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Fatigue and perceived social support as predictive factors for aggressive behaviors among mental healthcare professionals

OBJECTIVE To examine the relationship of perceived social support and fatigue as predictors of aggressive behaviors among mental healthcare professionals. **METHOD** A cross-sectional study was conducted between April 2018–June 2018 with 104 mental healthcare professionals who completed three questionnaires online, specifically, the Greek version of the Fatigue Assessment Scale (FAS), the Greek version of the Multidimensional Scale of Perceived Social Support (MSPSS) and the Greek version of the Aggression Questionnaire (G-AQ). The analysis was conducted using the Statistical Package for Social Sciences (SPSS), version 22.0. Descriptive statistics, multiple linear regression analysis, and the Pearson (r) correlation coefficient test were used. **RESULTS** The mental healthcare professionals reported high rates of fatigue and aggression and low levels of social support. Fatigue was reported by 54.8% (n=57) of the sample. The total score on FAS and its dimensions “mental fatigue” and “physical fatigue” were found to be significant predictors of aggressive behavior, while social support was not. The total score on MSPSS was found to be a significant predictor of “physical aggression”. In addition, a statistically significant relationship was found between fatigue and perceived social support. **CONCLUSIONS** Mental healthcare professionals present high rates of fatigue and aggression and record low levels of social support. These findings are of importance for developing a model of intervention that can prevent and diminish aggressive behaviors in this group.

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Η κόπωση και η αντιληφθείσα κοινωνική στήριξη ως παράγοντες επιθετικής συμπεριφοράς σε επαγγελματίες ψυχικής υγείας

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Working in healthcare surroundings and under potentially demanding circumstances may have severe consequences for the working attitudes of healthcare professionals and their general physical and psychosocial well-being. Phenomena such as burnout, depression, and fatigue are common findings among physically and mentally exhausted healthcare personnel.^{1,2} Domains related to their social life and social interactions (family, friends and significant

others) tend to be overlooked and considered of lesser importance to work-exhausted healthcare professionals. Social activities may be reduced to a minimum and the tendency of keeping to oneself becomes common practice among healthcare personnel.³

Fatigue is one of the most common symptoms that healthcare professionals experience.⁴ Lack of harmony in the daily routine has been associated with higher scores

of fatigue on relevant scales. Healthcare professionals, and specifically nurses, who work in rotation shifts, present higher levels of anxiety, depression and fatigue than those who work under a standardized schedule.^{5,6} Studies have shown that sleep deprivation and higher levels of fatigue can worsen a person's mood, resulting in high scores of anxiety, depression, anger and confusion on the relevant scales.^{7,8} Increased levels of compassion fatigue have also been reported in healthcare professionals who work in shifts, and in more demanding surroundings such as the intensive care unit (ICU). Intervention strategies have been suggested, some of which are connected to improvement of perceived social support.^{9,10}

In addition, aggressive behaviors are common in the working environment of healthcare professionals, adding to the possible burnout and depression that may have already developed as a result of the demanding dynamics.¹¹⁻¹³ Aggression among healthcare professionals is a multidimensional phenomenon that cannot be addressed solely by exploring the effect of one variable. Fatigue, perceived social support, depression, and burnout are all factors that may influence, positively or negatively, the mental and physical state of healthcare workers.^{12,13} On the other hand, frustrated patients may express violent feelings towards health professionals, who, in extreme cases, may exceed their professional limits and behave violently with the patients.¹³ The source of this aggression can thus be either the professionals themselves or their dissatisfied patients, or both. In one study¹⁴ it was shown that of healthcare professionals who had been harassed by patients or their visitors, only 45% had reported the incident to the hospital authorities. The experience of aggression from patients is perceived as a problem to be solved on a greater scale, transcending the individual boundaries of the employees themselves.¹⁵ Conversely, aggressive behaviors on the part of a co-worker are perceived as the employee's own problem, which creates a sense of unfairness and isolation.¹⁶

Studies documenting the effect of social support in the event of aggressive behavior have been conducted with adolescents,¹⁷ university students,¹⁸ schoolchildren¹⁹ and older women.²⁰ Regarding the aggressive behavior of mental health professionals themselves, one research study only concluded that depression can be considered as a predictor of their aggressive behavior.²¹

MATERIAL AND METHOD

Objective

Given the lack of evidence on the aggressiveness of mental health professionals themselves and its determinants, the purpose

of this study was to investigate whether fatigue and absence of perceived social support are predictive factors for aggressive behaviors among mental health professionals, and to explore the relationship between aggressive behavior and fatigue, perceived social support and their various dimensions. It was expected that higher scores on scales for fatigue and lower scores on scales for perceived social support would be associated with higher scores for aggressive behavior. This study is the first to examine the relationship between these variables, and the only one to explore these variables among mental healthcare professionals. The results of this study were expected to provide a better understanding of how perceived social support and fatigue affect mental healthcare professionals, with a view to designing intervention.

Design

The study used a cross-sectional design, with "perceived social support" and "fatigue" as independent variables and "aggressive behavior" as the dependent variable.

Participants

The study was conducted between April and June 2018 with the participation of 104 mental health professionals. The inclusion criteria were: (a) Completion of an informed consent form, and (b) being a mental health professional working in a psychiatric hospital, residential unit for psychiatric patients, mental health day-care center or community home. Those working in centers for drug-addicted persons or in centers for delinquent behavior were excluded from the study.

Procedure

The questionnaires were distributed and collected online and subsequently formed in an electronic format using the "Gmail (google form)" application. Information about the aims of the study was distributed to the participants before the completion of the relevant questionnaires.

Concerning the recruitment of participants, an online link was provided first to mental health professionals working in the Greek Association for Regional Development and Mental Health (EPAPSY), after securing the permission of the Scientific Director of the organization. The recruitment call was then dispersed online to include several mental health professional groups. After the questionnaires were filled in, the data were automatically transformed into Microsoft Excel Form and were collected by the researcher for processing and analysis using the Statistical Package for Social Sciences (SPSS), version 22.0.

Ethical considerations

Approval and permission for the study were given by the Ethics Committee of EPAPSY (<http://www.epapsy.gr/index.php/english>). Participants were informed about the academic purpose of the

research and assured that the anonymity of their answers will be maintained and that they can withdraw from participation status any time they wish. Informed consent was provided by all participants.

Data collection

Three anonymous questionnaires were used in order to measure aggressive behaviors, fatigue and social support, respectively:

The Aggression Questionnaire (AQ)²² is a 29-item questionnaire which consists of four dimensions of aggression: (a) Physical aggression (9 items), verbal aggression (5 items); this refers to inflicting pain and damage on others, and illustrates the instrumental or motor part of behavior, (b) anger (8 items); this indicates the emotional or intuitive element of behavior, and (c) hostility (8 items); this pertains to emotions of ill-will and unfair treatment. The questions use a 5-point Likert-type scale, from 1: "not at all" to 5: "completely", to assess the degree to which respondents believe that they are related with the items or not. The Greek version of the AQ (G-AQ) was used for the purposes of this study.²³

The Fatigue Assessment Scale (FAS)²⁴ is a brief self-reported instrument designed to assess the symptomatology of chronic fatigue. The FAS approaches the concept of fatigue as a unidimensional construct, but to ensure that it assesses all potential aspects of fatigue, the instrument explores both mental and physical symptoms. The FAS consists of 10 items the 5 first items to evaluate physical fatigue and the other 5 items, to assess mental fatigue, completed on a 5-point Likert scale (1: "never" to 5: "always"). The score thus ranges from 10 (minimum) to 50 (maximum). FAS scores from 10–21 indicate no fatigue (normal), 22–34 (fatigue) and ≥ 35 indicate extreme fatigue. The Greek version of FAS has been tested in end-stage renal disease patients undergoing hemodialysis and in patients suffering from other chronic illnesses, revealing high reliability and validity.^{25,26}

The Multidimensional Scale of Perceived Social Support (MSPSS)²⁷ is a self-reported instrument designed to assess the perceived social support of the individual in three dimensions: Family, friends, and significant others. It includes 12 items with a 7-point Likert scale (from 1: "very strongly disagree" to 7: "very strongly agree"). The score ranges from 12 to 84; the higher the score the higher the perceived level of social support. The total score is calculated by adding the results for all items and the total mean score from any dimension indicates high levels of social support from that source. The MSPSS has been tested in different populations, including individuals suffering from kidney disease²⁸ and psychiatric outpatients.²⁹ The MSPSS was translated and culturally adapted for Greek patients suffering from multiple sclerosis (MS)³⁰ and validated among patients undergoing hemodialysis.³¹

Statistical analysis

According to the level of measurement, percentages statistics were used to describe the demographic variables. Descriptive statistics, mean and standard deviation (\pm SD) were used to describe

and summarize the main variables. Multiple linear regression was applied to predict aggressive behavior based on perceived social support and fatigue and their various dimensions. The Pearson (*r*) correlation coefficient test was used to calculate the relationship between aggression, perceived social support, fatigue and their dimensions. Statistical analysis was conducted using the Statistical Package for Social Sciences (SPSS) software, version 22.0. The level of statistical significance was set at 0.05.

RESULTS

The age of the 104 participants ranged between 21 and 64 years (mean 36.81; SD 8.92 years) and the majority were female ($n=90$). Table 1 shows the demographic data of the participants.

Table 2 shows the scores recorded on the three study questionnaires. Frequencies obtained for cut-off points of fatigue indicated that the levels of fatigue recorded by the healthcare professionals participating in the study were: non-fatigue in 38 (36.5%), fatigue in 57 (54.8%) and extreme fatigue in 9 (8.7%).

Table 3 shows the relationships between the total scores on the three scales. Results indicated a weak negative association between the total scores on G-AQ and MSPSS, and between the total scores on MSPSS and FAS, and a moderate positive association between the total scores on G-AQ and FAS.

Table 1. Demographic characteristics of the participating mental healthcare professionals ($n=104$).

Demographic data	Frequency	Percentage (%)
<i>Gender</i>		
Female	90	86.5
Male	14	13.5
<i>Marital status</i>		
Married	33	31.7
Unmarried	60	57.7
Divorced	8	7.7
Other	3	2.9
<i>Educational level</i>		
High School	7	6.7
University	39	37.5
MSc	54	51.9
PhD	2	1.9
<i>Work experience (years)</i>	Mean (SD)	8.33 (7.08)
<i>Age (years)</i>	Mean (SD)	36.81 (8.92)

SD: Standard deviation

Table 2. Scores of mental healthcare professionals on the questionnaires G-AQ, MSPSS, and FAS (n=104).

	Mean	SD	Minimum	Maximum
Total G-AQ	71.28	1.244	45.00	113.00
Physical aggression	22.12	0.407	13.00	34.00
Verbal aggression	12.53	0.235	6.00	21.00
Anger	17.63	0.344	9.00	26.00
Hostility	19.00	0.516	9.00	33.00
Total MSPSS	5.5986	0.08442	3.00	7.00
Significant others	5.9303	0.95940	3.00	8.50
Family	5.3197	1.27830	2.00	8.75
Friends	5.5457	0.99071	3.00	7.00
Total FAS	23.85	0.623	11.00	45.00
Physical fatigue	12.9135	3.54201	6.00	23.00
Mental fatigue	10.9327	3.28948	5.00	23.00

G-AQ: Greek version of Aggression Questionnaire, MSPSS: Multidimensional Scale of Perceived Social Support, FAS: Fatigue Assessment Scale, SD: Standard deviation

Table 3. Relationship between the total scores of mental healthcare professionals on the questionnaires G-AQ, MSPSS, and FAS (n=104).

	Total G-AQ	Total MSPSS	Total FAS
<i>Pearson correlation</i>			
Total G-AQ	1.000	-0.235	0.474
Total MSPSS	-0.235	1.000	-0.251
Total FAS	0.474	-0.251	1.000
<i>p value</i>			
Total G-AQ	.	0.008	0.000
Total MSPSS	0.008	.	0.005
Total FAS	0.000	0.005	.

G-AQ: Greek version of Aggression Questionnaire, MSPSS: Multidimensional Scale of Perceived Social Support, FAS: Fatigue Assessment Scale

The relationship between total score on G-AQ and the dimensions "physical and mental fatigue" on the FAS was found to be statistically significant, indicating a positive association between aggression and physical fatigue and between aggression and mental fatigue (tab. 4).

Regarding the relationships between the total score on G-AQ and the various dimensions of MSPSS a mild negative association was found between total G-AQ and "significant others", and a mild positive association between total G-AQ and "friends". The relationship between total G-AQ and "family" was not statistically significant (tab. 5).

Total FAS, mental fatigue and physical fatigue were found to be significant predictors of total G-AQ, while total

Table 4. Relationship between the total score of G-AQ and the dimensions of FAS (physical and mental fatigue) in mental healthcare professionals (n=104).

	Total G-AQ	Physical fatigue	Mental fatigue
<i>Pearson correlation</i>			
Total G-AQ	1.000	0.439	0.442
Physical fatigue	0.439	1.000	0.732
Mental fatigue	0.442	0.732	1.000
<i>p value</i>			
Total G-AQ	.	0.000	0.000
Physical fatigue	0.000	.	0.000
Mental fatigue	0.000	0.000	.

G-AQ: Greek version of Aggression Questionnaire, MSPSS: Multidimensional Scale of Perceived Social Support, FAS: Fatigue Assessment Scale

MSPSS was not. Total FAS and mental fatigue were found to be significant predictors for "anger" while "physical fatigue" and total MSPSS were not. Total MSPSS, "significant others", total FAS, and "physical fatigue" were found to be significant predictors for "hostility". Total MSPSS was found to be a significant predictor for "physical aggression" (tab. 6).

The dimensions of "family", "friends" and "significant others" of MSPSS were not shown to be significant predictors for the total Q-AQ score ($B=0.253$, $t(101)=2.40$, $p=0.811$, $B=-3.462$, $t(101)=-2.047$, $p=0.043$, $B=-0.664$, $t(101)=-0.356$, $p=0.722$, respectively) or "anger" ($B=0.029$, $t(100)=0.099$, $p=0.921$, $B=-0.488$, $t(100)=-0.949$, $p=0.345$, $B=-0.698$, $t(100)=-1.496$, $p=0.138$, respectively). "Mental fatigue" and "physical fatigue" were not found to be significant

Table 5. Relationship between the dimensions of MSPSS and G-AQ in mental healthcare professionals (n=104).

	Total G-AQ	Significant others	Family	Friends
<i>Pearson correlation</i>				
Total G-AQ	1.000	-0.226	-0.075	-0.298
Significant others	-0.226	1.000	0.441	0.692
Family	-0.075	0.441	1.000	0.292
Friends	-0.298	0.692	0.292	1.000
<i>p value</i>				
Total G-AQ	.	0.011	0.223	0.001
Significant others	0.011	.	0.000	0.000
Family	0.223	0.000	.	0.001
Friends	0.001	0.000	0.001	.

G-AQ: Greek version of Aggression Questionnaire, MSPSS: Multidimensional Scale of Perceived Social Support

Table 6. Beta coefficients for G-AQ and its dimensions using multiple regression including FAS and MSPSS in mental healthcare professionals (n=104).

Model	Unstandardized coefficients		Standardized coefficients	t	p*	95% CI for B	
	B	SE	Beta			Lower bound	Upper bound
(Constant)	60.483	9.489		6.374	0.000	41.660	79.307
Total MSPSS	-1.831	1.322	-0.124	-1.386	0.169	-4.453	0.791
Total FAS	0.883	0.179	0.442	4.932	0.000	0.528	1.238
<i>Dependent variable: Total G-AQ</i>							
(Constant)	48.798	4.335		11.25	0.000	40.198	57.397
Physical fatigue	0.892	0.461	0.249	1.937	0.049	-0.021	1.806
Mental fatigue	1.002	0.496	0.260	2.021	0.046	0.018	1.986
<i>Dependent variable: Total G-AQ</i>							
(Constant)	18.215	3.983		4.573	0.000	10.313	26.117
Total fatigue	-1.199	0.555	-0.196	-2.161	0.033		0.791
Total MSPSS	0.314	0.075	0.380	4.185	0.000	0.165	0.463
<i>Dependent variable: Hostility (G-AQ)</i>							
(Constant)	29.747	3.327		8.940	0.000	23.146	36.349
Significant others	-1.631	0.691	-0.307	-2.359	0.020	-3.003	-0.259
<i>Dependent variable: Hostility (G-AQ)</i>							
(Constant)	10.589	1.843		5.745	0.000	6.933	14.246
Physical fatigue	0.420	0.211	0.263	1.993	0.049	0.002	0.839
<i>Dependent variable: Hostility (G-AQ)</i>							
(Constant)	13.806	2.477		5.573	0.000	8.892	18.721
Total FAS	0.286	0.047	0.518	6.111	0.000	0.193	0.378
Total MSPSS	-0.532	0.345	-0.131	-1.543	0.126	-1.217	0.152
<i>Dependent variable: Anger (G-AQ)</i>							
(Constant)	10.329	1.132		9.121	0.000	8.083	12.576
Mental fatigue	0.368	0.120	0.372	3.060	0.003	0.129	0.607
Physical fatigue	0.233	0.130	0.219	1.801	0.075	-0.024	0.490
<i>Dependent variable: Anger (G-AQ)</i>							
(Constant)	17.849	3.335		5.351	0.000	11.232	24.465
Total FAS	-0.169	0.465	-0.035	-0.363	0.717	-1.090	0.753
Total MSPSS	0.219	0.063	0.335	3.474	0.001	0.094	0.343
<i>Dependent variable: Physical aggression (G-AQ)</i>							

* p<0.05

SE: Standard error, CI: Confidence interval, G-AQ: Greek version of Aggression Questionnaire, MSPSS: Multidimensional Scale of Perceived Social Support, FAS: Fatigue Assessment Scale

predictors for "physical aggression" ($B=0.234$, $t(101)=1.457$, $p=0.148$, $B=0.214$, $t(101)=1.238$, $p=0.219$).

DISCUSSION

The purpose of this study was to investigate whether perceived social support and fatigue are predictive factors for aggressive behavior among healthcare professionals.

It was expected that higher scores of fatigue and lower scores of perceived social support would be related to higher scores of aggressive behaviors. This hypothesis was validated, as the results showed a negative association between perceived social support and aggression, and a positive association between fatigue and aggression; thus, the higher the levels of perceived social support, the lower the levels of aggressive behavior.

A novel contribution of this research is that it examines the relationship between fatigue, perceived social support and aggression in mental healthcare professionals. To the knowledge of the author no other studies have investigated these specific concepts as being interrelated.

According to the study findings, healthcare professionals have high levels of fatigue. Specifically, more than half of the sample presented fatigue, according to their FAS score, and 10% presented extreme fatigue.

Fatigue was found to be a significant predictor of aggressive behavior. This means that fatigued individuals are prone to develop aggressive behaviors. Based on these findings, we can conclude that there is a high possibility for healthcare professionals to express aggressive behaviors towards to their coworkers or towards their patients.

It was also observed that higher scores for mental fatigue were associated with higher scores for aggressive behaviors, meaning that higher levels of physical fatigue result in higher levels of aggression. In general, the prevalence of depression and aggressive behaviors has been found higher in mental health professionals, further indicating the work environment as a possible causal factor of fatigue in mental healthcare workers.²⁷

Physical health symptoms are a common observation in healthcare professionals. They often work in a hostile environment, having to deal with their patients' aggression or even that of their coworkers. Employees with higher levels of aggression present higher levels of burnout, they feel dissatisfied with their work and their physical health scores are low.¹⁶

Regarding perceived social support, it was not found to be a significant predictor of aggressive behavior, although there was a tendency for aggressive behavior to decrease as the levels of perceived social support increased. Specifically, aggressive behaviors increased when the level of perceived social support from family increased and decreased as the levels of support from friends and significant others decreased. On the other hand, higher scores of support from friends led to higher scores of aggressive behaviors. Regarding significant others, a significant negative association was found; the lower the scores for support from significant others, the higher the scores for aggressive behaviors. A number of studies document the relationship of perceived social support with aggression. Exploring the role of social interaction, perceived social support and social acceptance in a sample of aggressive adolescents (260 high school pupils), researchers found that of all the components of social interaction, there is a critical connection between negative views and aggression.³² As positive thoughts increased the levels of aggression decreased.

Negative correlation was found between the components of perceived social support (social help of companions, family, and others) and relapse, social acknowledgment, and aggression. Social collaboration, social acknowledgment, and perceived social support play a crucial role as a mediator in aggression, and perceived social support is strongly related to more effective coping with stressors, resulting in better physical and health outcome and recovery from illness.³³

A significant association was also found between aggression and both the dimensions of fatigue (mental and physical) indicating that if an individual is either mentally or physically fatigued then there is an increased likelihood of developing aggressive behaviors.

The multiple regression analysis to examine the relationship between the various dimensions of aggression (verbal, physical, anger and hostility) and perceived social support and fatigue indicated that a significant association between perceived social support, fatigue and anger and hostility. In a study, other researchers have demonstrated that high levels of fatigue in healthcare workers who deal with chronically ill patients can result in deterioration of the patients' symptoms and signs.³⁴

Another study showed a relationship between perceived social support and psychological resilience and perceived stress and aggression.³⁵ Perceived social support and psychological resilience can be successful in decreasing the pressure and hostility of veteran healthcare workers and should be considered powerful directing elements in managing stress and aggression. Studies show an inverse relationship between levels of aggression and levels of perceived social support, with a significant negative correlation between perceived social support from family and all the dimensions of aggression.³⁶

Limitations

Although the research was carefully conducted, there are limitations to be recognized. First, the female participants were significantly more than the males in the research population. Considering the fact described in the literature review that some behavioral differences have been observed between men and women, the results of this study may not have fully addressed potential differences between men and women.

Implications for practice

As a final comment, although the demanding characteristics of work in the field of mental health care cannot be eliminated, policy changes and targeted interventions can modify their impact on mental healthcare workers.

Interventions that cover not only prevention, but also recovery for fatigued mental healthcare workers will be innovative for the healthcare system, therapeutic for the workers themselves and beneficial for the patients.

Future research could explore how aggressive behaviors are expressed in different fields of healthcare specialization, such as the ICU. Although researchers have investigated a number of factors that may affect the well-being of

healthcare professionals, no model has yet been developed that investigates aggression considering all the possible variables.

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Η κόπωση και η αντιληφθείσα κοινωνική στήριξη ως παράγοντες επιθετικής συμπεριφοράς σε επαγγελματίες ψυχικής υγείας

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ΣΚΟΠΟΣ Να εξεταστεί η πιθανή σχέση αντιληφθείσας κοινωνικής στήριξης και κόπωσης με την εμφάνιση επιθετικών συμπεριφορών μεταξύ επαγγελματιών ψυχικής υγείας. **ΥΛΙΚΟ-ΜΕΘΟΔΟΣ** Πρόκειται για συγχρονική μελέτη. Από τον Απρίλιο του 2018 έως τον Ιούνιο του 2018, 104 επαγγελματίες ψυχικής υγείας συμπλήρωσαν 3 ερωτηματολόγια που τους δόθηκαν ηλεκτρονικά. Πρώτον, όσον αφορά στην κόπωση, χρησιμοποιήθηκε η ελληνική έκδοση της κλίμακας The Fatigue Assessment Scale (FAS). Δεύτερον, όσον αφορά στην κοινωνική στήριξη, εφαρμόστηκε η ελληνική έκδοση της κλίμακας Multidimensional Scale of Perceived Social Support (MSPSS) και, τέλος, σχετικά με την επιθετικότητα χρησιμοποιήθηκε η ελληνική έκδοση του ερωτηματολογίου επιθετικότητας (Aggression Questionnaire, G-AQ). Η στατιστική ανάλυση διενεργήθηκε, χρησιμοποιώντας το λογισμικό πρόγραμμα Statistical Package for Social Sciences (IBM SPSS), έκδοση 22.0. Εφαρμόστηκαν περιγραφικές στατιστικές αναλύσεις, πολλαπλές γραμμικές παλινδρομήσεις και η δοκιμασία συντελεστή συσχέτισης Pearson (*r*). **ΑΠΟΤΕΛΕΣΜΑΤΑ** Οι επαγγελματίες ψυχικής υγείας παρουσίασαν υψηλά ποσοστά κόπωσης και επιθετικότητας και χαμηλά ποσοστά κοινωνικής στήριξης. Κόπωση παρουσίασε το 54,8% (n=57) του συνολικού δείγματος. Η συνολική βαθμολογία της κλίμακας FAS και των διαστάσεων της «ψυχική κόπωση» και «φυσική κόπωση» βρέθηκαν να είναι σημαντικοί προγνωστικοί παράγοντες επιθετικής συμπεριφοράς, ενώ δεν ήταν η κοινωνική στήριξη. Η συνολική βαθμολογία της κλίμακας MSPSS βρέθηκε να είναι ένας σημαντικός παράγοντας πρόβλεψης για τη φυσική επιθετικότητα. Επί πλέον, διαπιστώθηκε στατιστικά σημαντική συσχέτιση μεταξύ κόπωσης και κοινωνικής στήριξης. **ΣΥΜΠΕΡΑΣΜΑΤΑ** Οι επαγγελματίες ψυχικής υγείας παρουσιάζουν υψηλά ποσοστά κόπωσης και επιθετικότητας και χαμηλότερα ποσοστά κοινωνικής στήριξης. Έχει μεγάλη σημασία η ανάπτυξη ενός μοντέλου που μπορεί να αποτρέψει και να μειώσει τις επιθετικές συμπεριφορές.

Λέξεις ευρητηρίου: Επαγγελματίες ψυχικής υγείας, Επιθετικότητα, Κοινωνική στήριξη, Κόπωση

References

1. VAN DAM A. Subgroup analysis in burnout: Relations between fatigue, anxiety, and depression. *Front Psychol* 2016, 7:90
2. DIMITROPOULOS C, FILIPPOU N. Professional burnout in health professionals. *Arch Hellen Med* 2008, 25:642–647
3. KOINIS A, GIANNOU V, DRANTAKI V, ANGELAINA S, STRATOU E, SARI-DI M. The impact of healthcare workers job environment on their mental-emotional health. Coping strategies: The case of a local general hospital. *Health Psychol Res* 2015, 3:1984
4. RICE V, GLASS N, OGLE K, PARSIAN N. Exploring physical health perceptions, fatigue and stress among health care profes-

- sionals. *J Multidiscip Healthc* 2014, 7:155–161
5. FERRI P, GUADI M, MARCHESELLI L, BALDUZZI S, MAGNANI D, DI LORRENZO R. The impact of shift work on the psychological and physical health of nurses in a general hospital: A comparison between rotating night shifts and day shifts. *Risk Manag Healthc Policy* 2016, 9:203–211
 6. KYRIOPOULOS J, TSIANTOU V. The financial crisis and its impact on health and medical care. *Arch Hellen Med* 2010, 27:834–840
 7. CHAROS D, KOLYPERA V, LAZARIDOU E, ANDRIOPOULOU M, VIVILAKI V, LIVANIS E. The impact of occupational stress on health care professionals during the financial crisis. *Arch Hellen Med* 2017, 34:467–475
 8. HO JC, LEE MB, CHEN RY, CHEN CJ, CHANG WP, YEH CY ET AL. Work-related fatigue among medical personnel in Taiwan. *J Formos Med Assoc* 2013, 112:608–615
 9. SOULIOTIS K, PAPADONIKOLAKI J, PAPAGEORGIOU M, ECONOMOU M. The impact of crisis on health and health care: thoughts and data on the greek case. *Arch Hellen Med* 2018, 35(Suppl 1):9–16
 10. VAN MOL MM, KOMPANJE EJ, BENOIT DD, BAKKER J, NIJKAMP MD. The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: A systematic review. *PloS One* 2015, 10:e0136955
 11. KUMAR S. Burnout and doctors: Prevalence, prevention and intervention. *Healthcare (Basel)* 2016, 4:E37
 12. PAPATHANASIOU IV. Work-related mental consequences: Implications of burnout on mental health status among health care providers. *Acta Inform Med* 2015, 23:22–28
 13. FERNANDES H, SALA DCP, HORTA ALM. Violence in health care settings: Rethinking actions. *Rev Bras Enferm* 2018, 71:2599–2601
 14. ARNETZ JE, HAMBLIN L, AGER J, LUBORSKY M, UPFAL MJ, RUSSELL J ET AL. Underreporting of workplace violence: Comparison of self-report and actual documentation of hospital incidents. *Workplace Health Saf* 2015, 63:200–210
 15. IRINYIT, NÉMETH A. Violent acts against health care providers. *Orv Hetil* 2016, 157:1105–1119
 16. MERECZ D, DRABEK M, MOŚCICKA A. Aggression at the workplace – psychological consequences of abusive encounter with coworkers and clients. *Int J Occup Med Environ Health* 2009, 22:243–260
 17. HAMAMA L, RONEN-SHENHAV A. Self-control, social support, and aggression among adolescents in divorced and two-parent families. *Child Youth Serv Res* 2012, 34:1042–1049
 18. ALRADAYDEH MF, ALORANI OI. The relationship between aggression and perceived social support among university students in Jordan. *International Journal of Humanities and Social Science* 2017, 7:200–205
 19. ŠMIGELSKAS K, VAIČIŪNAST, LUKOŠEVIČIŪTĖ J, MALINOWSKA-CIEŚLIK M, MELKUMOVA M, MOVSESYAN E ET AL. Sufficient social support as a possible preventive factor against fighting and bullying in school children. *Int J Environ Res Public Health* 2018, 15:E870
 20. HARVEY IS, ALEXANDER K. Perceived social support and preventive health behavioral outcomes among older women. *J Cross Cult Gerontol* 2012, 27:275–290
 21. TZELETOPOULOU A, ALIKARI V, ZYGA S, TSIRONI M, LAVDANITI M, THEOFILOU P. Are burnout syndrome and depression predictors for aggressive behavior among mental health care professionals? *Med Arch* 2018, 72:244–248
 22. BUSS AH, PERRY M. The aggression questionnaire. *J Pers Soc Psychol* 1992, 63:452–459
 23. TSORBATZOU DIS H. Psychometric evaluation of the Greek version of the Aggression Questionnaire. *Percept Mot Skills* 2006, 102:703–718
 24. MICHIELSEN HJ, DE VRIES J, VAN HECK GL. Psychometric qualities of a brief self-rated fatigue measure: The Fatigue Assessment Scale. *J Psychosom Res* 2003, 54:345–352
 25. ZYGA S, ALIKARIV, SACHLAS A, FRADELLOS EC, STATHOULIS J, PANOUTSOPOULOS G ET AL. Assessment of fatigue in end stage renal disease patients undergoing hemodialysis: Prevalence and associated factors. *Med Arch* 2015, 69:376–380
 26. ALIKARI V, FRADELLOS E, SACHLAS A, PANOUTSOPOULOS G, LAVDANITI M, PALLA P, LAPPA T, GIATRAKOU S, STATHOULIS J, BABATSIKOU F, ZIGA S. Reliability and validity of the Greek version of "The Fatigue Assessment Scale". *Arch Hellen Med* 2016, 33:231–238
 27. ZIMET GD, DAHLEM NW, ZIMET SG, FARLEY GK. The Multidimensional Scale of Perceived Social Support. *J Pers Assess* 1988, 52:30–41
 28. EKER D, ARKAR H. Perceived social support: Psychometric properties of the MSPSS in normal and pathological groups in a developing country. *Soc Psychiatry Psychiatr Epidemiol* 1995, 30:121–126
 29. CECIL H, STANLEY MA, CARRION PG, SWANN A. Psychometric properties of the MSPSS and NOS in psychiatric outpatients. *J Clin Psychol* 1995, 51:593–602
 30. THEOFILOU P. Translation and cultural adaptation of the Multidimensional Scale of Perceived Social Support for Greece. *Health Psychol Res* 2015, 3:1061
 31. THEOFILOU P, ZYGA S, TZITZIKOS G, MALINDRETOS P, KOTROTSIOU E. Assessing social support in Greek patients on maintenance hemodialysis: psychometric properties of the Multidimensional Scale of Perceived Social Support. In: Balogun R, Abdel Rahman E, Balogun S (eds) *Chronic kidney disease: Signs/symptoms, management options and potential complications*. Nova Publ, New York, 2013:265–279
 32. SAMADIFARD HR, DAMIRCHI ES. The relationship between perception of social interaction, perceived social support and social acceptance with aggression among adolescents. *Journal of Research & Health* 2018, 8:38–46
 33. BROUWER S, RENEMAN MF, BÜLTMANN U, VAN DER KLINK JJ, GROOTHOFF JW. A prospective study of return to work across health conditions: Perceived work attitude, self-efficacy and perceived social support. *J Occup Rehabil* 2010, 20:104–112
 34. NAGATOMO I, AKASAKI Y, UCHIDA M, TOMINAGA M, HASHIGUCHI W, TAKIGAWA M. Gender of demented patients and specific family relationship of caregiver to patients influence mental fatigue and burdens on relatives as caregivers. *Int J Geriatr Psychiatry* 1999, 14:618–625
 35. EBRAHIMI L, MORADI F. Correlation of perceived social support and psychological hardness with perceived stress and aggression in retired veterans. *Iran J War Public Health* 2018, 10:157–164
 36. TALWAR P, RAHMAN MFA. Perceived social support among University students in Malaysia: A reliability study. *Malaysian Journal of Psychiatry* 2013, 22:1
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