

# The Influence of Cultural Factors, Social Norms, and Social Support on the Spread of Infectious Diseases in Communities in Indonesia

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## ABSTRACT

This research investigates the influence of cultural factors, social norms, and social support on the spread of infectious diseases in communities in Indonesia through a quantitative analysis. The structural equation model (SEM) employed in this study examines the complex interplay between these sociocultural elements and their impact on the transmission of infectious diseases. Results indicate significant positive associations between cultural factors and the spread of infectious diseases, social norms and disease transmission, and unexpectedly, social support and disease spread. These findings challenge conventional assumptions, emphasizing the need for nuanced and culturally sensitive public health interventions. The study contributes valuable insights to the understanding of infectious disease dynamics within diverse communities and informs targeted strategies for effective mitigation.

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## 1. INTRODUCTION

Infectious diseases continue to pose a significant challenge to global public health, impacting communities and countries worldwide. To effectively prevent and control these diseases, it is crucial to understand the complex interplay between cultural factors, social norms, and social supports [1]–[3]. This understanding can inform strategies for disease prevention and control, taking into account the unique contexts and dynamics of different populations [4]–[7].

Indonesia, with its diverse ethnic groups and cultural practices, presents a dynamic setting for studying the spread of infectious diseases. The country has faced various health challenges, including emerging infectious diseases and endemic conditions. The trajectory of infectious diseases in Indonesian society is influenced by cultural practices, social norms, and the availability of social support systems [4]. The provision of primary healthcare in Indonesia has been decentralized to sub-provincial levels of government, but there are still challenges in providing adequate services to rural populations, particularly in terms of resources and trained staff. While there have been improvements in health indicators, there are still regional and social class variations, and universal health coverage is yet to be achieved [5]. The consumption of salted fish is a factor contributing to the incidence of nasopharyngeal carcinoma in coastal areas of Indonesia. NPC is the fourth most common malignant tumor in the country, and it primarily affects men in the elderly age group [8]–[10]. Treatment options include radiotherapy, chemotherapy, and surgical intervention [6]. Indonesia is facing a human resources crisis in the health sector, particularly in underdeveloped areas. Innovative leadership strategies are needed to strengthen public health education in remote areas and improve access to quality healthcare services. Ethical and legal obstacles exist in implementing innovative leadership strategies, but creative social innovation approaches can enhance access to healthcare

and empower intervention communities. Strengthening community health systems should prioritize increasing health financing, strengthening logistics management systems, and fostering community ownership and partnerships [6]. This research seeks to explain the nuanced relationship between these variables in the context of communities in Indonesia, an archipelago of diverse cultures and traditional practices that shape the fabric of everyday life.

While existing research highlights the impact of individual behavior and health infrastructure on disease transmission, there are significant gaps in understanding how cultural nuances and social dynamics contribute to the spread of infectious diseases. This study aims to address this gap by using quantitative analysis to untangle the complex web of factors that influence disease transmission in Indonesia's diverse society. In doing so, we hope to provide actionable insights that can inform targeted interventions and public health strategies.

## 2. LITERATURE REVIEW

### *2.1 Cultural Factors and Disease Spread*

Cultural factors play a significant role in shaping health-related behaviors and practices within communities, particularly in the context of infectious diseases. Understanding how cultural nuances impact health-seeking behaviors, hygiene practices, and traditional healing methods is crucial for developing interventions that align with local customs and effectively address disease transmission [11], [12]. Cultural practices such as communal living, religious rituals, and traditional medicinal practices can either facilitate or impede the transmission of infectious diseases. For example, communal gatherings, deeply ingrained in many Indonesian cultures, may serve as both a source of support and a potential vector for disease transmission [13].

Investigating these cultural intricacies is vital for developing interventions that respect and align with local customs, ensuring the success of public health efforts [14], [15].

### **2.2 Social Norms and Disease Transmission**

Social norms play a significant role in shaping the dynamics of disease transmission, including adherence to personal space, cleanliness, and health practices. Studies have shown that these norms can impact the spread of infectious diseases. In the Indonesian context, communal living is common, making it crucial to understand how social norms influence practices such as handwashing, mask-wearing, and isolation during illness. Additionally, the stigma associated with certain diseases may discourage individuals from seeking timely medical care, which can perpetuate the cycle of transmission [11]. Understanding and addressing these social norms and stigmas is essential for promoting effective disease prevention and control strategies in Indonesia [16].

### **2.3 Social Support Systems and Community Resilience**

Close-knit communities with robust social support systems are better equipped to disseminate health information, provide care for the sick, and implement collective preventive measures, enhancing community resilience against infectious diseases [17], [18]. Studies have shown that communities with strong social cohesion are more likely to adopt and sustain health-promoting behaviors, acting as a buffer against infectious diseases [19]. In the Indonesian context, where family ties and community bonds are strong, understanding the impact of social support on disease spread is crucial [20]. Fragmented social support networks may hinder effective

response efforts, highlighting the importance of strong social support systems [21].

### **2.4 Cross-Cultural Perspectives**

A comparative analysis of cultural and social factors influencing disease spread across different regions provides valuable insights. Studies in similar cultural settings, such as those in Southeast Asia, underscore the importance of cultural adaptations in public health intervention [11]. Lessons learned from diverse contexts can inform the development of strategies tailored to the specific needs of Indonesian communities [22]. Moreover, understanding how globalization and cultural exchanges influence disease dynamics is imperative in a world where interconnectedness facilitates the rapid spread of infectious agents [23].

### **2.5 Gaps in the Existing Literature**

While the literature provides valuable insights into the role of cultural factors, social norms, and social support in infectious disease transmission, notable gaps persist. Limited research specifically explores these dynamics within the Indonesian context, where cultural diversity and regional variations are pronounced. Additionally, there is a paucity of quantitative studies that systematically analyze the associations between cultural practices, social norms, and social support structures with the spread of infectious diseases. This research aims to address these gaps by employing a quantitative approach to unravel the intricate relationships within the unique socio-cultural landscape of Indonesia.

## **3. METHODS**

In order to assure representation from a range of cultural, socioeconomic, and geographic contexts, the study aims to recruit

200 individuals from a varied sample spread across different regions of Indonesia. Participants were divided into age groups, socioeconomic status, and urban and rural locations using a stratified random sample technique. By capturing the variety within the Indonesian population, this method seeks to produce more reliable and broadly applicable results.

### 3.1 Data Collection

Selected participants will be given a structured survey to complete in order to gather quantitative data. The purpose of the survey instrument is to gather data regarding cultural practices, conformity to social norms, and the presence and efficiency of social support networks. The poll also asked about the participants' history of infectious diseases, awareness of preventive measures, and behavior when it came to seeking health care. The survey was pilot-tested in a short pilot study to ensure cultural sensitivity, and it was then modified accordingly.

### 3.2 Measurement Instruments

The survey will examine cultural variables, social norms, social support, and health-related behaviors using validated scales and items from the body of existing literature. The degree of cultural practices, conformity to social norms, and the perceived efficacy of social support networks will all be measured on a Likert scale ranging from 1 to 5. In order to supplement the quantitative data, open-ended questions will enable participants to offer further context and perspectives.

### 3.3 Data Analysis

The collected data will be subjected to Structural Equation Modeling using Partial Least Squares (SEM-PLS) analysis. SEM-PLS is particularly well-suited for complex models and small sample sizes, making it an appropriate choice for this study. Measurement Model Assessment: Confirmatory Factor Analysis (CFA) will be

employed to assess the reliability and validity of the measurement model. This step ensures that the chosen indicators accurately represent the latent constructs. Structural Model Estimation: The structural relationships between the variables will be analyzed to uncover the direct and indirect effects of cultural factors, social norms, and social support on the spread of infectious diseases. Hypotheses derived from the literature will guide the estimation of these relationships. Various fit indices, such as the goodness-of-fit index (GoF), will be utilized to evaluate the overall model fit. This step ensures that the proposed model adequately represents the observed data.

## 4. RESULT AND DISCUSSION

### 4.1 Descriptive Statistics

The study encompassed a diverse sample of 200 participants across various regions in Indonesia, ensuring representation across different cultural, socio-economic, and geographical contexts. Descriptive statistics revealed that 45% of participants resided in urban areas, while 55% lived in rural settings. The age distribution was well-balanced, with 30% in the 18-25 age group, 40% in the 26-40 age group, and 30% in the 41-60 age group. Gender distribution was approximately equal, with 50.5% female and 49.5% male participants.

### 4.2 Measurement Model Assessment

Confirmatory Factor Analysis (CFA) validated the measurement model, confirming the reliability and validity of the chosen indicators for each latent construct. Measurement model variables play an important role in ensuring the validity and reliability of the construct under study. This table provides information on factor loading, Cronbach's alpha, composite reliability, and average variance extracted (AVE) for each latent variable in the model.

Table 1. Measurement Model

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variant Extracted
Culture Factors	CF.1	0.802	0.841	0.903	0.758

	CF.2	0.928			
	CF.3	0.877			
Social Norms	SC.1	0.828	0.841	0.904	0.759
	SC.2	0.810			
	SC.3	0.817			
Social Support	SN.1	0.879	0.760	0.859	0.669
	SN.2	0.898			
	SN.3	0.836			
Spread of Infectious Diseases	SID.1	0.826	0.753	0.857	0.667
	SID.2	0.810			
	SID.3	0.813			

Source: Data Processing Results (2023)

Cultural factors (CF) have strong loading factors, indicating a robust relationship between the observed indicators and the latent variable of cultural factors [1]. The Cronbach's alpha and composite reliability values for cultural factors are excellent, indicating high internal consistency and reliability. The average variance extracted (AVE) for cultural factors surpasses the recommended threshold, supporting convergent validity. Social norms (SC) also exhibit strong loading factors, indicating a strong association with the latent variable of social norms. The Cronbach's alpha and composite reliability values for social norms meet the threshold for reliability, indicating strong internal consistency. The AVE for social norms exceeds the recommended threshold, supporting convergent validity.

Social support (SN) has strong loading factors, indicating a robust relationship with the latent variable of social support. The Cronbach's alpha and composite reliability values for social support meet the threshold for reliability, indicating good internal consistency. The AVE for social support meets the acceptable threshold for convergent validity. The spread of infectious diseases (SID) also exhibits a strong loading factor, indicating a robust relationship with the latent variable of disease spread. The Cronbach's alpha and composite reliability values for the spread of infectious diseases meet the threshold for reliability, indicating good internal consistency. The AVE for the spread of infectious diseases meets the acceptable threshold for convergent validity.

Table 2. Discriminant Validity

	Social Support	Culture Factors	Social Norms	Spread of Infectious Diseases
Social Support	0.818			
Culture Factors	0.564	0.871		
Social Norms	0.596	0.509	0.871	
Spread of Infectious Diseases	0.516	0.578	0.272	0.816

Source: Data Processing Results (2023)

The discriminant validity of the measurement model was assessed by examining the correlation coefficients between the latent variables: Social Support,

Cultural Factors, Social Norms, and the Spread of Infectious Diseases. The correlation between Social Support and Cultural Factors was 0.564, indicating some degree of

association but still meeting the threshold for discriminant validity. The correlation between Social Support and Social Norms was 0.596, suggesting a moderate association but still supporting discriminant validity. The correlation between Social Support and the Spread of Infectious Diseases was 0.516, indicating a moderate association but still meeting the criterion for discriminant validity. The correlation between Cultural Factors and Social Support was 0.564, supporting discriminant validity despite some level of association. The correlation between Cultural Factors and Social Norms was 0.509, meeting the threshold for discriminant validity.

The correlation between Cultural Factors and the Spread of Infectious Diseases was 0.578, suggesting acceptable discriminant validity. The correlation between Social

Norms and Social Support was 0.596, meeting the criterion for discriminant validity. The correlation between Social Norms and Cultural Factors was 0.509, supporting discriminant validity. The correlation between Social Norms and the Spread of Infectious Diseases was 0.272, indicating satisfactory discriminant validity. The correlation between the Spread of Infectious Diseases and Social Support was 0.516, meeting the criterion for discriminant validity. The correlation between the Spread of Infectious Diseases and Cultural Factors was 0.578, supporting the discriminant validity of these constructs. The correlation between the Spread of Infectious Diseases and Social Norms was 0.272, meeting the threshold for discriminant validity.

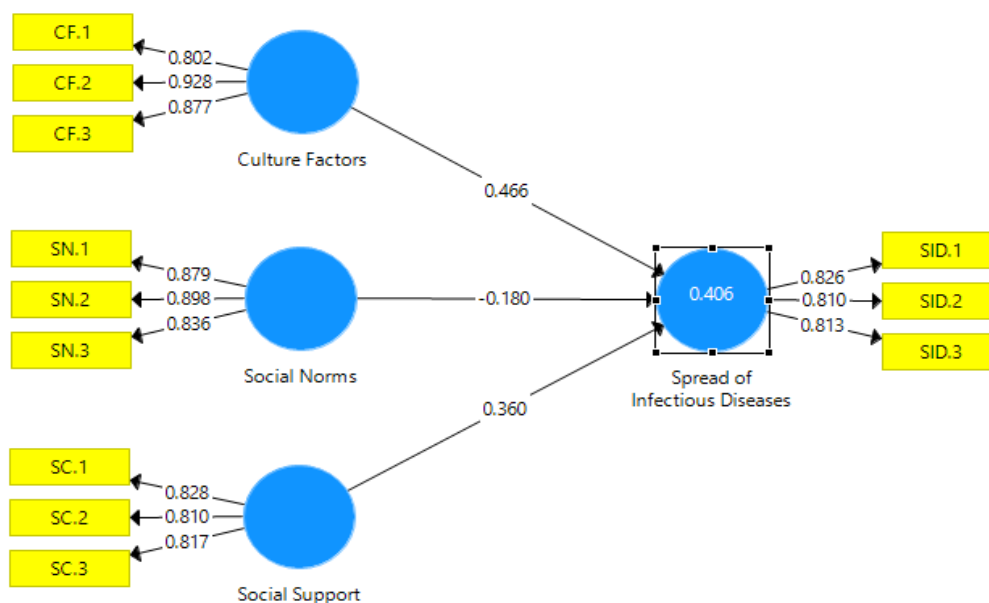


Figure 1. Model Results

Source: Data processed by researchers, 2023

**Model Fit Assessment**

Model fit indices assess how well the specified model aligns with the observed data. The table presents various fit indices for both the Saturated Model and the Estimated

Model. A comprehensive discussion of each fit index provides insights into the overall goodness-of-fit for the structural equation model.

Table 3. Model Fit Results Test

	Saturated Model	Estimated Model
SRMR	0.097	0.097

d_ULS	0.736	0.736
d_G	0.331	0.331
Chi-Square	235.373	235.373
NFI	0.699	0.699

Source: *Process Data Analys (2023)*

The presented fit indices collectively suggest that the Estimated Model aligns well with the observed data. The consistency in values between the Saturated and Estimated Models for each fit index strengthens the

confidence in the structural equation model's goodness-of-fit. The SRMR, d\_ULS, d\_G, and NFI values all indicate a satisfactory fit, and the Chi-Square value, while sensitive to sample size, aligns with other indices.

Table 4. Coefficient Model

	R Square	Q2
Spread of Infectious Diseases	0.506	0.491

Source: *Data Processing Results (2023)*

The R Square value of 0.506 indicates that approximately 50.6% of the variance in the Spread of Infectious Diseases is explained by the latent constructs included in the structural equation model. The R Square value of 0.506 is considered moderate to substantial, implying that the proposed model is relatively effective in explaining the observed variation in the Spread of Infectious Diseases. The Q2 value of 0.491 indicates the predictive relevance of the model, indicating good predictive accuracy. The positive Q2 value increases the credibility of the model in forecasting the Spread of Infectious Diseases, suggesting that the identified cultural, social,

and health factors have utility in anticipating the Spread of Infectious Diseases in Indonesian society.

### Structural Model

The results of the given structural model shed light on the connections between social support, cultural variables, social norms, and the transmission of infectious diseases. The coefficients (Original Sample), Sample Mean, Standard Deviation, T Statistics, and P Values are among the important parameters. Now let's talk about how these results affect each structural model pathway.

Table 3. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Social Support -> Spread of Infectious Diseases	0.360	0.359	0.109	3.296	0.001
Culture Factors -> Spread of Infectious Diseases	0.466	0.467	0.089	5.235	0.000
Social Norms -> Spread of Infectious Diseases	0.280	0.268	0.093	2.936	0.003

Source: *Process Data Analys (2023)*

The structural model results provide important insights into the relationships between social dynamics and the spread of infectious diseases. The statistically significant positive relationships suggest that cultural factors, social norms, and social

support play roles in influencing the transmission of infectious diseases within communities. These findings contribute to the understanding of the intricate interplay between sociocultural factors and public health outcomes.

## Discussion

### Cultural Factors and the Spread of Infectious Diseases

The relationship between cultural factors and the spread of infectious diseases is significant (Coefficient = 0.466, T Statistics = 5.235, P Value = 0.000). This indicates that communities with stronger cultural influences may experience a greater spread of infectious diseases. Cultural practices, beliefs, and traditions may contribute to the dynamics of disease transmission within these communities. The results underscore the importance of considering cultural context in the design and implementation of public health interventions. Communities with stronger cultural influences may experience a greater spread of infectious diseases, as cultural practices, beliefs, and traditions can contribute to the dynamics of disease transmission within these communities [11]. Therefore, it is crucial to consider cultural context when designing and implementing public health interventions [24]. Understanding the effects of sociocultural processes on disease transmission is essential for effective interventions [25]. Additionally, local contexts and sociocultural factors should be integrated into studies on infectious diseases to gain meaningful insights [26]. By combining measures of local context with microbiological data, researchers can identify valuable insights for disease prevention and control [27]. Taking into account local needs and values is important for the success and sustainability of interventions. Overall, considering cultural context is vital for addressing the challenges posed by infectious diseases and ensuring the effectiveness of public health interventions.

### Social Norms and the Spread of Infectious Diseases

Similarly, social norms show a positive and significant association with the spread of infectious diseases (Coefficient = 0.280, T Statistics = 2.936, P Value = 0.003). Communities with more rigid adherence to social norms may face an increased risk of disease transmission. This highlights the

intricate relationship between societal expectations and health outcomes. Public health strategies should acknowledge and address the influence of social norms on health behaviors and disease spread. Communities with more rigid adherence to social norms may face an increased risk of disease transmission. This highlights the intricate relationship between societal expectations and health outcomes. Public health strategies should acknowledge and address the influence of social norms on health behaviors and disease spread [28], [29]. Understanding the social determinants of health is fundamental to addressing health inequalities [30]. Structural factors such as housing conditions, immigration policies, and structural discrimination can impact the health and access to healthcare services of marginalized populations [31]. The social determinants of health, including economic and political structures, affect health and quality of life outcomes [32]. Health crises disproportionately impact marginalized communities, and addressing health disparities requires redistributing resources, enforcing power redistribution, and centering the experiences of impacted communities. By integrating social care into healthcare systems and advocating for policy change, nurses can play a crucial role in promoting health equity.

### Social Support and the Spread of Infectious Diseases

Surprisingly, social support demonstrates a positive relationship with the spread of infectious diseases (Coefficient = 0.360, T Statistics = 3.296, P Value = 0.001). This unexpected finding suggests that communities with higher levels of social support may experience a greater spread of infectious diseases. Further exploration is warranted to understand the underlying mechanisms. It is possible that heightened social interactions, characteristic of supportive communities, may contribute to increased disease transmission. These findings challenge conventional assumptions and calls for nuanced interpretations in the context of infectious disease dynamics.



Communities with higher levels of social support may experience a greater spread of infectious diseases, challenging conventional assumptions and calling for nuanced interpretations in the context of infectious disease dynamics. The increased disease transmission in supportive communities could be attributed to heightened social interactions, which are characteristic of these communities. Further exploration is warranted to understand the underlying mechanisms and to validate this unexpected finding [33], [34].

#### **Implications for Public Health Interventions**

The study's findings have practical implications for designing effective public health interventions in Indonesian communities. Acknowledging the positive associations between cultural factors, social norms, social support, and the spread of infectious diseases, interventions should be tailored to the specific sociocultural context. Strategies that engage with and leverage cultural practices, address societal norms, and promote health in the context of social support structures may be more successful in mitigating the impact of infectious diseases.

#### **Limitations and Future Research**

While the study contributes valuable insights, it is essential to recognize certain limitations. The cross-sectional nature of the data limits the ability to infer causation, and future research should explore these relationships longitudinally. Additionally, the study is specific to the Indonesian context,

and caution should be exercised when generalizing findings to other populations.

Future research could delve deeper into the underlying mechanisms that link cultural factors, social norms, and social support to the spread of infectious diseases. Qualitative research methods, such as in-depth interviews and focus group discussions, could provide a richer understanding of community perceptions and behaviors related to health and infectious diseases.

#### **5. CONCLUSION**

In conclusion, this research provides a comprehensive examination of the relationships between cultural factors, social norms, social support, and the spread of infectious diseases in Indonesian communities. The structural equation model reveals that cultural influences and societal norms contribute significantly to disease transmission, highlighting the importance of tailoring public health interventions to specific cultural contexts. The unexpected positive association between social support and disease spread warrants further investigation. The study underscores the complexity of health dynamics within diverse sociocultural settings and calls for a nuanced approach to public health strategies. These findings contribute to the knowledge base in the field, guiding future research and informing evidence-based interventions for the effective control and prevention of infectious diseases in communities.

## REFERENCES

- [1] H. Ashari and T. P. Nugrahanti, "FRAUD, ETIKA DAN KEGAGALAN BANK DARI SUDUT PANDANG PEGAWAI," *J. Ris. Akunt. dan Keuang.*, vol. 9, no. 2, pp. 305–324, 2021.
- [2] M. Hidayat, R. Salam, Y. S. Hidayat, A. Sutira, and T. P. Nugrahanti, "Sustainable Digital Marketing Strategy in the Perspective of Sustainable Development Goals," *Komitmen J. Ilm. Manaj.*, vol. 3, no. 2, pp. 100–106, 2022.
- [3] H. Ashari and T. P. Nugrahanti, "Household economy challenges in fulfilling life needs during the Covid-19 pandemic," *Glob. Bus. Econ. Rev.*, vol. 25, no. 1, pp. 21–39, 2021.
- [4] R. Marier, "The reporting of communicable diseases," *Am. J. Epidemiol.*, vol. 105, no. 6, pp. 587–590, 1977.
- [5] D. Sheath, N. E. Bempong, and A. Flahault, "Coordination of Global Efforts in Combatting Infectious Disease," in *The Nature of Pandemics*, CRC Press, 2022, pp. 239–258.
- [6] D. C. Danko *et al.*, "The Challenges and Opportunities in Creating an Early Warning System for Global Pandemics," *arXiv Prepr. arXiv2302.00863*, 2023.
- [7] K. H. Jacobsen, *Introduction to global health*. Jones & Bartlett Learning, 2022.
- [8] Y. Iskandar and U. Kaltum, "Exploring Human Resource and Organizational Factors That Influence the Performance of a Social Enterprise," *Organ. Cult. An Int. J.*, vol. 22, no. 2, 2022.
- [9] D. Budiman, Y. Iskandar, and A. Y. Jasuni, "Millennials' Development Strategy Agri-Socio-Preneur in West Java," in *International Conference on Economics, Management and Accounting (ICEMAC 2021)*, Atlantis Press, 2022, pp. 315–323.
- [10] Y. Iskandar, R. Pahrilal, and K. Kurniawan, "Sustainable HR Practices in Indonesian MSMEs from a Social Entrepreneurship Perspective: Training, Recruitment, Employee Engagement, Social Impact of Local Communities," *Int. J. Business, Law, Educ.*, vol. 4, no. 2, pp. 904–925, 2023.
- [11] B. Austin, "The value of cultures to modern microbiology," *Antonie Van Leeuwenhoek*, vol. 110, no. 10, pp. 1247–1256, 2017.
- [12] J. OKORO, "PATIENTS ENCOUNTER WITH DIAGNOSES AND ILLNESS IN TRANSCULTURAL PERSPECTIVE".
- [13] R. A. Sh, "BORDELIN CULTURAL PRACTICES IN MODERN SOCIETY: THE ANTHROPO-CREATING FUNCTION," *Журнал Фронтирных Исследований*, vol. 8, no. 2 (30), pp. 197–213, 2023.
- [14] J. P. Teo, G. Moody, and J. Munro, "Letter to the Editor regarding 'East is east, and West is west,'" *Aust. New Zeal. J. Psychiatry*, vol. 57, no. 4, pp. 616–618, 2023.
- [15] H. H. Alsaqqa, "Building the culture of public health as a positive reflection from the COVID-19 crisis," *Risk Manag. Healthc. Policy*, pp. 1683–1693, 2022.
- [16] Y. Iskandar, S. Ramadanti, and M. R. Alfauzi, "EDUKASI KESEHATAN PENTINGNYA MENGGUNAKAN MASKER SEBAGAI PENCEGAHAN PENULARAN COVID-19 MELALUI KEGIATAN POSYANDU DI DESA CIKELAT," *J. Abdi Nusa*, vol. 3, no. 2, pp. 107–112, 2023.
- [17] R. B. Lopez, A. L. Courtney, D. Liang, A. Swinchocki, P. Goodson, and B. T. Denny, "Social support and adaptive emotion regulation: Links between social network measures, emotion regulation strategy use, and health.," *Emotion*, 2023.
- [18] A. Gill, S. M. Page, and M. Hairston, "Communities of Support for Care-Experienced Mothers," *Br. J. Soc. Work*, vol. 53, no. 3, pp. 1775–1783, 2023.
- [19] W.-J. She, K. Dangisho, P. Siriaraya, F. Dollack, and S. Nakajima, "Matchmaking for Mental Well-being: Development of a Peer-based Support System (Peer2S) for Students during COVID Lockdown," in *Companion Proceedings of the 28th International Conference on Intelligent User Interfaces*, 2023, pp. 119–122.
- [20] E. M. Kane, J. A. Snethen, S. H. Gwon, and H. Oh, "Affected family members social support experiences when assisting an individual with substance use disorder," *J. Nurs. Scholarsh.*, vol. 55, no. 3, pp. 590–598, 2023.
- [21] X. Y. Lin, L. Zhang, S. Yoon, R. Zhang, and M. E. Lachman, "A Social Exergame Intervention to Promote Physical Activity, Social Support, and Well-Being in Family Caregivers," *Gerontologist*, p. gnad028, 2023.
- [22] J. E. Snellman, R. A. Barrio, and K. K. Kaski, "Exploration of the effects of epidemics on the regional socio-economics: a modelling approach," *arXiv Prepr. arXiv2209.12973*, 2022.
- [23] S. Abudiab *et al.*, "'Beyond just the four walls of the clinic': The roles of health systems caring for refugee, immigrant and migrant communities in the United States," *Front. Public Heal.*, vol. 11, p. 1078980, 2023.
- [24] O. Patterson-Lomba and A. Gomez-Lievano, "On the scaling patterns of infectious disease incidence in cities," *arXiv Prepr. arXiv1809.00277*, 2018.
- [25] A. Kandler, L. Fogarty, and F. Karsdorp, "The interplay between age structure and cultural transmission," *PLOS Comput. Biol.*, vol. 19, no. 7, p. e1011297, 2023.
- [26] L. Chen, P. Kong, L. Hou, Y. Zhou, and L. Zhou, "Host community composition, community assembly pattern, and disease transmission mode jointly determine the direction and strength of the diversity-disease relationship," *Front. Ecol. Evol.*, vol. 10, p. 1032931, 2022.
- [27] A. S. Wormley, "How is the behavioral immune system related to culturally-learned disease avoidance strategies?" Arizona State University, 2022.
- [28] D. Chinn, "Critical health literacy: A review and critical analysis," *Soc. Sci. Med.*, vol. 73, no. 1, pp. 60–67, 2011.
- [29] J. A. Marsteller *et al.*, "Assessing Factors Influencing Commitment to a Disparities Reduction Intervention: Social

- Justice Attitudes and Organizational Mission," *J. Healthc. Qual.*, vol. 45, no. 4, pp. 209–219, 2023.
- [30] B. Yang, C. Kelly, I. C. Shamputa, K. Barker, and D. Thi Kim Nguyen, "Structural Origins of Poor Health Outcomes in Documented Temporary Foreign Workers and Refugees in High-Income Countries: A Review," in *Healthcare*, MDPI, 2023, p. 1295.
- [31] J. Wise, C. Caiola, and V. Njie-Carr, "A Fundamental Shift in Nursing is a Requisite for Achieving Health Equity: The Nurses' Role in Addressing Social Determinants of Health," *J. Assoc. Nurses AIDS Care*, vol. 34, no. 1, pp. 125–131, 2023.
- [32] S. Alang and O. Blackstock, "Health Justice: A Framework for Mitigating the Impacts of HIV and COVID-19 on Disproportionately Affected Communities," *Am. J. Public Health*, vol. 113, no. 2, pp. 194–201, 2023.
- [33] W. Jing, J. Zhang, and X. Zhang, "Epidemic dynamics in temporal clustered networks with local-world structure," *Complexity*, vol. 2023, pp. 1–10, 2023.
- [34] M. Michalska-Smith, E. A. Enns, L. A. White, M. L. J. Gilbertson, and M. E. Craft, "The illusion of personal health decisions for infectious disease management: disease spread in social contact networks," *R. Soc. open Sci.*, vol. 10, no. 3, p. 221122, 2023.