

Social Support Networks, Coping Mechanisms, and Mental Health Outcomes in Post-Traumatic Stress Disorder (PTSD) Patients in Yogyakarta

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ABSTRACT

In Yogyakarta, Indonesia, this study examines the complex interactions that exist between coping strategies, social support networks, and mental health outcomes in people with Post-Traumatic Stress Disorder (PTSD). The study uses regression and correlation analysis on a broad sample to determine the links between coping techniques, perceived social support, and the severity of PTSD symptoms. In line with previous research, the results emphasize the protective value of emotional support and proactive social support-seeking. But the surprising positive relationship that was found between avoidance and the severity of symptoms presents a fresh angle that calls for more research on the cultural dynamics of coping strategies. This study establishes the foundation for further research on PTSD in the particular sociocultural environment of Yogyakarta and offers subtle insights for customized therapies.

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1. INTRODUCTION

Post-Traumatic Stress Disorder (PTSD) is a mental health condition that often arises after exposure to traumatic events. It is characterized by symptoms such as recurrent distressing dreams or flashbacks, internal or external avoidance, and hypervigilance or exaggerated startle response [1]. PTSD can have a significant impact on an individual's interpersonal relationships and social cognition [2]. It is common among various populations, including military servicemembers, veterans, and refugees [3].

Several factors have been found to be associated with PTSD. For example, a study on resettled Afghan refugees in Australia found that communication difficulties, separation

from family, and self-recognition of a mental health problem were strongly and independently associated with a probable PTSD diagnosis [3]. Another study on violently injured patients in urban trauma centers found that PTSD was highly prevalent in this population, and understanding the root causes of PTSD could help direct interventions to support individuals with services that meet their individual needs [4].

Treatment options for PTSD include psychotherapy, which is often considered the first line of treatment, and pharmacological interventions. Among the psychotherapy options, cognitive processing therapy, exposure therapy, and eye movement desensitization and reprocessing (EMDR) are some of the most common and effective

approaches [5]. Ketamine-assisted therapy has also shown promise in treating PTSD and depression, particularly among healthcare providers [6]. The incidence of PTSD may be noteworthy in the context of Yogyakarta, Indonesia, a region known for its history of natural disasters and socio-political turmoil. Such events can have long-lasting psychological effects on the impacted people, making a careful investigation of the variables affecting their mental health outcomes necessary.

Yogyakarta offers a distinctive location for our study because of its hardy people and rich cultural heritage. The chance to examine the intricacies of PTSD in a culturally unique setting is provided by the contrast between its historical background and current difficulties. Given the possible effects of trauma in Yogyakarta, it is critical to examine the coping strategies and support networks that people with PTSD may utilize.

It is important to comprehend how coping strategies and social support interact in the mental health context of PTSD patients for a number of reasons [7], [8]. First of all, Yogyakarta's vulnerability to traumatizing incidents calls for a focused investigation of the elements affecting the mental health of its citizens. Second, by figuring out these patterns, it will be easier to create and carry out mental health interventions that are more suited to the particular requirements of the community [9]. Using a quantitative methodology, this project aims to produce empirical data that will improve the debate on PTSD among academics and give useful information for Yogyakarta community stakeholders, mental health professionals, and policymakers.

2. LITERATURE REVIEW

2.1 PTSD and Mental Health

Post-Traumatic Stress Disorder (PTSD) is a severe and persistent mental health condition that arises from exposure to traumatic events. It affects an individual's emotional well-being, cognitive functioning, and overall quality of life. PTSD symptoms often include intrusive memories, hypervigilance,

avoidance behaviors, and alterations in mood and cognition [3], [10], [11]. Research has shown that PTSD is common among various populations, such as resettled refugees [3], and violently injured patients [4]. A study on core symptoms of PTSD in a veteran sample identified recurrent distressing dreams or flashbacks, internal or external avoidance, and hypervigilance or exaggerated startle as the main criteria [1]. These core symptoms were found to accurately identify 79% of veterans with PTSD [1].

PTSD has been linked to increased inflammation in the body and brain. Patients with PTSD have been found to have higher levels of inflammatory cytokine biomarkers, such as interleukin-1, interleukin-6, tumor necrosis factor- α , nuclear factor-KB, and C-reactive protein, compared to healthy controls [12]. Animal model experiments have also suggested the role of inflammation in the pathogenesis and pathophysiology of PTSD [12]. The impact of PTSD on quality of life and subjective well-being has been studied in various populations, such as those affected by natural disasters like tsunamis [13], and victims of bullying at work [14]. In both cases, PTSD was found to have a significant negative impact on the individuals' mental health and quality of life. The chronic and pervasive nature of PTSD underscores the importance of investigating factors that may mitigate or exacerbate its impact, particularly within distinct cultural contexts like Yogyakarta.

2.2 Social Support Networks

Social support is indeed a crucial factor in influencing mental health outcomes, particularly in the context of trauma and PTSD [15]–[18]. Various dimensions of social support include emotional, instrumental, informational, and appraisal support. Primary sources of social support are family, friends, and community

networks, which provide individuals coping with trauma a sense of belonging, understanding, and assistance in practical matters³. Studies have shown that higher levels of perceived social support are associated with better mental health outcomes in PTSD patients [19], [20].

For instance, in the context of military sexual trauma (MST), social support has been found to be essential for recovery and prevention of PTSD. However, individual differences in seeking or benefiting from social support in trauma survivors are not well understood [19]. Interventions like Skills Training in Affective and Interpersonal Regulation (STAIR) have been developed to promote social engagement and skills that support greater role functioning in veterans with PTSD and MST [21].

Moreover, resilience has been found to mediate the relationship between social support and mental health outcomes. In a study on individuals with multiple sclerosis, resilience significantly mediated the relationships between social support from significant others, family members, and friends, and subsequent mental health outcomes [22]. However, cultural nuances may influence the nature and effectiveness of social support, necessitating an exploration of how these dynamics manifest in the context of Yogyakarta.

2.3 Coping Mechanisms in PTSD

Coping mechanisms are the various approaches people take to deal with the psychological and emotional difficulties brought on by trauma. Numerous coping strategies are highlighted in the research, such as expressing emotions, problem-solving, avoiding situations, and looking for social support. While maladaptive coping methods may exacerbate symptoms, adaptive coping mechanisms are linked to better mental health outcomes. It is essential to

comprehend the coping strategies used by PTSD sufferers in order to customize solutions that meet the particular requirements of Yogyakarta's community. The literature highlights the necessity for context-specific research by speculating that cultural influences may influence the choice of coping mechanisms [23]–[26].

2.4 Gaps in the Literature

There are still certain gaps in the literature, despite the fact that it offers insightful information about coping strategies, social support, and PTSD. Few studies have explicitly examined the relationships between these variables, especially in Yogyakarta's cultural environment. Moreover, most research has mostly concentrated on populations in the West, therefore a more comprehensive and diverse approach is needed to take into account the distinct socio-cultural aspects that are common in areas like Yogyakarta. Comprehending these limitations is essential to defending the necessity of a quantitative study that advances a more comprehensive understanding of PTSD in a multicultural and heterogeneous environment.

3. METHODS

3.1 Design & Sample

This study utilized a quantitative research approach to systematically investigate the relationship between social support networks, coping mechanisms, and mental health outcomes in individuals diagnosed with Post-Traumatic Stress Disorder (PTSD) in Yogyakarta, Indonesia. Quantitative research provides the advantage of generating empirical data, which allows statistical analysis to draw reliable conclusions and uncover patterns in a large and diverse sample. The target population for this study consisted of individuals diagnosed with PTSD in Yogyakarta.

Given the diversity of age, gender, and trauma experience in this population, a representative sample will be selected. To achieve this, stratified random sampling is conducted to ensure that the sample reflects the demographic characteristics of individuals with PTSD in Yogyakarta. Participants will be recruited from mental health clinics, support groups, and community organizations serving individuals affected by trauma and PTSD with a total of 150 participants involved in the study.

3.2 Data Collection

Data collection involves administering a structured survey to the participants. The following standardized measurement tools will be used:

1. Social Support Questionnaire: To assess the perceived availability of social support from family, friends, and other sources. This questionnaire will help capture emotional, instrumental, informational, and appraisal support.
2. Coping Strategies Inventory: To identify coping mechanisms used by individuals with PTSD. This inventory will allow participants to self-report their coping strategies, distinguishing between adaptive and maladaptive approaches.
3. PTSD Checklist (PCL-5): To evaluate the severity of PTSD symptoms. The PCL-5 is a widely used and validated tool to assess the presence and intensity of PTSD symptoms.

3.3 Data Analysis

Data analysis with SPSS software will include several steps:

1. Descriptive statistics, such as mean, standard deviation, and frequency distribution, will be used to summarize the demographic characteristics of the sample.

2. Bivariate correlation analysis will be conducted to examine the relationship between perceived social support, coping mechanisms, and mental health outcomes (PTSD symptom severity).
3. Multiple regression analysis will be used to determine the predictive power of social support and coping mechanisms on mental health outcomes while controlling for relevant demographic variables.
4. Subgroup analyses may also be conducted to identify variations by age, gender, and type of trauma.

4. RESULTS AND DISCUSSION

4.1 Results

a. Statistics Descriptive

This study involved a diverse sample of individuals diagnosed with Post-Traumatic Stress Disorder (PTSD) in Yogyakarta. Demographic characteristics are summarized as follows: The mean age of participants was calculated at 35.2 years ($SD = 8.7$). The sample consisted of 45% males and 55% females. Participants reported exposure to a variety of traumatic events, including natural disasters (22%), conflict-related incidents (30%), and personal trauma (48%).

1. Perceived Social Support

The assessment of perceived social support utilized the Social Support Questionnaire. The participants rated their perception of support across multiple domains: The mean score for emotional support was 4.8 ($SD=1.2$). Participants reported an average score of 3.9 ($SD = 1.5$) for instrumental support. The mean score for informational support was 4.2 ($SD = 1.0$). The mean score for

appraisal support was 4.5 (SD = 1.3).

2. *Coping Mechanisms*

Coping mechanisms were evaluated using the Coping Strategies Inventory, which provides insight into the strategies used by participants to manage the challenges associated with PTSD: Problem Solving participants reported a mean score of 3.6 (SD = 1.4). The mean score for emotional expression was 4.1 (SD=1.2). The mean score for avoidance as a coping strategy was 2.8 (SD = 1.6). Seeking Social Support participants reported a mean score of 4.0 (SD = 1.1).

3. *PTSD Symptom Severity*

PTSD symptom severity was assessed using the PTSD Checklist (PCL-5). Participants rated the intensity of symptoms experienced. The mean score for overall PTSD symptom severity was 52.7 (SD = 12.3).

These descriptive statistics provided an initial overview of the characteristics of the study sample. The next stage of the study involved more in-depth statistical examinations, including correlation and regression analyses, to uncover the complex relationships between social support, coping mechanisms, and mental health outcomes in individuals with PTSD in Yogyakarta. The diversity in the sample ensures that the findings will reflect the complex and multifaceted nature of PTSD in this unique socio-cultural context.

b. *Variable Correlation*

The associations between coping strategies, mental health outcomes (such as the intensity of PTSD symptoms), and perceived social support were investigated using bivariate correlation analysis. The findings demonstrated the connections between social support, coping mechanisms, and mental health outcomes by revealing strong correlations between these variables.

There was a strong positive correlation between emotional support and instrumental support (0.632), informational support (0.481), and appraisal support (0.554). This suggests that individuals who perceive higher emotional support are also likely to experience higher levels of the other forms of support.

The strong positive correlation (0.683) between problem solving and emotional expression suggests that individuals who engage in active problem-solving strategies are also more likely to openly express their emotions.

The strong negative correlation (-0.712) suggests that higher levels of perceived emotional support are associated with lower PTSD symptom severity. This is in line with existing literature that emphasizes the protective role of emotional support in reducing the impact of trauma.

Avoidance: The positive correlation (0.261) between avoidance and PTSD symptom severity suggests that individuals who tend to avoid stressors may experience higher levels of PTSD symptoms. This is in line with the literature highlighting the

potentially maladaptive nature of avoidance strategies.

Social Support Seeking and PTSD Symptom Severity: A strong negative correlation (-0.627) indicated that actively seeking

social support was associated with lower PTSD symptom severity. This underscores the importance of encouraging individuals to seek support.

c. Regression Analysis

Table 1. Regression Analysis Results

Predictor Variable	B Coefficient	Standard Error	Beta	Sig
Constant	15.321	0.219		0.000
Emotional Support	-4.212	0.129	-0.362	0.002
Seeking Social Support	-2.821	0.072	-0.278	0.011
Problem-Solving	-1.594	0.092	-0.212	0.036
Avoidance	1.983	0.082	0.260	0.017

Source: Results of data analysis (2023)

The regression analysis aimed to explore the predictive power of various factors on the severity of PTSD symptoms. The results are presented in Table 1.

1. Constant: The constant (15.321) represents the estimate of PTSD symptom severity when all predictor variables are zero.
2. Emotional Support: The negative B coefficient (-4.212) for emotional support indicates that for every one unit increase in perceived emotional support, PTSD symptom severity is expected to decrease by 4.212 units. The negative beta (-0.362) indicates a moderate negative effect.
3. Seeking Social Support: Similarly, the negative B coefficient (-2.821) for seeking social support indicates that actively seeking social support is associated with decreased PTSD symptom severity. The negative beta (-0.279) indicates a moderate negative effect.
4. Problem Solving: A negative B coefficient (-1.594) for problem solving indicates that actively engaging in problem solving strategies is associated with decreased PTSD symptom severity. The negative beta (-

0.212) indicates a moderate negative effect.

5. Avoidance: Interestingly, the positive B coefficient (1.983) for avoidance suggests that individuals who tend to avoid stressors may experience increased PTSD symptom severity. The positive beta (0.260) indicates a moderate positive effect.

4.2 Discussion

The results of correlation and regression analyses shed light on the complex relationships between social support, coping mechanisms, and mental health outcomes in individuals diagnosed with Posttraumatic Stress Disorder (PTSD) in Yogyakarta. This discussion aims to explore implications, nuances, and potential avenues for further exploration.

a. The Role of Social Support

The strong negative correlation between perceived emotional support and PTSD symptom severity is consistent with existing literature. Regression analysis further confirmed that higher levels of emotional support were associated with lower PTSD symptom severity. This emphasizes the important role of emotional connection in buffering the impact of trauma, indicating the potential benefits of

interventions focused on improving emotional support networks.

Actively seeking social support also emerged as a key predictor of lower PTSD symptom severity. These findings are in line with the idea that individuals who seek support and engage with their social networks experience better mental health outcomes. Mental health interventions in Yogyakarta should consider emphasizing and normalizing support-seeking as a coping strategy.

b. Coping Mechanisms and their Complexity

The positive correlation between problem solving and emotion expression suggests a dynamic relationship where individuals who actively engage in problem solving are also more likely to openly express their emotions. However, the moderate effect size in the regression analysis implies that problem solving alone may not be sufficient to significantly impact PTSD symptom severity. An integrative approach that includes various coping strategies may be more effective.

The unexpected positive coefficient for avoidance in the regression analysis prompted a re-evaluation of the assumptions surrounding this coping mechanism. Contrary to expectations, higher levels of avoidance were associated with higher PTSD symptom severity. This raises interesting questions about the nature and cultural context of avoidance in Yogyakarta. Future research could study specific types of avoidance behaviors and their implications for mental health outcomes.

c. Cultural Considerations

The cultural context of Yogyakarta plays an important role in shaping the dynamics of social support and coping mechanisms. The collectivist nature of Indonesian society likely amplifies the impact of family and community-based support. Mental health interventions should be culturally sensitive, recognizing and utilizing existing support structures while respecting cultural norms around treatment.

4.3 Limitations

Some limitations are introduced by the study's cross-sectional design and dependence on self-report measures. To prove causation and minimize biases, future studies may use objective measurements and longitudinal designs. Furthermore, broadening the study to encompass a more heterogeneous geographic representation in Yogyakarta will improve the findings' generalizability.

4.4 Implications

The results have applications for Yogyakarta mental health professionals. Interventions may be more effective if they are designed with an emphasis on the value of emotional support, proactive social support-seeking, and a thorough understanding of coping mechanisms. These findings should be included into mental health policies by policymakers in order to support culturally appropriate approaches.

5. CONCLUSION

To sum up, this study offers important new understandings of the intricate relationships influencing the mental health results of PTSD sufferers in Yogyakarta. The important role those social connections play in reducing the effects of trauma is highlighted by the substantial influence of social support, especially emotional and proactive assistance. The unanticipated contribution of avoidance to

symptom intensity necessitates careful investigation and taking into account cultural differences in coping mechanisms. These findings highlight the need for culturally responsive therapies and have practical consequences for Yogyakarta politicians and

mental health practitioners. Ongoing research and cooperative efforts are crucial to improving our understanding of the intricacies of PTSD in many cultural contexts and boosting the efficacy of mental health support systems.

REFERENCES

- [1] J. L. Walton *et al.*, "Sometimes less is more: Establishing the core symptoms of PTSD," *J. Trauma. Stress*, vol. 30, no. 3, pp. 254–258, 2017.
- [2] H. Davies, "Social cognition and interpersonal relationships in individuals with Post-traumatic stress disorder (PTSD)." Cardiff University, 2015.
- [3] M. S. Hamrah, H. Hoang, J. Mond, B. Pahlavanzade, A. Charkazi, and S. Auckland, "The prevalence and correlates of symptoms of post-traumatic stress disorder (PTSD) among resettled Afghan refugees in a regional area of Australia," *J. Ment. Heal.*, vol. 30, no. 6, pp. 674–680, 2021.
- [4] Z. J. Coles, A. Tufariello, and S. Bonne, "Unpacking the Causes of Post-Traumatic Stress Disorder in Violently Injured Patients," *J. Surg. Res.*, vol. 256, pp. 43–47, 2020.
- [5] R. Gilman, E. M. O'Bryan, K. M. Chard, and M. Stewart, "Current Psychosocial Treatment Options for PTSD among Youth," *Curr. Treat. Options Psychiatry*, vol. 3, pp. 182–191, 2016.
- [6] S. Dames, P. Kryskow, and C. Watler, "A cohort-based case report: the impact of ketamine-assisted therapy embedded in a community of practice framework for healthcare providers with PTSD and depression," *Front. Psychiatry*, vol. 12, p. 803279, 2022.
- [7] S. Mokodenseho, F. H. M. Maku, S. Pobela, and F. Panu, "Menangani Krisis Mental di Kalangan Pelajar: Upaya Meningkatkan Kesejahteraan Emosional dalam Sistem Pendidikan," *J. Pendidik. West Sci.*, vol. 1, no. 06, pp. 335–342, 2023.
- [8] M. A. Ramli, "Bulletin of Early Childhood," *Bull. Early Child.*, vol. 1, no. 1, pp. 1–19, 2022.
- [9] Y. I. B. A. Ardhiyansyah, and U. B. Jaman, *The Impact of the Principal 's Leadership Style and the Organizational Culture of the School on Teacher Performance in SMAN 1 Cicalengka in Bandung City , West Java*, vol. 1. Atlantis Press SARL. doi: 10.2991/978-2-38476-088-6.
- [10] U. B. Jaman and A. Zulfikri, "Peran serta Masyarakat dalam Pencegahan Kekerasan Seksual dihubungkan dengan UU No. 12 Tahun 2022 Tentang Tindak Pidana Kekerasan Seksual," *J. Huk. dan HAM Wara Sains*, vol. 1, no. 01, pp. 1–7, 2022.
- [11] U. B. Jaman, "Legal Analysis of The Impact of Industrial Development on The Environment," *East J. Law Hum. Rights*, vol. 1, no. 03, pp. 87–92, 2023.
- [12] D.-H. Lee *et al.*, "Neuroinflammation in post-traumatic stress disorder," *Biomedicines*, vol. 10, no. 5, p. 953, 2022.
- [13] S. Exenberger and B. Juen, *Well-being, resilience and quality of life from children's perspectives: a contextualized approach*. Springer Science & Business Media, 2013.
- [14] S. B. Matthiesen and S. Einarsen, "Psychiatric distress and symptoms of PTSD among victims of bullying at work," *Br. J. Guid. Counc.*, vol. 32, no. 3, pp. 335–356, 2004.
- [15] H. Ashari and T. P. Nugrahanti, "Menurunnya Prestasi Akademis Mahasiswa Akuntansi pada Pembelajaran Daring di Masa Pandemi Covid-19," *J. Revenue J. Ilm. Akunt.*, vol. 2, no. 2, pp. 233–251, 2022.
- [16] I. Nugrahanti, S. Nurfadhillah, and Y. Nuraeni, "Analisis Peranan Guru dalam Meningkatkan Motivasi Belajar Siswa Kelas II di Sekolah Dasar Negeri Sukabumi Selatan 01 Kebon Jeruk," *J. Pendidik. dan Konseling*, vol. 4, no. 5, 2022.
- [17] S. Supriandi, T. Lesmana, I. Subasman, A. Y. Rukmana, and P. M. Purba, "Analisis Produktivitas Penelitian Pendidikan di Negara Berkembang: Perbandingan antara Negara di Asia Tenggara," *J. Pendidik. West Sci.*, vol. 1, no. 07, pp. 449–459, 2023.
- [18] Y. Iskandar, "Hubungan Self-Efficacy dengan Prokrastinasi Akademik Mahasiswa Semester 5 Fakultas Bisnis dan Humaniora Universitas Nusa Putra (Sebuah Proposal Penelitian)," *J. Psikol. dan Konseling West Sci.*, vol. 1, no. 1, pp. 43–52, 2023.
- [19] S. Jittayuthd and A. Karl, "Rejection sensitivity and vulnerable attachment: associations with social support and PTSD symptoms in trauma survivors," *Eur. J. Psychotraumatol.*, vol. 13, no. 1, p. 2027676, 2022.
- [20] J. B. Pollmann, A. B. S. Nielsen, S. B. Andersen, and K.-I. Karstoft, "Changes in perceived social support and PTSD symptomatology among Danish army military personnel," *Soc. Psychiatry Psychiatr. Epidemiol.*,

- vol. 57, no. 7, pp. 1389–1398, 2022.
- [21] M. Cloitre, C. Jackson, and J. A. Schmidt, "STAIR for strengthening social support and relationships among veterans with military sexual trauma and PTSD," *Mil. Med.*, vol. 181, no. 2, pp. e183–e187, 2016.
- [22] E. Koelmel, A. J. Hughes, K. N. Alschuler, and D. M. Ehde, "Resilience mediates the longitudinal relationships between social support and mental health outcomes in multiple sclerosis," *Arch. Phys. Med. Rehabil.*, vol. 98, no. 6, pp. 1139–1148, 2017.
- [23] R. R. Madege, J. Msemwa, and D. Lymo, "Climate change; Farm level definition, causes, perceived impacts and coping mechanisms in three farming systems of Tanzania," 2016.
- [24] C. J. Starrs and J. C. Perry, "Coping action patterns as mechanisms of change across psychotherapies: three case examples of personality disorders with recurrent major depression," *J. Pers. Disord.*, vol. 32, no. Supplement, pp. 58–74, 2018.
- [25] D. Drewniak, A. Glässel, M. Hodel, and N. Biller-Andorno, "Risks and benefits of web-based patient narratives: systematic review," *J. Med. Internet Res.*, vol. 22, no. 3, p. e15772, 2020.
- [26] J. E. Khoury, L. Atkinson, T. Bennett, S. M. Jack, and A. Gonzalez, "Coping strategies mediate the associations between COVID-19 experiences and mental health outcomes in pregnancy," *Arch. Womens. Ment. Health*, vol. 24, pp. 1007–1017, 2021.