LOCUS OF CONTROL AND DECISION-MAKING COMPETENCE AS PREDICTORS OF WORK STRESS AMONG BUSINESS EDUCATION TEACHERS IN TERTIARY INSTITUTIONS IN NIGERIA

Ile C.M.¹, Ogochukwu Gloria Nnonyelu²

¹Professor, Department of Technology and Vocational, Education, Faculty of Education Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

²Msc Research Scholar, Department of Technology and Vocational, Education, Faculty of Education Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

Article DOI: https://doi.org/10.36713/epra13877

DOI No: 10.36713/epra13877

ABSTRACT

Stress has become a common phenomenon that is increasingly associated with the workplace. This study investigated the extent to which locus of control and decision-making competence serve as predictors of work stress among business educators in public tertiary institutions in Anambra State. Two research questions guided the study, while two null hypotheses were tested at the 0.05 level of significance. The study adopted correlational survey research design. The sample comprised 112 business educators in all the public institutions in Anambra State. A total of three research instruments were used to elicit data for this study. They include the Locus of Control Scale (LCS), the Decision Making Competence Questionnaire (DMCQ), and the Work Stress Scale (WSS-10). The reliability coefficient alphas for the instruments were established using Cronbach's alpha statistics. The outcome yielded reliability coefficient alpha of 0.73 for LCS, 0.76 for DMCQ, and 0.88 for WSS. Data were collected through the direct administration of the instrument to the respondents. The collected data were analysed using simple linear regression. The findings of the study revealed, among others, that locus of control was a significant predictor of work stress among business educators in public tertiary institutions in Anambra State. The findings further revealed that decision-making competence is not a significant predictor of work stress among business educators in public tertiary institutions in Anambra State. Based on the findings, it was recommended that the school administration should encourage business educators in public tertiary institutions to strengthen their locus of control in order to lessen stress at work. They should implement training initiatives to educate business educators on the implications of locus of control in work stress. These initiatives could include workshops, seminars or online courses.

KEYWORDS: Locus of control, Decision-making competence, Work stress, Predictors, Business educators, Tertiary institutions

1. INTRODUCTION

Stress has become a common phenomenon that is increasingly associated with the workplace. It seems to be everywhere and is perceived by many as constituting a major threat to both the mental and physical health of workers, especially those in the teaching profession. The World Health Organisation (WHO, 2016) stated that stress has become an increasingly health-threatening condition around the world. Today, a good number of studies, such as those by Lasebikan (2016), Alson (2019), and Akuezuilo and Azuji (2019), have shown that teaching is a highly stressful profession, not only in Nigeria but globally. Thus, stess has been highlighted as one of the primary elements affecting teachers' productivity and performance, especially among those teaching in public tertiary institutions.

People teaching business education programme in public institutions are referred to as business educators. This group of people, due to the nature of their job, was likely to experience work-related stress as a result of numerous job demands and pressures that could challenge their knowledge and abilities. More so, because of the important contribution these teachers make in the lives of students, stress among them has become an issue of great concern that cannot be easily overlooked. The reason is that business educators, much like teachers at all levels of schooling, are crucial agents of socialisation, helping students attain their full potential and develop into responsible citizens in addition to supporting learning.

In recent times, teaching has become increasingly stressful, especially in developing countries like Nigeria, where teachers seem to have become more like endangered species. The

situation even seems more challenging among those teaching in public tertiary institutions, such that these teachers not only battle with work overload, teaching both theoretical and practical business lessons, but also have to deal with an increasingly poor school climate, ineffective leadership, poor remuneration and poor work conditions coupled with the "publish or perish" syndrome that seem to have put every teacher on edge (Osamwonyi, 2016). All these factors put together seem to have jointly contributed to making the teaching profession more challenging and stressful, especially among business educators.

Teacher stress can be defined, according to Karner and Honing (2021), as a response of negative affect (such as anger or depression) by a teacher, usually accompanied by potentially pathogenic physiological and biochemical changes (such as an increased heart rate). This usually results from aspects of the teacher's job and is mediated by the perception that the demands made on the teacher constitute a threat to their self-esteem or well-being. Thus, in the context of this study, teachers' Work stress can be described as the teachers' adaptive response to any external action, situation or event that sets specific physical and/or psychological demands on the teacher as a person, mediated by individual features and/or psychological processes.

Business educators often experience the concepts outlined in the definitions of stress, which are essential for a comprehensive understanding of the subject. These include situational demands or stressors that cause people to adapt, in which individuals tend to react and adapt in different ways to the stressors they are presented with. In this situation, some form of physical and/or psychological response will likely occur. Therefore, both external and internal characteristics known as loci of control may come into play to determine the extent of physical and emotional responses exhibited by individuals as a result of stressors.

Locus of control, according to Rotter in Chiang, Fang, and Kaplan (2019), is a cognitive factor referring to the extent to which individuals perceive that they have control over the expectations of reinforcement and are responsible for the outcomes, successes and failures in their lives. It explains the degree to which one perceives events as being under one's control (internal locus) or under the control of external factors (external locus). Individuals with a high internal locus of control believe that outcomes such as success and failure are influenced by their own efforts and that responsibility for whether or not they get reinforced ultimately lies with them. On the other hand, individuals with an external locus of control believe that their own efforts have little impact on the amount of reinforcement they receive and that outcomes such as success and failure in life are controlled by external factors such as luck, chance, fate, destiny, society or other forces beyond their control.

Studies carried out by Clark, Jany and Philippi (2020); Ayodele and Oluwole (2015); Raveendran and Sivaneswaran (2019); Padmanabhan (2021) and Locke (2016) have shown that locus

of control plays a significant role in stress management and increases or decreases negative emotions, particularly in the working environment. Since individuals differ in their locus of control, workplace stress may not have the same effect on all the teachers, going by the notion that there are ranges of personal, social, and environmental moderators within each person that could influence their susceptibility and coping abilities in relation to the stressors experienced.

Stress not only has negative consequences for teachers, it also results in lower student achievement and higher costs for schools and society as a whole. For instance, a study conducted in Lagos, Nigeria, showed that the negative impact of teachers' stress often results in students' poor performance, their indiscipline, and even increased school dropout rates (Katharine, 2014). However, for teachers in public institutions like business education, those with more positive work values would likely be more capable of handling teaching jobs. Such a teacher may have a more optimistic attitude towards educational tasks and devote more time to teaching business innovations.

However, literature (such as Kyriacou, 2017; and Schumann, 2019) shows that stressors are categorised using different levels of analysis. Kyriacou (2017), for example, differentiates stressors at the personal level (such as relating with colleagues), the school level (such as managing class size and workloads), and the system level (such as school demands). Sometimes, the response to such demands can be useful, helping the teacher push through fear or pain to achieve a specific goal. However, when the demands become stressful, as Harvard Health (2020) noted, they become debilitating and can affect the individual's physical and mental health.

Stress responses can occur when the perceived environmental demands exceed an individual's regulatory capacity (Karasek, 2019). Stress can arise quickly or evolve over time because of cognitive evaluations of situations and potential consequences (that is, depending on how individuals appraise the balance between perceived resources and perceived demands). Stress can be evaluated as challenging or threatening, which in turn has different effects on cognition. Thus, various individual features, such as decision-making competence and social orientation, may contribute to an individual's perception of stress.

Decision-making competence is defined according to Parker, Bruine de Bruin, Fischhoff and Weller (2017) as an individual's tendency to follow normative rational principles in decision-making. It can also be defined as a construct that can be assumed to be related to performance and exhaustion in work-life settings (Ceschi, Demerouti, Sartori, and Weller, 2017). For example, a study by Santos-Ruiz et al. (2012) reported that individuals with higher decision-making ability showed significantly lower levels of cortisol before as well as after they were confronted with a stressful situation. Thus, decision-making does not only include choice but also the processes associated with making a decision (that is, the decision-making process). Decision-making competence in the context of this

study involves how various aspects of teachers' decision-

According to Alson (2019), decision-making competence can be considerably affected by the dynamics of the environment because most naturally dynamic situations contain a lot of uncertainty. A dynamic situation continually changes, and a decision-maker has to take temporal changes into consideration. A business educator, as a decision-maker, therefore, can use feedback on the effect of his or her actions in the school. In other words, as decisions are made and actions taken, the results of the decisions may be taken into consideration and the information used in subsequent decisions. Additionally, in dealing with the uncertainty of a continually changing learning environment, the teacher as a decision-maker needs to achieve a trade-off between the cost of action versus the risk of not taking action, as they all have the tendency to create stress at the end.

making processes influence decision outcomes.

Reports from previous studies such as Bruine de Bruin, Parker and Fischhoff (2007) and Dewberry, Juanchich and Narendran (2013) have shown that successful decision-making depends on the cognitive abilities to perform systematic and normatively rational decision processes and that decision-making competence has the tendency to affect real-life decision-making outcomes. Further, Shields, Lam, Trainor and Yonelinas (2016) found that experimentally manipulating acute stress affected participants' decision-making competence and performance outcome. However, the study did not go further to establish the relationship between decision-making competence and Work stress among the participants.

Business educators in tertiary institutions face a unique set of challenges and stressors, which can lead to burnout and decreased job satisfaction (Chambers, 2019). The stress of teaching complex theories, managing multiple classes and developing innovative learning experiences can be overwhelming. Additionally, the ever-evolving nature of business education and the need to keep up with the most current teaching techniques can add to the already heavy workload of business educators. The rising workload and lack of resources in many tertiary institutions have the tendency to create an environment that is not conducive to the teaching profession. Business educators often find themselves with limited resources, large class sizes and outdated teaching materials. This can lead to a feeling of isolation as well as decreased job satisfaction.

Furthermore, business educators often seem to lack adequate support from their institutions. They often seem to lack the mentorship and guidance needed to develop professionally and provide quality education. The lack of support can lead to feelings of burnout, which can ultimately affect students' learning (Chambers, 2019). It is therefore essential for tertiary institutions to address the unique stressors and challenges faced by business educators. This could include providing access to professional development and mentorship opportunities as well as adequate resources for teaching. Additionally, providing

adequate compensation for business educators is essential to maintaining job satisfaction and reducing stress.

It is important to note that some in-service programmes including sponsoring teachers for in-service training and organising seminars, workshops, conferences, and symposia on educational matters, have been organised by the government at various times towards improving teachers' job productivity and effectiveness, such programmes These programmes are carried out with some noticeable improvement recorded in the issue of teachers' jobs, especially at the primary and secondary school level. However, not much seems to have been done in order to address the lingering issue of stress experienced by teachers in tertiary institutions, especially among business educators teaching in public institutions in Anambra State. This motivated the researchers to embark on this study.

Statement of the Problem

Similar to other teachers in public institutions in Nigeria, business educators seem to encounter challenges that lead to enormous amounts of stress. In fact, stress levels among business educators seem to be increasing due to increased workload, high job demands, student misbehaviour, poor working conditions, poor relationships at work, role conflict, role ambiguity, a lack of complete autonomy, poor school ethos and decreasing developmental opportunities. These have the tendency to affect their health and well-being and would likely lead to teacher burnout, job dissatisfaction and poor performance.

Although literature is filled with studies on the causes, influence and effect of stress among teachers in Nigeria, not much has been done to investigate the contributions of variables like locus of control and decision-making competences as predictors of Work stress among business educators. The few available related studies were mostly conducted outside Nigeria, thus creating a gap in literature, which this study filled. Therefore, the problem of this study is to examine locus of control and decision-making competence as predictors of work stress among business education teachers in public tertiary institutions in Anambra State.

2. OBJECTIVES OF THE STUDY

The main purpose of the study was to examine locus of control and decision-making competence as predictors of work stress among business education teachers in public tertiary institutions in Anambra State. Specifically, the study examined:

- 1. The extent to which locus of control predicts Work stress among business educators in public tertiary institutions in Anambra State
- 2. The extent to which decision-making competence predicts Work stress among business educators in public tertiary institutions in Anambra State

Research Questions

The following research questions guided this study:

1. To what extent does locus of control predict Work stress among business educators in public tertiary institutions in Anambra State?



EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal

Volume: 9| Issue: 7| July 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

To what extent does decision-making competence predict Work stress among business educators in public tertiary institutions in Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

- 1. Locus of control is not a significant predictor of Work stress among business educators in public tertiary institutions in Anambra State.
- Decision-making competence is not a significant predictor of Work stress among business educators in public tertiary institutions in Anambra State.

3. METHODOLOGY

The study was carried out in Anambra State and adopted correlational survey research design. A correlational design is a kind of design that o establishes a relationship between two or more variables as well as indicate the direction and magnitude of the relationship between the variables (Nworgu, 2015).

4. SAMPLING DESIGN

The entire population of 112 business educators in all the public institutions in Anambra State was used for the study. Thus, there was no sampling since the population was manageable. A total of three research instruments were used to elicit data for this study. Locus of Control Scale contained 16 work-related items (such as, job effort, getting a job, promotions) to which participants responded to on a four-point scale of Strongly agree to strongly disagree. The scale had equal numbers of internally- and externally-worded items. Higher scores on LCS indicated externality, which is also the case with Rotter's (1966) measure.

Decision Making Competence Questionnaire (DMCQ) comprised 15 items that measured decisional self-esteem (respected and confident) and decision-making styles (vigilant and intuitive) of the study participants). It was measured on a 4-point rating scale of Always, sometimes, rarely and never.

The Work Stress Scale (WSS) was used to assess stress levels in young people and adults aged 12 and above. It evaluates the degree to which an individual has perceived life as unpredictable, uncontrollable and overloading over the previous month. In each case, respondents were asked how often they felt a certain way. The scale was measured on a fourpoint scale from 'never' to Always.

5. STATISTICAL DESIGN

Direct delivery approach was adopted in the administration of the questionnaire to the respondents. Data collected were analysed using the simple linear regression analysis to answer research questions and test the null hypotheses.

6. RESULTS

Research Question 1

To what extent does locus of control predict work stress among business educators in public tertiary institutions in Anambra State?

Table 1: Regression Analysis on the Extent Locus of Control Predict Work Stress among Business Educators in Public Tertiary Institutions in Anamhra State

R	R Square	Adjusted R Square	R Square Change	Beta	% added
0.424	0.180	0.172	0.180	0.424	42.4

Table 1 show that the locus of control has a beta of 0.424. This indicates that locus of control contributes 42.4 percent of work stress among business educators in public tertiary institutions in Anambra State.

Research Ouestion 2

To what extent does decision-making competence predict Work stress among business educators in public tertiary institutions in Anambra State?

Table 2: Regression Analysis on the Extent Decision-making Competence Predict Work Stress among Business Educators in Public Tertiary Institutions in Anambra State

R	R Square	Adjusted R Square	·		% added
0.012	0.000	-0.009	0.000	-0.012	1.2

In Table 2 shows that social orientation has a beta of -0.012. This indicates that decision-making competence contributes 1.2 percent to work stress among business educators in public tertiary institutions in Anambra State.

Null Hypothesis 1

Locus of control is not a significant predictor of Work stress among business educators in public tertiary institutions in Anambra State.

EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal Volume: 9| Issue: 7| July 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

Table 3: Regression Analysis on Locus of Control as a Significant Predictor of Work Stress among Business Educators in **Public Tertiary Institutions in Anambra State**

R	R Square	Adjusted R Square	R Square Change	Beta	%add	Cal. t.	df	Pvalue	Remark
0.424	0.180	0.172	0.180	0.424	42.4	4.803	105	0.000	S

S = Significant

Table 3 reveals that at 105 df and a 0.05 level of significance, the calculated t is 4.803 with a p-value of 0.000, which is less than 0.05, and the null hypothesis is rejected. Therefore, locus of control is a significant predictor of work stress among business educators in public tertiary institutions in Anambra State.

Null Hypothesis 2

Decision-making competence is not a significant predictor of Work stress among business educators in public tertiary institutions in Anambra State.

Table 4: Regression Analysis on Decision-Making Competence as a Significant Predictor of Work Stress among Business **Educators in Public Tertiary Institutions in Anambra State**

R	R Square	Adjusted R Square	R Square Change	Beta	%add	Cal. t.	df	Pvalue	Remark
0.012	0.000	-0.009	-0.009	-0.012	-1.2	-0.126	105	0.900	NS

NS = Not Significant

Table 4 reveals that at 105 df and a 0.05 level of significance, the calculated t is -0.126 with a p-value of 0.000. Since the pvalue is greater than the stipulated 0.05 level of significance, the null hypothesis is rejected. Therefore, decision-making competence is not a significant predictor of work stress among business educators in public tertiary institutions in Anambra State.

7. DISCUSSION

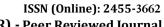
The findings of the study revealed that locus of control contributed 42.4 percent of work stress among business educators in public tertiary institutions in Anambra State. The finding also revealed that locus of control was a significant predictor of work stress among business educators in public tertiary institutions in Anambra State. The findings were consistent with previous research. The studies by Ayodele and Oluwole (2015), Raveendran and Sivaneswaran (2019), Padmanabhan (2021) and Locke (2016) all showed that people with external locus of control are more likely to experience higher levels of work stress than people with internal locus of control. These studies suggest that an individual's locus of control is a significant predictor of work stress. The study of Ayodele and Oluwole (2015) provides justification for this finding.. In their study, they investigated locus of control as a predictor of work stress among business education teachers in public tertiary institutions in Nigeria. They found that the locus of control of the teachers affected their work-related stress levels, with those who had an internal locus of control having lower stress levels than those with an external locus of control. The findings of the study also revealed that decision-making competence contributed 1.2 percent to work stress among business educators in public tertiary institutions in Anambra State. The findings further revealed that decision-making competencewas not a significant predictor of work stress among business educators in public tertiary institutions in

Anambra State. The results of the study showed that decisions can affect how much stress people experience. While this contribution may seem small, it is important to recognise that even a small amount of stress can have a significant impact on an individual's wellbeing. Decision-making can be a difficult and stressful process, and the ability to make sound decisions can help reduce the amount of stress associated with it. Therefore, it is important to recognise the impact decisionmaking has on stress levels.

Bavol'ar and Orosova (2015) conducted a study that showed low relationships between decision-making styles and work stress. This finding suggests that decision-making competence may not be as influential in determining work stress levels as other factors. The fact that there are numerous other factors that can affect a person's stress levels may help to explain the findings that showed that decision-making competence is not a significant predictor of work stress among business educators in public tertiary institutions in Anambra State. For example, workload, job satisfaction, job security and work-life balance can all have a significant impact on the amount of stress an individual experiences. Therefore, it is important to consider other factors that may influence an individual's stress levels in addition to decision-making competence.

8. CONCLUSIONS

Based on the findings of the study, the study concludes that locus of control is a significant predictors of work stress among business educators in public tertiary institutions in Anambra State. Decision-making competence is not found to be a significant predictor of work stress.





EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal

Volume: 9| Issue: 7| July 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

9. IMPLICATIONS OF THE STUDY

The study suggests that locus of control and decision-making competence all have an effect on work stress among business educators in public tertiary institutions in Anambra State. These findings have important implications for business educators in public tertiary institutions in Anambra State. It suggests that the way business educators think about their ability to control outcomes and their decisions can all influence their work stress levels. Thus, business would see the need to pay more attention to these aspects of their work and consider ways to improve their locus of control and decision-making competence in order to reduce their stress levels.

10. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

- Administrators of public tertiary institutions should encourage business educators in public tertiary institutions to strengthen their locus of control in order to lessen stress at work. They should implement training initiatives to educate business educators on the implications of locus of control on work stress. These initiatives could include workshops, seminars, or online courses.
- Tertiary institutions administrators should provide resources and training for business educators to build their decision-making competence. They should encourage business educators to be more proactive in their decision-making processes and empowered to make informed decisions and take ownership of their choices.

REFERENCES

- Akuezuilo, J.A and Azuji, I.M. (2019). Extent of school-related stress occurrence among secondary school teachers in Anambra State: Implication for health counselling. International Journal of Research and Scientific Innovation (IJRSI), 6(5), 90-94. https://www.rsisinternational.org/journals/ijrsi/digitallibrary/volume-6-issue-5/90-94.pdf
- Alson, J. (2019). Stress among public school teachers. Journal of Research Initiatives, 4(2), 3. Retrieved from: https://digitalcommons.uncfsu.edu/jri/vol4/iss2/3.
- 3. Ayodele, O. & Oluwole, A. (2015). Locus of control as a predictor of work stress among business education teachers in public tertiary institutions. Journal of Educational Research and Reviews, 3(3), pp.1-7.
- 4. Bavol'ar, J. Orosova, O. (2015). Decision-making styles and their associations with decision-making competencies and mental health. Judgement and Decision-making, 10(1), 115-122.
- 5. Bruine de Bruin, W., Parker, A. M., and Fischhoff, B. (2007). Individual differences in adult decision-making competence. Journal of Personality and Social Psychology, 92(5), 938-956. doi: 10.1037/0022-3514.92.5.938
- Ceschi, A. (2017). Decision-making processes in the workplace: how exhaustion, lack of resources and job demands impair them and affect performance. Frontiers in Psychology, 2(3), 321-333.
- Chambers, J. (2019). Supporting Business Educators: Preventing Burnout in the Classroom. Business Education Forum, 73(1), 14-20.
- 8. Chiang, Y, Fang, W. and Kaplan, U. (2019). Locus of control: The mediation effect between emotional stability and proenvironmental behaviour. Sustainability, 11(820), 1-14.

- 9. Clark, K.; Jany, M.; and Philippi, C. (2020). chronic stress in relation to locus of control. Undergraduate Research Symposium. 31. https://irl.umsl.edu/urs/31.
- Dewberry C., Juanchich M., Narendran S. (2013). Decision-making competence in everyday life: the roles of general cognitive styles, decision-making styles and personality. Personal. Individ. Dif. 55, 783–788. 10.1016/j.paid.2013.06.012
- Harvard Health (2020). Understanding the stress response. Harvard Health Publishing. Retrieved from https://www.health.harvard.edu/staying-healthy/understandingthe-stress-response
- 12. Karasek R. A. (2019). Job demands, job decision latitude and mental strain: implications for job redesign. Administrative Science Journal. 24, 285–307.
- 13. Kärner, T., Höning, J. Teachers' experienced classroom demands and autonomic stress reactions: results of a pilot study and implications for process-oriented research in vocational education and training. Empirical Res Voc Ed Train 13, 8 (2021). https://doi.org/10.1186/s40461-021-00113-3
- 14. Katharine, R.P. (2014). Locus of control, cognitive appraisal, and coping in stressful episodes. Journal of Personality and Social Psychology, 46(3), 655-668.
- 15. Kyriacou C. (2017). Teacher stress and burnout: An international review. Educational Resource, 29(2), 146–52.
- Lasebikan, V. O. (2016). Expert panel's modification and concurrent validity of the teacher stress inventory among selected secondary school teachers in Nigeria. Psicologia: Reflexão e Crítica, 29, 1–7. https://doi.org/10.1186/s41155-016-0047-3
- 17. Osamwonyi, E.F. (2016). In-service education of teachers: Overview, problems and the way forward. Journal of Education and Practice, 7(26), 83-87. retrieved from https://files.eric.ed.gov/fulltext/EJ1115837.pdf.
- Padmanabhan, S. (2021). The impact of locus of control on workplace stress and job satisfaction: A pilot study on privatesector employees. Current Research in Behavioral Sciences, 2(9), 200-222
- Parker A. M., Bruine de Bruin W., Fischhoff B., Weller J. (2017). Robustness of decision-making competence: Evidence from two measures and an 11-year longitudinal study. Journal of Behavioral Decision Making, 12(12).
- 20. Raveendran, T. and Sivaneswaran, A. (2019). Influence of locus of control on job stress of teachers in jaffna. Journal of Business Studies, 6(2), 95-116.
- 21. Santos-Ruiz, A., Garcia-Rios M. C., Fernandez-Sanchez, J. C., Perez-Garcia, M., Muñoz-García M. A., Peralta-Ramirez, M. I. (2012). Can decision-making skills affect responses to psychological stress in healthy women? Psychoneuroendocrinology, 37, 1912–1921. 10.1016/j.psyneuen.2012.04.002
- 22. Schumann S (2019) Belastungserleben von angehenden Lehrpersonen der Sekundarstufe II in der Schweiz und in Deutschland. In: Holtsch D, Oepke M, Schumann S (eds) Lehren und Lernen auf der Sekundarstufe II. Gymnasial-und wirtschaftspaedagogische Perspektiven. hep, Bern, pp 430–440
- Shields, G. S., Lam J. C. W., Trainor, B. C., Yonelinas, A. P. (2016). Exposure to acute stress enhances decision-making competence: evidence for the role of DHEA. Psychoneuroendocrinology 67 51–60. 10.1016/j.psyneuen.2016.01.031.