

Original

Social Support and Satisfaction with Life among Portuguese Prison Officers: The Mediating Effect of Anxiety

Bibiana Monteiro¹, Vítor Costa¹, and Samuel Monteiro^{1,2}¹Universidade da Beira Interior; ²NECE - Research Centre for Business Sciences

ARTICLE INFO

Article history:

Received 24 October 2023

Accepted 2 January 2024

Keywords:

Prison officers

Prisons

Social Support

Anxiety

Satisfaction with Life

Mediation

A B S T R A C T

Work in the prison system can present a high risk to the mental and physical health of prison officers due to the dangerousness, diversity, and complexity associated with this job. Therefore, knowing that prison officers play a key role in prisons, it is essential to explore variables that help understand the health and well-being of these professionals. Thus, this study aims to explore and describe the relationship between social support, generalized anxiety, and life satisfaction in a sample of 100 Portuguese prison officers. The results showed the existence of a significant positive relationship between social support and life satisfaction. Social support also shows a significant negative relationship, decreasing anxiety. It was also found that increased anxiety significantly contributed to a decrease in the participants' satisfaction with life. It was also possible to verify the existence of a mediating relationship between social support and satisfaction with life through anxiety. The results are subsequently discussed and translated into implications for research and professional practice.

Apoyo social y satisfacción con la vida en agentes penitenciarios portugueses: El efecto mediador de la ansiedad

R E S U M E N

El trabajo en el sistema penitenciario puede presentar un alto riesgo para la salud mental y física de los funcionarios de prisiones debido a la peligrosidad, diversidad y complejidad asociadas a este trabajo. Por lo tanto, sabiendo que los agentes penitenciarios desempeñan un papel clave en las prisiones, es esencial explorar variables que ayuden a comprender la salud y el bienestar de estos profesionales. Así, este estudio tiene como objetivo explorar y describir la relación entre el apoyo social, la ansiedad generalizada y la satisfacción con la vida en una muestra de 100 agentes penitenciarios portugueses. Los resultados mostraron la existencia de una relación positiva significativa entre el apoyo social y la satisfacción con la vida. El apoyo social también muestra una relación negativa significativa, disminuyendo la ansiedad. También se comprobó que el aumento de la ansiedad contribuía significativamente a la disminución de la satisfacción con la vida de los participantes. También se pudo comprobar la existencia de una relación mediadora entre el apoyo social y la satisfacción con la vida a través de la ansiedad. Posteriormente, se discuten los resultados y se traducen en implicaciones para la investigación y la práctica profesional.

Palabras clave:

Agentes penitenciarios

Prisiones

Apoyo social

Ansiedad

Satisfacción con la vida

Mediación

* Corresponding author.

E-mail address: vitormvc@ubi.pt (V. Costa).

Introduction

Working in prisons is inherently stressful and poses risks due to its dangerousness, diversity, and complexity, leading to negative health outcomes for prison officers (Brower, 2013; Forsyth et al., 2022). The exposure to traumatic events and various stressful factors, makes prison officers more susceptible to suffering negative health consequences, such as stress, exhaustion, and psychological disorders, including suicide, thus making prisons a high-risk environment for the mental and physical health of these workers (Bell et al., 2019; Brower, 2013; Johnson et al., 2005). In this context, it is crucial to explore psychological variables to understand the determinants and impacts of mental health.

Prison officers have a complex, potentially conflicting role, with a duality between ensuring security and promoting the rehabilitation process. Thus, on the one hand, their role includes preserving security, policing inmates' behavior by imposing order, control, and observation, preventing escapes, fights, and drug trafficking. On the other hand, to promote the rehabilitation process, prison officers are expected to provide services to inmates such as support, assistance, and counseling (Bourbonnais et al., 2007; Scott, 2006). In addition to the complexity of the role, prison officers also face a lack of support and autonomy, and poor-quality working relationships (Kinman et al., 2016), which can have a negative impact on the health and well-being of these workers, decreasing the professional performance and the levels of life satisfaction (Brower, 2013; Lambert et al., 2018).

Therefore, it is important to explore variables that help to understand the health and well-being of these professionals. In the current study, we explore the role of social support, generalized anxiety, and satisfaction with life among prison officers. Considering prison officers' working conditions, social support emerges as a buffer, with a protective role during times of greater stress in individuals' lives, making them better able to cope with the vicissitudes of life.

Social support is a multidimensional concept categorized into three dimensions (i.e, family, friends, significant others). It involves a network of connections with individuals who can offer assistance and support, helping to alleviate the impact of work-related tension and stress (Bezerra et al., 2016; Lambert et al., 2010). This support stems from two sources: informal, encompassing family, friends, and significant others; and formal, involving health professionals and other professionals (Gouin et al., 2016).

Among the numerous mental health issues that can affect prison officers, generalized anxiety can be characterized by excessive and uncontrollable anxiety and worry (American Psychiatric Association [APA], 2014; World Health Organization [WHO], 2020) about the individual's daily life. It can also be accompanied by other somatic mental symptoms (WHO, 2020), which can significantly impair an individual's psychosocial functioning (APA, 2014). It is also associated with at least three of the following characteristics: a) restlessness or feeling on the edge; b) easy fatigue; c) difficulty concentrating or having a blank mind; d) irritability; e) muscle tension; and f) sleep disturbances (APA, 2014). Consequently, there are some social conditions that increase the risk of this disorder, namely being single, widowed or divorced, socially isolated, and a lack of support from friends or family.

Life satisfaction, as a component of subjective well-being (together with positive and negative affect) refers to the subject's conscious cognitive evaluation of their own life based on their own criteria (Pavot & Diener, 1993). The criteria may include judgments about life, work, marriage, school, and other domains that may be based on past emotional experiences or emotional memories, but they may also include explicit goals, values, and standards

of comparison (Biswas-Diener et al., 2004). Life satisfaction is an important indicator of psychological health in its association with emotional and psychological variables and with daily life events (Tsitsas et al., 2019).

Understanding the role of the prison officer, the study of these three variables seems relevant to explore the antecedents and consequences of prison officers' anxiety. Due to the scarcity of studies on these variables in this population, this study is innovative, providing new scientific evidence.

Social Support, Anxiety and Satisfaction with Life: Theoretical Relationships

Recent literature has explored the relationship between social support, anxiety, and life satisfaction (Gonzalez-Saenz de Tejada et al., 2017; McCanlies et al., 2018; Tsitsas et al., 2019). Considering the relationship between social support and life satisfaction, McCanlies et al. (2018) found that higher levels of satisfaction with life are associated with higher levels of social support, exploring life satisfaction as both a predictor and outcome of social support. However, life satisfaction is often studied as an outcome of social support. In their research, Au et al. (2009) and Khalid (2021) found social support to be a significant predictor of higher life satisfaction. Therefore, a high level of social support seems to lead to greater life satisfaction.

In what concerns the relationship between social support and anxiety, the literature has provided evidence of a negative relationship between these two variables (e.g., Gonzalez-Saenz de Tejada et al., 2017), given that higher levels of social support were associated with a reduction in anxiety symptoms. In addition, a study in Iran further the protective role of family support against anxiety, identifying family as the primary and foremost source of support (Roohafza et al., 2014). Therefore, social support can be seen as a factor that reduces anxiety symptoms in prison officers.

Regarding the relationship between anxiety and satisfaction with life, studies with different samples, including 410 students in Athens (Greece) (Tsitsas et al., 2019), 348 students in Cyprus (Serin et al., 2010), and 152 elderly Filipinos (Jose et al., 2018), have suggested that there is evidence of a negative relationship between these variables, showing that lower levels of anxiety were associated with higher levels of life satisfaction. Therefore, given that anxiety is related to adversities in the functioning of significant areas (such as family, school, and social relationships), people with high levels of anxiety will have a negative perception of their lives. So, those who have anxiogenic symptoms have lower levels of satisfaction with life (Dryman et al., 2016 cit. in Gonçalves et al., 2017). Considering the foregoing, it follows that anxiety may be a predictor of life satisfaction.

Given the literature reviewed, and following previous research (Xiaowen et al., 2018; Zhang et al., 2021), this study wants to explore anxiety as a mediating variable between social support and satisfaction with life. The following hypotheses are formulated:

H_1 : There is a positive association between social support and satisfaction with life.

H_2 : There is a negative association between social support and anxiety.

H_3 : There is a negative association between anxiety and satisfaction with life.

H_4 : Anxiety mediates the relationship between social support and satisfaction with life.

Figure 1 presents the proposed mediation model.

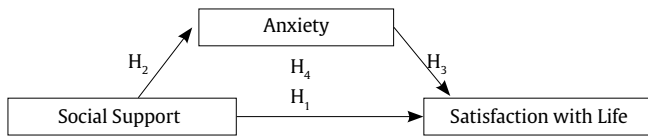


Figure 1
Mediation Model between Social Support, Anxiety and Satisfaction with Life.

Method

Procedures

This study is part of the EU-funded project “LEADCOR – Leadership development for occupational stress reduction in correctional settings” (<http://www.leadership-corrections.org/>). Data were collected online between February and April 2022. A questionnaire was created and hosted on the EU Survey platform and distributed via mailing list to prison officers in Portugal by the Sindicato Nacional do Corpo da Guarda Prisional (SNCGP). Ethical principles were respected, and the study was approved by the Institutional Review Board of UBI (CE-UBI-Pj- 2022-011).

Data were analyzed using IBM SPSS version 28 and the PROCESS macro (Hayes, 2013) version 4.2 for SPSS was also used to test the mediation model. JASP (Jasp Team, 2023) was used to perform confirmatory factor analysis (CFA). Fit indices are reported considering Kline’s (2016) recommendations and interpreted according to Hair et al.’s (2010) guidelines.

Participants

The sample consisted of 100 Portuguese prison officers aged between 28 and 63 ($M = 45.4$; $SD = 8.0$). The average length of professional experience in their current job was 20.0 years ($SD = 8.6$).

Table 1 shows that most of the sample is composed of men (77%). As far as academic qualifications are concerned, 58% have secondary education (12th grade), and a significant proportion work in a prison for adult males (73%). Finally, in terms of their role, while all these professionals are prison officers, 10 per cent have a managerial role.

Instruments

Sociodemographic questionnaire

A sociodemographic questionnaire was used to characterize the sample according to age, gender, academic qualifications, the

place where they work, years of experience, and their role in the prison service.

Social Support

Social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988), considering the Portuguese version by Carvalho et al. (2011). This 12-item instrument is a subjective assessment scale about the adequacy of social support. Items are assessed on a Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree) (Carvalho et al., 2011). Items are grouped into three subscales (of 4 items each) to assess social support from specific sources (i.e., family, friends, and significant others). It is also possible to assess social support by calculating the average of the 12 items.

The Portuguese version used in the current study was previously validated with a sample of 454 students, 100 patients with depression, and 261 participants from the general population (Carvalho et al., 2011). In the current study, scale construct validity was assessed with CFA, using maximum likelihood estimation. A total of three correlated factors (family, friends, and significant others) representing the three subscales were considered. Residual covariances were added between consecutive items (1-3, and 3-4) and items of the same factor (2-10, and 3-11) with similar content. s

Overall model fit is acceptable, with $\chi^2(47) = 91.32, p < .01$; $\chi^2/df = 1.94$; CFI = .964; RMSEA = .097, $p < .01$; SRMR = .043. AVE was .71 (family), .84 (friends), and .60 (significant others).

In what concerns internal consistency, a Cronbach’s alpha (α) value of .92 was obtained for the family subscale, for the items relating to friends, internal consistency was very high ($\alpha = .95$), and for the items capturing support from significant others the alpha values were high ($\alpha = .88$). The internal consistency (α) of the total scale (12 items) was .95.

Anxiety

Anxiety was assessed using the GAD-7 (Spitzer et al., 2006), considering the Portuguese version by Sousa et al. (2015), consisting of a brief self-report instrument, comprising seven items, assessed on a Likert scale ranging from 0 (Rarely) to 3 (Almost every day). Higher scores show a greater presence of anxiety symptoms. This scale was created using the generalized anxiety disorder (DSM) symptom criteria (Parkerson et al., 2015), and aims to assess the individual’s state of health during the previous two weeks. The Portuguese version was initially validated using a sample of 100 patients with clinical/psychiatric backgrounds (Sousa et al., 2015). Later, a study with 1,031 college

Table 1
Socio-demographic characteristics of the sample

		Frequency (n)	Valid Percentage (%)
Gender	Male	77	77
	Female	23	23
Academic Qualifications	Up to Secondary school/ 9 years	14	14
	Secondary school / 12 years	58	58
	Post-secondary non-tertiary education	12	12
	Tertiary education (Bachelor’s and Master’s)	16	16
Workplace	Adult male prison	73	73
	Adult female prison	19	19
	Prison/detention center for young men	4	4
	Other	4	4
Role in the prison system	Prison officer	90	90
	Prison officer (with managerial role)	10	10

students provided additional evidence for the good construct validity of the measure. To assess the scale construct validity in the current study, a confirmatory factor analysis was done using maximum likelihood estimation. Overall model fit, after adding the covariance between four error pairs involving content-related items (2-7) and consecutive items (1-2, 2-3, and 6-7), indicates an acceptable model fit, $\chi^2(10) = 12.38, p = .261; \chi^2/df = 1.24; CFI = .996; RMSEA = .049, p = .45, SRMR = .020$. AVE was .69, indicating good convergent validity. Internal consistency (α) was .94 in this study for the total scale (7 items).

Satisfaction with Life

Satisfaction with life was assessed using the Satisfaction with Life Scale (SWLS) (Diener et al., 1985), which was adapted to Portuguese by Neto (1993). This instrument has five items assessed on a Likert scale ranging from 1 (totally disagree) to 7 (totally agree). The scores range from 5 to 35, with higher scores revealing higher levels of perceived satisfaction with life. The scale shows good psychometric qualities and is a brief instrument that is easy to understand, apply, and quote. It can also be used with adults from all age groups and cultural backgrounds. The Portuguese version of the SWLS has been extensively used, with an initial validation study with a sample of 217 adolescents (Neto, 1993), and a more recent one with 130 participants (Laranjeira, 2009). In the current sample, CFA with maximum likelihood estimation was used to test a one factor solution. After considering the covariance between items 3 and 4, a good model fit is observed with $\chi^2(4) = 6.31, p = .18; \chi^2/df = 1.58; CFI = .993; RMSEA = .076, p = .28, SRMR = .024$. AVE was .61, which indicates good convergent validity. An internal consistency (α) of .90 was obtained.

Results

The descriptive statistics of the instruments used - mean, median, standard deviation, minimum, and maximum - can be seen in Table 2.

The correlations between the variables show that anxiety has a significant negative correlation with social support ($r = -.38, p < .01$). Satisfaction with life, on the other hand, shows a negative correlation with anxiety ($r = -.54, p < .01$) and a positive correlation with social support ($r = .38, p < .01$). It is also worth mentioning that the sociodemographic variables age, academic qualifications and years of experience did not show statistically significant correlations with the variables under study. Table 3 shows the data

in more detail, including the square root of AVE, showing that the measures have discriminant validity.

Table 2

Descriptive and dispersion statistics for MSPSS, GAD-7 and SWLS in the sample

	M	Mdn	DP	Min.	Máx.
SO	5.3	5.5	1.3	1	7
FAM	5.5	5.8	1.3	2	7
FR	5.0	5.3	1.3	1	7
MSPSS	5.3	5.5	1.2	2.2	7
GAD-7	8.7	7.0	6.2	0	21
SWLS	20.6	21.0	7.0	5	35

Note. SO = Social Support provided by a significant other; FAM = Social Support provided by the family; FR= Social Support provided by friends. MSPSS = Multidimensional Scale of Perceived Social Support; GAD-7 = Generalized Anxiety Disorder; SWLS = Satisfaction with Life Scale.

To test the hypotheses under study, we first carried out a linear regression (to test H_1) and then used a mediation model with bootstrapping, following the guidelines of Hayes (2013) to test the remaining hypotheses. H_1 predicts the existence of a positive association between social support and satisfaction with life, and it was found that social support has a significant positive effect on satisfaction with life ($\beta = 2.25, p < .001, 95\%IC 1.15, 3.35$), thus failing to reject H_1 . Social support alone explains 14% of the variance in satisfaction with life. The results for H_2 , which hypothesizes the existence of a negative association between social support and anxiety, indicate that social support negatively predicts anxiety ($a = -1.96, p < .001, 95\%IC -2.93, -.99$), thus failing to reject H_2 . Regarding H_3 , that predicts the existence of a negative association between anxiety and satisfaction with life, the results show that anxiety has a negative impact on satisfaction with life ($b = -.52, p < .001, 95\%IC -.72, -.32$), failing to reject H_3 . Finally, H_4 predicts that anxiety plays a mediating role in the relationship between social support and satisfaction with life, confirming that the effect of social support on satisfaction with life through anxiety is 1.02 (95%IC .40, 1.70), thus failing to reject hypothesis H_4 . When the mediator is considered, the direct effect of social support on satisfaction with life is significant ($c' = 1.23; p = .02$), although it is lower than the value observed without the presence of the mediator (down from 2.25 to 1.23). Social support and anxiety explain 32.4% of the variance in satisfaction with life. An illustration of the results is available on Figure 2.

Table 3

Correlations between the variables under study

	1	2	3	4	5	6	7	8	9
1. Age	—								
2. ACQ	-.09	—							
3. YEA	.96**	-.08	—						
4. SO	-.02	.14	.02	(.77)					
5. FAM	-.07	.13	.00	.77**	(.84)				
6. FR	-.05	.06	.00	.74**	.72**	(.92)			
7. SUP	-.05	.12	.01	.92**	.91**	.90**	—		
8. ANX	.15	.13	.15	-.35**	-.25*	-.42**	-.38**	(.83)	
9. SWL	-.05	-.07	-.05	.33**	.32**	.39**	.38**	-.54**	(.78)

Note. ACQ = academic qualifications; YEA = years of experience; SO = significant others; FAM = family; FR = friends; SUP = social support; ANX = anxiety; SWL = satisfaction with life. Square root of AVE shown on diagonal.

* $p < .05$; ** $p < .01$

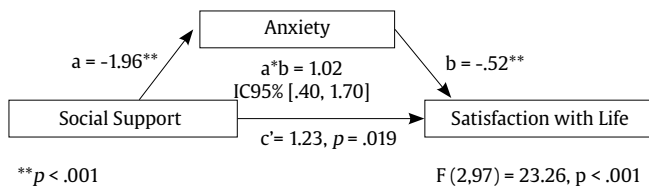


Figure 2

The mediating effect of Anxiety on the relationship between Social Support and Satisfaction with Life.

Discussion

The present study aimed to explore the role of anxiety as a mediator in the relationship between social support and satisfaction with life. The results show that social support has a positive impact on satisfaction with life, showing that for prison officers, being in contact with people that are important to them positively influences their assessment of their own lives. The results align with previous studies showing that with good support, individuals can cope with internal and external pressures, providing them with a sense of identity, belonging, and a more meaningful life (Khalid, 2021; McCanlies et al., 2018). Social support provides emotional resources that help individuals in problem-solving, coping with stress, and increasing their overall sense of well-being.

Secondly, knowing that anxiety can be characterized by excessive and uncontrollable worries that individuals have about everyday matters, this study demonstrates that social support has a significant negative impact on anxiety. In other words, it is possible to observe that providing support (whether from family, friends, or another significant person) can reduce symptoms such as nervousness, tension, irritability, restlessness, and excessive worries, thereby lowering anxiety levels in this sample of prison officers. Additionally, studies by Gonzalez-Saenz de Tejada et al. (2017) and Zhang et al. (2021) had already shown the existence of a negative relationship between these two variables, demonstrating that higher levels of social support were associated with a reduction in anxiety symptoms. Furthermore, it is worth mentioning that among the sources of support mentioned earlier, friends tend to be the ones who contribute the most to reducing anxiety, highlighting the importance of friendships as a significant resource for dealing with anxiety. These results also suggest the protective role that social support plays in relation to anxiety, as it offers emotional support, understanding, and the sharing of concerns and can assist in relieving anxiety symptoms.

It was also possible to observe the negative impact of anxiety on satisfaction with life, with prison officers who have greater concerns generally being less satisfied with their lives. However, if anxiety is reduced, individuals may experience a greater sense of congruence between their lives and their ideals, understanding that their living conditions are excellent, that they are satisfied with their lives, and that they have achieved what has been truly important in their lives so far, leading to greater and better satisfaction with life. This result is in line with previous research on the impact of anxiety on satisfaction with life (Serin et al., 2010; Tsitsas et al., 2019). Thus, the results suggest that high levels of anxiety negatively impact the overall evaluation these professionals make of their lives.

Regarding the results of the mediation model analysis, they show that social support from various sources has an indirect impact on satisfaction with life through anxiety. In other words, when prison officers perceive greater social support, they may experience lower levels of anxiety, which, in turn, may lead to an improvement in their satisfaction with life. Therefore, social support plays a

protective role in this sample, helping to reduce anxiety levels, which, consequently, contributes to greater satisfaction with life.

This study can be considered an innovative one, continuing the exploration of the mediating role of anxiety (Xiaowen et al., 2018; Zhang et al., 2021) in the relationship between social support and satisfaction with life. In this regard, it is the first study to investigate, in a sample of prison officers, professionals for whom mental health issues may be problematic, the direct and indirect effects of social support and anxiety on life satisfaction. In other words, social support increases life satisfaction by lowering anxiety while also having a direct positive impact on satisfaction with life.

The results should be interpreted considering several limitations, which give rise to implications for future research. Given that this study focused on informal sources of support (e.g., family, friends, and significant others), future studies may explore the role of formal sources of support (e.g., healthcare professionals, colleagues) to understand if these sources have a similar impact in reducing anxiety and increasing satisfaction with life. Considering the cross-sectional nature of the present study, the results obtained are not generalizable, and causal relationships cannot be established. Future research can collect data at different time points to assess the possibility of temporal changes in the studied variables as well as to explore social support in its different dimensions and typologies (formal and informal) through qualitative methods. The use of an online survey may have contributed to a less representative sample, as the online environment presents limitations for those less familiarized with information and communication technologies. Therefore, it is suggested that a combination of virtual and traditional dissemination methods would be a viable option to obtain a richer and more representative sample of the population. In this study, there is a noticeable gender imbalance in the sample (77% - 23%) that reflects the gender distribution of prison officers (approximately 86% - 14%) in Portugal, as shared by the General Directorate of Reintegration and Prison Services with the authors on July 28, 2023. Future research should seek to collect data in a female-only sample or in a sample with a balanced gender ratio to determine if the results obtained in this study are replicable in such a sample.

This study also has potential implications for further research, as it appears to be the first study testing this mediation model. Therefore, future studies should be developed to test the relationship between these variables in different populations, validating the adequacy of the model in different samples. Given that in the present study, social support remains a statistically significant predictor even in the presence of anxiety, future research could investigate an alternative model where anxiety serves as a moderating variable, considering the impact of social support on satisfaction with life at different levels of anxiety.

A set of practical implications emerge from the study. Considering the characteristics of the job, the presence of a clinical psychologist or occupational health professional in prisons is essential, providing support and assistance not only to inmates but also to prison officers, helping them to cope with the professional challenges, including techniques for managing anxiety and stress. It is also crucial to develop policies to support mental health issues, including the implementation of mental health training programs and the establishment of psychological support protocols. Awareness and education about mental health issues faced by prison officers are also important. Awareness can be raised through campaigns, lectures, and training. Education aims to reduce the stigma associated with mental health by providing information about mental health conditions and encouraging individuals to seek help and support when needed. It is also important to promote a healthy and mentally supportive work environment for prison

officers, including appropriate work management practices, the establishment of peer support mechanisms, the promotion of self-care activities, and the provision of resources to address daily challenges. These implications aim to recognize the issues faced by prison officers, promote mental health, and enhance their well-being. Therefore, through targeted interventions and policies, it is possible to improve the quality of life and reduce the negative impacts that anxiety can have on this profession.

This research is groundbreaking, examining anxiety as a mediator in the relationship between social support and life satisfaction in a sample where mental health issues are critical and warrant further investigation in clinical and health psychology research. It also paves the way for future research and interventions aimed at exploring and promoting social support and understanding its relationship with anxiety and satisfaction with life in different populations and contexts, providing resources to enhance individuals' well-being.

Acknowledgements

The authors would like to thank the National Union of Prison Guards Corps (Sindicato Nacional do Corpo da Guarda Prisional - SNCGP) for their contribution to the data collection procedures. The current research was partly funded by the European Commission's Erasmus+ program, Grant Agreement nr. 2019-1-PT01-KA204-061285.

References

- American Psychiatric Association. (2014). *Manual diagnóstico e estatístico de transtornos mentais: DSM-5*. Artmed.
- Au, A., Lau, K., Koo, S., Cheung, G., Pan, P., & Wong, M. (2009). The Effects of Informal Social Support on Depressive Symptoms and Life Satisfaction in Dementia Caregivers in Hong Kong. *East Asian Archives of Psychiatry*, 19(2), 57–64. <https://easap.asia/index.php/find-issues/past-issue/item/264-0902-v19n2-p57>
- Bell, S., Hopkin, G., & Forrester, A. (2019). Exposure to Traumatic Events and the Experience of Burnout, Compassion Fatigue and Compassion Satisfaction among Prison Mental Health Staff: An Exploratory Survey. *Issues in Mental Health Nursing*, 40(4), 304–309. <https://doi.org/10.1080/01612840.2018.1534911>
- Bezerra, C. de M., Assis, S. G. de, & Constantino, P. (2016). Sofrimento psíquico e estresse no trabalho de agentes penitenciários: Uma revisão da literatura. *Ciência & Saúde Coletiva*, 21(7), 2135–2146. <https://doi.org/10.1590/1413-81232015217.00502016>
- Biswas-Diener, R., Diener, E., & Tamir, M. (2004). The psychology of subjective well-being. *Daedalus*, 133(2), 18–25. <https://doi.org/10.1162/001152604323049352>
- Bourbonnais, R., Jauvin, N., Dussault, J., & Vezina, M. (2007). Psychosocial work environment, interpersonal violence at work and mental health among correctional officers. *International Journal of Law and Psychiatry*, 30(4–5), 355–368. <https://doi.org/10.1016/j.ijlp.2007.06.008>
- Brower, J. (2013). *Correctional Officer Wellness and Safety Literature Review*. United States Department of Justice Office of Justice Programs Diagnostic Center. <https://s3.amazonaws.com/static.nicic.gov/Public/244831.pdf>
- Carvalho, S., Pinto-Gouveia, J., Pimentel, P., Maia, D., & Mota-Pereira, J. (2011). Características psicométricas da versão portuguesa da Escala Multidimensional de Suporte Social Percebido (Multidimensional Scale of Perceived Social Support—MSPSS). *Psicologica*, 54, 331–357. https://doi.org/10.14195/1647-8606_54_13
- Diener, E., Emmons, R. A., Randy, L. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Forsyth, J., Shaw, J., & Shepherd, A. (2022). The support and supervision needs of prison officers working within prison environments. An empty systematic review. *The Journal of Forensic Psychiatry & Psychology*, 33(4), 475–490. <https://doi.org/10.1080/14789949.2022.2085150>
- Gonçalves, F., Mendes, A., & Santos, J. (2017). Ansiedade e satisfação com a vida. Estudo das relações numa amostra de estudantes portugueses. *OMNIA Revista Interdisciplinar de Ciências e Artes*, 7, 23–40. <https://doi.org/10.23882/OM07-2017-10-03>
- Gonzalez-Saenz de Tejada, M., Bilbao, A., Baré, M., Briones, E., Sarasqueta, C., Quintana, J. M., Escobar, A., & CARESS-CCR Group. (2017). Association between social support, functional status, and change in health-related quality of life and changes in anxiety and depression in colorectal cancer patients: Social support, functional status, HRQoL, and distress in CRC. *Psycho-Oncology*, 26(9), 1263–1269. <https://doi.org/10.1002/pon.4303>
- Gouin, J.-P., da Estrela, C., Desmarais, K., & Barker, E. T. (2016). The Impact of Formal and Informal Support on Health in the Context of Caregiving Stress: Formal and Informal Support and Caregiving Stress. *Family Relations*, 65(1), 191–206. <https://doi.org/10.1111/fare.12183>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (7th ed.). Pearson.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- JASP Team (2023). *JASP* (Version 0.18.1) [Computer software]. <https://jasp-stats.org/>
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2), 178–187. <https://doi.org/10.1108/02683940510579803>
- José, H., Oliveira, C., Costa, E., Matos, F., Pacheco, E., Nave, F., Valentim, O., & Sousa, L. (2023). Anxiety and Depression in the Initial Stage of the COVID-19 Outbreak in a Portuguese Sample: Exploratory Study. *Healthcare*, 11(5), Article 659. <https://doi.org/10.3390/healthcare11050659>
- Jose, S., George, N., & Dante, G. (2018). Life satisfaction as a predictor of death anxiety among the elderly people. *Indian Journal of Health and Well-being*, 9(6), 829–832. <https://www.i-scholar.in/index.php/ijhw/article/view/181091>
- Khalid, N. (2021). Resilience, Perceived Social Support, and Life Satisfaction Among Malaysian College Students. *Journal of Nusantara Studies (JONUS)*, 6(2), 21–40. <https://doi.org/10.24200/jonus.vol6iss2pp21-40>
- Kinman, G., James Clements, A., & Hart, J. (2016). Work-related wellbeing in UK prison officers: A benchmarking approach. *International Journal of Workplace Health Management*, 9(3), 290–307. <https://doi.org/10.1108/IJWHM-09-2015-0054>
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling* (4th Ed.). The Guilford Press.
- Lambert, E. G., Altheimer, I., & Hogan, N. L. (2010). Exploring the Relationship Between Social Support and Job Burnout Among Correctional Staff. *Criminal Justice and Behavior*, 37(11), 1217–1236. <https://doi.org/10.1177/0093854810379552>
- Lambert, E. G., Jiang, S., Liu, J., Zhang, J., & Choi, E. (2018). A Happy Life: Exploring How Job Stress, Job Involvement, and Job Satisfaction Are Related to the Life Satisfaction of Chinese Prison Staff. *Psychiatry, Psychology and Law*, 25(4), 619–636. <https://doi.org/10.1080/13218719.2018.1473174>
- Laranjeira, C. A. (2009). Preliminary validation study of the Portuguese version of the satisfaction with life scale. *Psychology, health & medicine*, 14(2), 220–226. <https://doi.org/10.1080/13548500802459900>
- McCanlies, E. C., Gu, J. K., Andrew, M. E., & Violanti, J. M. (2018). The effect of social support, gratitude, resilience and satisfaction with life on depressive symptoms among police officers following Hurricane Katrina. *International Journal of Social Psychiatry*, 64(1), 63–72. <https://doi.org/10.1177/0020764017746197>
- Neto, F. (1993). The satisfaction with life scale: Psychometrics properties in an adolescent sample. *Journal of Youth and Adolescence*, 22(2), 125–134. <https://doi.org/10.1007/BF01536648>
- Parkerson, H. A., Thibodeau, M. A., Brandt, C. P., Zvolensky, M. J., & Asmundson, G. J. G. (2015). Cultural-based biases of the GAD-7. *Journal of Anxiety Disorders*, 31, 38–42. <https://doi.org/10.1016/j.janxdis.2015.01.005>
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. In E. Diener (Ed.), *Assessing well-being: The collected works of Ed Diener*. pp. 101–117. <https://doi.org/10.1007/978-90-481-2354-4>
- Roohafza, H. R., Afshar, H., Keshтели, A. H., Mohammadi, N., Feizi, A., Taslimi, M., & Adibi, P. (2014). What's the role of perceived social support and coping styles in depression and anxiety? *Journal of Research in Medical Sciences*, 19(10), 944–949. <http://jrms.mui.ac.ir/index.php/jrms/article/view/10063/4756>
- Scott, D. (2006). The caretakers of punishment: Prison officers and the rule of law. *Prison Service Journal*, 168, 14–19.
- Serin, N. B., Serin, O., & Özbağ, L. F. (2010). Predicting university students' life satisfaction by their anxiety and depression level. *Procedia - Social and Behavioral Sciences*, 9, 579–582. <https://doi.org/10.1016/j.sbspro.2010.12.200>
- Sousa, T. V., Viveiros, V., Chai, M. V., Vicente, F. L., Jesus, G., Carnot, M. J., Gordo, A. C., & Ferreira, P. L. (2015). Reliability and validity of the Portuguese version of the Generalized Anxiety Disorder (GAD-7) scale. *Health and Quality of Life Outcomes*, 13(1), Article 50. <https://doi.org/10.1186/s12955-015-0244-2>

- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>
- Tsitsas, G., Nanopoulos, P., & Paschali, A. (2019). Life Satisfaction, and Anxiety Levels among University Students. *Creative Education*, 10(05), 947–961. <https://doi.org/10.4236/ce.2019.105071>
- World Health Organization. (2020). QD85 Burnout. ICD-11. <http://id.who.int/icd/entity/129180281>
- Xiaowen, W., Guangping, G., Ling, Z., Jiarui, Z., Xiumin, L., Zhaoqin, L., Hongzhan, L., Yuyan, Y., Liyuan, Y., & Lin, L. (2018). Depression and anxiety mediate perceived social support to predict health-related quality of life in pregnant women living with HIV. *AIDS Care*, 30(9), 1147–1155. <https://doi.org/10.1080/09540121.2018.1456640>
- Zhang, H., Chen, D., Cui, N., Zou, P., Shao, J., Wang, X., Zhang, Y., Du, J., Du, C., Zhou, G., & Zheng, D. (2021). Explaining Job Satisfaction Among Residents in Standardized Residency Training Programs: A Serial Multiple Mediation Model. *Risk Management and Healthcare Policy*, 14, 4073–4081. <https://doi.org/10.2147/RMHP.S330217>
- Zimet, G., Dahlem, N., Zimet, S., & Farley, G. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2