a continuous and multidirectional interaction between person variables and situation variables' (Magnusson & Endler, 1976) which means social identification with family as a situation and individual's responsibility to perceive and value family as centrality as personal variables play an important role changing stress.

The results of examination of workplace stress's negative association with family functioning, and social identification's role for workplace stress moderation concluded that the higher level of individual's social identification with their family, the lower negative effect from workplace stress on their family functioning. It is because when their sense of identity is high, they might influence others emotionally which gives them power to cope with stressors. Whereas negative social identification or poor relationship among members of family might a reason of workplace stress's significant impact on family functioning.

Conclusions

To conclude, workplace stress has a negative association with faculty member's family functioning. Individual's high social identification with their family is an effective coping method with workplace stress and, moderates the relationship between workplace stress and family functioning. Keeping faculty member's work and family life balance is dependent on their social identification level with family group.

References

Avanzi, L., Fraccaroli, F., Castelli, L., Marcionetti, J., Crescentini, A., Balducci, C., & Dick, R. (2018). How to mobilize social support against workload and burnout: the role of organizational identification. *Teaching and Teacher Education*, *69*, 154–167. doi:10.1016/j.tate.2017.10.001

Baider, L., Ever-Hadani, P., Goldzweig, G., Wygoda, M. R, & Peretz, T. (2003). Is perceived family support a relevant variable in psychological distress? A sample of prostate and breast cancer couples *Journal of Psychosomatic research, 55*(5), 453–460. doi:10.1016/s0022-3999(03)00502-6

Barnett, R. C., & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal Personal Social Psych*ology, *49*(1), 135–145. doi:10.1037//0022-3514.49.1.135

Beck, A. (1984). Cognitive approaches to stress. In R. L. Woolfolk, & P. M. Lehrer (Eds), *Principles and Practices of stress management* (pp. 255–305). New York: Guilford.

Billings, A., & Moos, R. (1982). Work stress and the stress-buffering roles of work and family resources. *Journal of Occupational Behaviour, 3*, 215–232. doi:10.1002/job.4030030303

Cameron, J. (2004). A three factor model of social identity. *Self and Identity*, *3*(3). 239–262. doi:10.1080/13576500444000047

Cohen, S., & Kamarck, T. (1994). A global measure of perceived stress. *Journal of Health and Social Behaviour*, *24*(4), 385–396.

Ellemers, N., Koetekaas, P., & Ouwerkerl, J. (1999). Self-categorization, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology, 29,* 371–389.

Endler, N. S., & Magnusson, D. (1976). Toward an interactional psychology of personality. *Psychological Bulletin*, *83*(5), 956–974. doi:10.1037/0033-2909.83.5.956

Fok, C. C., Allen, J., Henry, D. & Team, P. A. (2014). The brief family relationship scale: A brief measure of the relationship dimension in family functioning. *Sage Journals, 21*(1), 67–72. doi:10.1177/1073191111425856

Haslam, S. A, O'Brien, A., Jetten, J., Volmedal, K., & Penna, S. (2005). Taking the strain: social identity, social support and the experience of stress. *British Journal Social Psychology, 44*(3), 355–370. doi:10.1348/014466605X37468

Haslam, S. A., & Reicher, S. (2006). Stressing the group: Identity and the Unfolding Dynamics of responses to stress. *Journal of Applied Psychology, 91*(5), 1037–1052. doi:10.1037/0021-9010.91.5.1037

Kiecolt-Glaser, J. K, Malarkey, W. B., Chee, M., Newton, T., Cacioppo, J. T., Mao, H. Y., & Glaser, R. (1993). Negative behavior during marital conflict is associate with immunological down-regulation. *Psychosomatic Medicine,* *55*(5), 395–409. doi:10.1097/00006842-199309000-00001

Klink, J. L., Byars-Winston, A., & Bakken, L. L. (2008). Coping efficacy and perceived family support: potential factors for reducing stress in premedical students. *Medical Education*, *42*(6), 572–579. doi:10.1111/j.1365-2923.2008.03091.x

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Press.

Magnusson, D., & Endler, N. S. (1976). (Eds). *Personality at the cross-roads: current issues in interactional psychology*. New York: Halsted Press.

Melnyk, Yu. B., & Pypenko, I. S. (2018). Training of future specialists in higher education institutions. *International Journal of Science Annals, 1*(1-2), 4–11. doi:10.26697/ijsa.2018.1-2.01

Melnyk, Yu., & Stadnik, A. (2018). Mental health of a personality: diagnostics and prevention of mental disorders. *International Journal of Education and Science, 1*(3-4), 50. doi:10.26697/ijes.2018.3-4.37

Pennebaker, J. W. (1982). *The psychology of physical symptoms*. New York: Springer-Verlag.

Pleck, J. H. (1985). *Working wives/working husbands*. Beverly Hills, CA: Sage.

Rosalind, C., Lois, B., & Grace, B. K. (1987). (Eds). *Gender and stress*. London: Collier Macmillan.

Seiffge-Krenke, I., Aunola, K., & Nurmi, J. (2009). Changes in stress perception and coping during adolescence: The role of situational and personal factors. *Child Development*, *80,* 259–279. doi:10.1111/j.1467-8624.2008.01258.x

Taifel, H. (1978). Social categorization, social identity and social comparison. In H. Taifel (Ed.), *Differentiation between social groups: Studies in the social psychology of ingroup relations* (pp. 61–76). London: Academic Press.

Taifel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–37). California: Brooks/Cole.

Wang, Sh., Repetti, R., & Campos, B. (2011). Job stress and family social behavior: the moderating role of neuroticism. *Journal of Occupational Health Psycho*logy, *16*(4), 441–456. doi:10.1037/a0025100

Zellars, K. L., & Perrewé, P. L. (2001). Affective personality and the content of emotional social support: Coping in organizations. *Journal of Applied Psychology, 86*(3), 459–467. doi:10.1037/0021-9010.86.3.459