Model of Spiritual Culture of Madurese People in Resilience and Adaptation of New Normal

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Abstract

Background: From the beginning of its initial appearance until mid-2021, Corona Virus Disease-19 (Covid-19) is a feared outbreak around the world, including in Indonesia and particularly in Madura. The negative perception of stress will further weaken self-strength both physically and mentally so that resilience and coping mechanisms tend to be maladaptive.

Purpose: This study aimed to analyze the spiritual culture of Madurese communities in resilience and physical health.

Methods: This analysis will later become the basis in the formulation of a model of spiritual cultural towards resilience, and physical health. In the design of explanatory observational research, the first stage is to explain the construct and its contributing indicators. The second stage is to conduct FGD with respondents as well as to consult with experts. The population is a community on the island of Madura with a sample consisting of 400 respondents using probability sampling, namely cluster random sampling based on a predetermined population area. The exogenous variable is the culture of spirituality. Endogenous variables are resilience and physical health. Data were collected using questionnaire research and analyzed using structural models with SmartPLS (Partial Least Square) software.

Results: The results showed that spirituality culture factors had a positive effect on resilience with a coefficient of 0.449. Spirituality culture factors had a positive effect on physical health with a coefficient of 0.161, and resilience factors had a positive effect on physical health with a coefficient of 0.172.

Conclusion: This indicates that the higher the spiritual culture of the Madurese community, the higher the resilience, psychological well-being, and physical health, especially during the COVID-19 pandemic.

Keywords: culture of spirituality; physical health; resilience.

Introduction

Severe acute respiratory syndrome coronavirus 2 (SarsCov-2) or Corona Virus Disease-19 (Covid-19) is a respiratory infectious disease declared a global pandemic by WHO on March 11, 2020. Covid-19 from the beginning of its appearance until mid-2021 is an outbreak that is tweeted around the world including in Indonesia and Madura. The number of cases on August 27, 2021, globally reached 214,468,601 with data on deaths of 4,470,969 people (WHO, 2021). Cases in Indonesia reached 4,056,354 with a death toll of 130,781 (Kemenkes, 2021). This will have an impact on various physical and mental distresses that affect the holistic dimensions of life. Preliminary studies on the Madurese community related to holistic health obtained data that 70% fully understood the meaning and purpose of life in the spiritual dimension. Meanwhile, regarding perseverance (perseverance) in effort and struggles, 80% was very persistent and 20% was quite persistent. In terms of independency or self-reliance, 60% was very independent, 20% was independent and 20% was quite independent. Concerning equanimity when facing problems, 30% was calm, 30% was calm enough, and 40% was less calm. While existentially alone in facing challenges, 70% was good and 30% was enough. Madura, culture, and Islam are sociological facts that cannot
be separated because all three form the distinctive values of the Madurese (Wiyata, 2013).

Covid-19 has caused various negative impacts since the March 2020 period and the impacts can still be felt. The negative impacts are not only physical but also psychological, social, cultural, economic, political and spiritual. Several studies have reported that Covid-19 causes distress (Bao et al., 2020), delirium, depression, anxiety, fatigue, insomnia, PTSD (Guo et al., 2020; Rogers et al., 2020) to mental disorders (Rajkumar, 2020). The social impacts that occur are distress due to restrictions on physical mobility (Kraemer et al., 2020), public fear, decreased socio-economic and cultural activities (Kim & Su, 2020; Uddin et al., 2020). Biological impacts are the occurrence of respiratory diseases such as pneumonia (Jin et al., 2020), damage to the cardiovascular system (Madjid et al., 2020), Acute Respiratory Distress Syndrome (ARDS) (Leija-martinez et al., 2020; Lin et al., 2020; Hashemian et al., 2021) until death (Barro et al., 2020). This condition is very risky and manifests in bio-psycho-social-spiritual distress which if it persists for a long time will cause a lot of chaos in various aspects of life.

Various prevention efforts have been carried out, especially in improving health status and preventing the transmission of COVID-19. This can be seen from implementing health protocols, minimizing anxiety, and improving psychological health to maintaining social distance. Moreover, what is important is self-awareness that all dimensions cannot be separated from the deep transcendental meaning of life that is related to God in the spiritual dimension. Spirituality will be meaningful in life because it is related to the belief in God as a reality greater than oneself (Ekşi & Kardaş, 2017). According to Gonzales et al (2014), spirituality activates adaptive coping mechanisms so that individuals can cope with the stress of an illness (Salman & Lee, 2019). Deep spirituality will bring psychological calm and move the neuro, hormonal and immunological systems. Spiritual application through remembrance is effective in improving the perception of stress and balancing cortisol which has an impact on metabolic stability (Amir et al., 2018), and significantly affects the working system of the immune system (Asiyah et al., 2021). Spirituality is a transcendental and integrative side that plays an integral role in shaping the quality of life, health, and well-being in a bio-psycho-socio-spiritual manner. Spirituality impacts on various aspects of life in a multidimensional manner and is very complex in influencing and dealing with various situations and conditions of life.

The spiritual strength of the Madurese community is reflected in a holistic harmony that includes bio-psycho-social-spiritual aspects which have implications for the range of health and illness during the pandemic and the era of new habits. The strong dimension of Islamic spirituality in Madura is able to form an individual who is strong-minded, patient, sincere, good at being grateful, and taking wisdom. The implementation of all these characters will give birth to high resilience. Resilience will strengthen the Madurese community to have adaptive coping strategies. In the study of psychoneuroimmunology, it is perceived as eustress that balances the function of nerves, hormones, and the immune system so that it is more resistant to disease, including COVID-19 infection.

The purpose of this study was to analyze the spiritual culture of Madurese communities in resilience and adaptation. This analysis will later become the basis in the formulation of a model of spiritual cultural nursing towards resilience and adaptation.

Method
Design
This research is an explanatory observational study through structural model testing with SmartPLS (Partial Least Square) software. The first stage describes the test results based on the theory by looking at the constructs and indicators that contribute. The second stage then compiles a module on strategic issues that have been carried out by FGD with respondent representatives and conducted consultations with experts.

Setting and Sample
Respondents consisting of 400 people were selected using probability sampling, namely cluster random sampling based on a predetermined population area. The sample is people in four districts on the island of Madura, namely Sumenep, Pamekasan, Sampang, Bangkalan without regard to the existing strata in the population, namely random sampling from the population. The determination of the number of samples was carried out based on the statement of Hair et al., (2017) that the minimum sample for SEM-PLS analysis is at least 10 times the number of indicators and 10 times the number of arrows in the model structure. The data collection process was carried out online in July-September 2021 with inclusion criteria of a minimum age of 17 years.

Variables
The variables are spirituality culture, resilience, and physical health. Exogenous variables are spirituality culture and endogenous variables are resilience and physical health.

Instruments
The questionnaires in this study were the questionnaire which was adopted and adapted from various sources. The researcher developed the resilience questionnaire based on the Resilience Assessment Scale (FRAS) questionnaire by Walsh (2016). The spiritual culture questionnaire was developed based on the Spiritual questionnaire by Yusuf (2016), and the physical health questionnaire was developed based on the Signs of Physical Health.
Health Symptoms during the Covid19 Pandemic from the Indonesian Ministry of Health. (2021). The researcher asked permission to develop a questionnaire and then tested the validity and reliability of 32 respondents based on the same characteristics as the research sample, namely the areas of Jember, Bondowoso, Situbondo, and Probolinggo where most of the people are Madurese. The questionnaire uses an ordinal scale with good, fair, and poor categories. The compositions are Culture of Spirituality, Resilience, and Physical Health. Culture of Spirituality consists of mystery, love, suffering, hope, and grace, while Resilience consists of meaningful life/purpose, perseverance, self-reliance, equanimity, and existential aloneness, and Physical Health consists of symptoms of fever and flu, painful, minor respiratory disorders, moderate respiratory disorders, and severe respiratory disorders.

### Intervention
The data were collected by giving questionnaires to 400 respondents and testing the structural model with SmartPLS (Partial Least Square) software.

### Data Collection
The sample is people in four districts, namely Sumenep, Pamekasan, Sampang, Bangkalan. The participants were recruited based on ethical principles. Participants who were involved in previous research had received a written explanation regarding the research objectives, procedures, rights and obligations, benefits, and disadvantages during the research. Only participants who had provided informed consent were included in the study. The data collection process was carried out online with research assistants for each district. There were 404 people who responded. Three people refused or were not willing to be respondents and 401 people were willing to be respondents, but there

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Frequency</th>
<th>Percentage of</th>
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<td><strong>District</strong></td>
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<td>Bangkalan</td>
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<td>Sampang</td>
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<td>69</td>
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<td>Pamekasan</td>
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<tr>
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<tr>
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<td>41%</td>
</tr>
<tr>
<td>Woman</td>
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<td>236</td>
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<td>26-35 years (Early Adulthood)</td>
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<td></td>
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<tr>
<td>46-55 years (Early Old Age)</td>
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<td>56-65 years (Late Old Age)</td>
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<td>&gt;65 years (Elderly)</td>
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<tr>
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</tr>
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<td>132</td>
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</tr>
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<tr>
<td>Private employees</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>Unemployed</td>
<td></td>
<td>46</td>
<td>11.5%</td>
</tr>
</tbody>
</table>
was 1 person who did not meet the inclusion criteria so the total respondents were 400 people. Before starting data collection, the researcher conducted a trial on 32 participants with the same characteristics. The pilot was conducted to the community in four districts namely Jember, Bondowoso, Situbondo, and Probolinggo to validate the questionnaire.

**Data Analysis**

The construct factors studied included cultural spirituality (X1), resilience (Y1), and physical health (Y2). The data scale used for statistical testing is the absolute value of each variable, but to facilitate the presentation of data in the table, a Likert scale is used. The stages of structural model analysis are testing the effect of exogenous factors on endogenous factors. Path diagram analysis of SEM Partial Least Square structural equations on indicators of all latent variables are done in the Development Model of Spiritual Culture of the Madurese People in Resilience and Adaptation in the New Normal. Evaluation of construct validity is done by calculating convergent validity. Convergent validity is known through the value of factor loading and Average Variance Extracted (AVE). All instruments meet the convergent validity test with a loading factor and Average Variance Extracted (AVE) above 0.5.

The strategic issues obtained from the results of the Structural Equation Modelling-Partial Least Square (SEPLS) analysis were used as a reference for conducting Focus Group Discussions (FGD) with respondent representatives and conducted consultations with experts. The results of strategic issues, FGDs, expert consultations, and the results of the development of a cultural model of Madurese spirituality in resilience and adaptation to new habits are used as a reference for module development. The modules resulting from the development of the models serve as a reference for the manufacture of comprehensive modules, so that they can be used as guidelines by health workers or researchers in conducting interventions.

**Ethical Consideration**

This research has received approval from the Ngudia Husada Madura School of Health research ethics committee with Ethics Approval Letter Number: 1076/KEPK/STIKES-NHM/EC/VII/2021.
Results

This research is explanatory observational study through testing the structural model with SmartPLS (Partial Least Square) software. This research was conducted to determine the development of a cultural model of Madurese spirituality in resilience and adaptation to new normal by looking at the contributing constructs and indicators, then compiling a module on the strategic issues that have been carried out by the FGD with respondent representatives then consulting with experts. Description of study variables is shown to explain constructs research data according to measurable indicators for each construct research factors. The construct factors studied including Culture of Spirituality (X1); Resilience (Y1); and Physical Health (Y2). The data scale used for statistical tests is the absolute value of each variable, but Likert scale is used to facilitate the presentation of the data in the table.

The results of the study in Table 1 show that from 400 respondents, it is known that based on the district with the largest number of respondents (54%) is Bangkalan Regency. Based on gender, the majority of respondents (59%) were women. Based on age, as many as 139 respondents (34.7%) were at the stage of late adolescence (age 17-25 years). Based on the education level of the respondents, the most respondents were Bachelor with 201 respondents (50.25%), and based on the occupation, the students occupied the highest positions with 132 people (33%).

The results of the study illustrate that as many as 54 respondents (13.5%) had been diagnosed with COVID-19 or had done PCR with positive results. Based on the symptom variables felt in the last 3 months, the majority felt more than one symptom of being infected with Covid-19, namely 159 people (39.75%). Based on the variable diagnosis of comorbidities (comorbid) there were 1 person (0.25%) with cardiac decompensation, 2 people with coronary heart disease (0.5%), 2 people with heart disease (0.5%), 4 people with lung disease (1%), 5 people with kidney disease (1.25%), 9 people with diabetes mellitus (2.25%), 39 people with hypertension (9.75%), 30 people with other comorbidities (7.5%), and 308 people with no comorbidities (77%).

The results of the study in spirituality culture illustrate that in the Mystery variable (Belief in the Afterlife), 364 people (91%) in Madura had high confidence. Based on the Love variable, the majority of Madurese people had a high value on love which was the key or domain of a person’s spirituality, with 348 people (87%). Suffering response of the Madurese community had a high response in a positive direction with 364 people (91%). Then the hope of the Madurese community in the majority of Spirituality Culture had a high value, with 345 people (86.25%). Meanwhile, Grace (Gratitude for What God Has Given) in the Madurese community also had a high score, with 361 people (90.25%).
Spirituality is interpreted in a deep sense as an exploration of the highest truth and not just a routine of religious rituals (Maraj et al., 2020). Spirituality is the connection between the personal, social, environmental, and transcendental dimensions of God which is believed to affect physical and mental health (Ghaderi et al., 2018). Every individual has a side of spirituality to achieve closeness and connectedness between himself and the highest Existence that is the God of the Universe (Joseph et al., 2017). A deep sense of connectedness encourages the mental resilience of individuals to be able to survive in the face of distress and rise from stressful circumstances. This is in accordance with the Qur’an Surah Al-Baqarah verse 277 and many similar statements explain that believers (good spirituality) do not feel worried and do not grieve. This can be translated that spirituality will give birth to resilience and the ability to respond positively to distress in life. Chen and Bonanno (2020) explained that resilience is the ability of individuals to be positive about various problems and uncertain situations including mental attitudes during the Covid-19 pandemic. Resilience gives birth to an effective coping mechanism when facing threatening situations and conditions. It is in accordance with Syukrowardi et al. (2017) that spirituality is suspected as one of the main factors for the formation of high resilience in individuals so that adaptive in responding to stress. Many studies have also reported a significant association between spirituality and resilience (Mizurion et al., 2016; Jones et al., 2016; Khan et al., 2016; Cherry et al., 2018; Maraj et al., 2020).

Spirituality does not only affect the psychosocial dimension but also greatly affects the biological stress response. Researchers argue that all factors and consequences of distress are inseparable from the meaning of deep life that is transcendental in the spiritual dimension. In the time of the covid-19 pandemic, stress must be watched out for as a promoter of the risk of respiratory infections and decreased health range with all clinical sweetness (Peters et al., 2021). One of the trans-objective implementations of social spirituality in Madura is the reading of Burdah as a magical and economical treatment when there are sick relatives (Faidi, 2016). Burdah is also believed to be a spiritual-based method of treatment to cure the sick and avoid society from tā’on disease (Ramin, 2018), including in the spiritual response to Covid-19 which is also perceived as a kind of ta’on disease version of the latest. In addition to Burdah, there is remembrance and prayer together as well as carrying out certain practices by the Madurese community to reject bala (misfortune), illness, disease, and avoid disaster. In line with Sohail (2020) the application of spirituality is reflected in many rituals such as congregational prayer, giving alms, listening to lectures, and applying the Prophet’s methods of treatment.

Spiritual influence on improving physical and mental health status can be studied scientifically, one of which is through the concept of psychoneuroimmunology. Psychoneuroimmunology describes the close relationship between the psychological dimensions of stress mechanisms, the nervous, endocrine, and immune systems in modulating the immune response to infection (Kim & Su, 2020). Spirituality in this case should be translated as a stimulus that can turn distressed (negative stress) into eustress (positive stress). This will have an impact on the perception of positive stress so that the stress response is also positive. According to Dhabbar-McEwen, the perception of stress is more psychological in internal mental events and stress responses are more biological purpose) of the Madurese community was high, with 373 people (93.25%). The Madurese also had a decision to continue to survive despite the difficulties, disappointments, and perseverance are high with 366 people (91.5%). Based on the self-reliance variable, only 1 person (0.25%) had a low level of independence, while the equanimity variable the majority had a high level of patience/calmness as many as 388 people (97%) and none had a low level of patience/calm (0%). In the Existential Aloneness variable, the majority of Madurese people had a high awareness that they had to face the challenges in life, with 364 people (91%).

The results of the study illustrate that the physical health of the Madurese community in adapting to the new habits of the Covid-19 pandemic mostly had high fever and flu symptoms, namely 376 respondents (94%). In the pain variable, 373 respondents (93.25%) were in the high category. While the majority of respondents (97%) were in the high category in mild, moderate, and severe respiratory disorders.

Discussion

Madura is a district in East Java that is known for its cultural acculturation and spirituality. The culture of visiting each other, helping, family, friendship, and togetherness in worship activities cannot be separated in the daily life of Madurese people. Various studies of social anthropology explain that Madura is scientifically proven to have a distinctive and unique character in exploring the balance of inner dimensions and social structures (Mulyadi, 2018). The role of religion as a means of spirituality is very influential on the life of the people of Madura. Even in daily behavior, it is not uncommon for religious leaders to be involved in various things such as matchmaking, sustenance, internal conflict, social conflict, and also the treatment of diseases (Ramin, 2018). It is also implemented in the attitude of the people of Madura in responding to the Covid-19 pandemic. The people of Madura have a high belief that health and salvation can be achieved by approaching God. If this is not managed properly, it will give birth to a combination of social and spiritual support for the Madurese community as a potential to achieve holistic health.

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In this study, it has been explained that spirituality is significantly related to resilience so that the perception of stress in this study is positive. This is in accordance with studies that spirituality improves health (Firda & Haksama, 2020), resilience (Fradelos et al., 2020), reduces anxiety, increases the meaning of life and hope (Reis & Menezes, 2017), and subjective happiness (Satici, 2016). Spirituality in principle must be able to lower psychological pressure so that individuals do not fall into a state of illness. This is because stressors affect the immune system through several pathways, namely the Hypothalamus-Pituitary-Adrenal (HPA Axis), the Sympathy-Adrenal-Medullary (SAM Axis) axis, the CRH-Mast Cell axis, Neuropeptide with the Immune System, psychological stress pathways, and oxidative stress (Campeau, 2016). If one of these systems is disrupted, then what happens is a decrease in immunity that has an impact on the susceptibility of covid-19 infection. If the body is already infected with covid-19, it will be very risky for cytokine storms (Coperchini et al., 2020) such as the uncontrolled release of pro-inflammatory cytokines interleukin (IL)-1b and IL-6 (Conti et al., 2020). This will have a negative impact on the occurrence of immunopathology (Bhaskar et al., 2020) which is often accompanied by coagulopathy (Willim et al., 2020). The three pathogenesis phenomena on the course of covid-19 inflammation are the cause of the severity of the disease until the occurrence of ARDS and multiorgan damage to death. Therefore, according to researchers, modulating the spiritual system has a good impact on psychological health and will eventually look more concrete on physical health and avoid covid-19 infection. This can be found in many Madurese and people outside Madura who have spiritual awareness to be free from serious stress. Therefore, there will also be balanced regulation of various body systems so that they adapt and survive to various forms with stress and covid-19 infection.

Conclusion

The cultural model of the Madurese spirituality in resilience and adaptation to the new normal which consists of: Culture of Spirituality, Resilience, and Physical Health. Culture of Spirituality composed of mystery, love, suffering, hope, and grace, while Resilience consists of a meaningful life/purpose, perseverance, self-reliance, equanimity, and existential aloneness, and Physical Health consists of symptoms of fever and flu, pain, minor respiratory disorders, moderate respiratory disorders, and severe respiratory disorders. High resilience is influenced by spiritual culture directly so that it affects the physical health of the Madurese community in the new normal.

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Data Availability Statement

The datasets generated during and/or analysed during the current study are not publicly available due to in a series research projects but are available from the corresponding author on reasonable request.

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