Spiritual Capital and Implications in the Disaster Mitigation Phase: A Post–Tsunami Study in Sumberjaya, Pandeglang, Banten, Indonesia

Novia Nurul Badi’ah1, Isbandi Rukminto Adi2, Ety Rahayu3
1,2,3 (Department of Social Welfare, Universitas Indonesia, Indonesia)

ABSTRACT: This research aims to reveal spiritual capital and implications in the disaster mitigation phase of tsunami victims at Sumberjaya, Pandeglang, Banten, Indonesia. The site of the study was chosen because it is inclined to tsunamis and earthquakes. This research used qualitative methods with a case study approach. Collection data techniques use deep interviews, and documentation studies from online observations. This study concludes that spiritual capital in the disaster mitigation phase in Sumberjaya was indicated by the values of compliance, acceptance and gratitude, responsibility, awareness, and effort and prayer. The implications of spiritual capital for disaster mitigation include innovations in education and disaster mitigation regulations made by local governments; increasing awareness in the community by not rebuilding their homes in red zones; and maintaining the coexistence and sustainability of their generation.

KEYWORDS – spiritual capital, mitigation, tsunami, social worker, wellbeing

I. INTRODUCTION

From Fahm (2019) on His previous research about spirituality disaster management shows that spiritual values such as tawakkal (surrender to God), gratitude, and patience are attributed that can help grow also increase individual and common resilience to mitigate disasters, so in the face of disasters, individuals or communities can obtain vital spiritual support from their beliefs as well as can also have access to rely on important support and resources generated or collected by their faith-based of the framework.

On December 22, 2018, a tsunami hit the Sunda Strait covering the Pandeglang and Lampung areas due to the underwater landslide of The Child of Krakatau Mountain. The fatality caused 437 people to die, 31,943 were injured, also 16,198 people were displaced (BNPB, 2019). And the highest casualties were in Pandeglang Regency as many as 296 people died, 16,712 people were injured, 3 people were missing, and 7,972 people were displaced (BNPB, 2019).

Predictions point to the close risk of a crushing earthquake and tsunami will occur in the path along Sumatra and Java due to Indonesia's geographical position on the active tectonic plates of Eurasia, Indo-Australia, the Pacific, also the Philippines which if the geologic process occurs on the plates can trigger a tsunami mega-thrust (Ponangsera, Kurniadi, Puspitosari, & Hartono, 2021). Tsunamis have the potential to occur with heights reaching 20 m and 12 m on the southern coasts of West Java and East Java, as well as an average altitude of 4.5 m along the southern coast of Java (Widiyantoro et al., 2020).

Research from Oral, Yenel, Oral, Aydin, & Tuncay (2015) shows that there is a significant relationship between residence, earthquake experience, and preparation for. While research results from Mc Geehan (2012) show that religious beliefs shape the interpretation of events and approaches to recovery, socio-political structures have an impact on the distribution of pre-tsunami disaster relief and risk as well as cultural values, including a focus on strength, service to others, and future orientation for disaster risk reduction. Other research on disaster mitigation also shows that the lack of attention to disaster mitigation planning actually contributes to poverty (Sanderson, 2000).
For mitigation and preparedness for possible disasters that will occur in the Sunda Strait, both tsunamis and other possible disasters, it is very necessary to be prepared in their daily lives, so that survivors can still role socially to improve their well-being, then not be re-trapped in a circle of weakness that caused by disasters (Midgley, 1995, p. 20).

Using data from earlier studies on spiritual capital, disaster mitigation, and a screening data of the conditions in Sumberjaya post the tsunami, the purpose of the research is to examine how the practice of spiritual capital and implications in the disaster mitigation phase in Sumberjaya.

II. LITERATURE REVIEW

2.1 Spiritual Capital

Philosophically, according to Payne (2014), spiritual ideas arise in the East, for example from the pattern of philosophers of Buddhism, Hinduism, and Islam. Bosch, Torralba, & Gracia (2013) say that spirituality is not only a human need or philosophical state of mind, but is also an implicit human capacity that has the potential to drive the development of other's abilities in an integrated manner, which in addition to being a form of intelligence, spirituality also as an increased engine, optimizing resources and integrating others.

Zohar dan Marshall (2004), introducing spiritual capital thinkers in this century, stated their theory of spiritual capital, namely 'Spiritual Capital: Wealth We Can Live By', mean spiritual capital is wealth, with which the capital of wealth is spiritual capital that man can live. Meanwhile, Baker (2012) states that spiritual capital comes from something solid and can be used to produce something solid, as motivation also an ethos to act in this world.

Zohar dan Marshall (2004) assembles important values of spiritual capital based on the three great philosophers Plato, namely goodness, truth, also beauty. Then Zohar and Marshall parse it such as the value of life, freedom, vision or purpose, the search for happiness, respect, loyalty, service, as well as other spiritual values. These values are divided into three categories, namely, first personal values related to one's own life, friends, family, it’s interests of the person, second interpersonal values, in a group and between members in his group such as loyalty, also trust), and finally transpersonal values (that go beyond personal and group, universal values, such as the quality of life, protecting the world for future generations, or about justice), whose values are compiled and set of spiritual capital.

2.2 Disaster Mitigation

Disaster mitigation becomes required if an area is inclined to disasters. If disasters are not addressed properly and there are no disaster prevention efforts, it will have an impact on economic, social, and also benefit anxiety. It can also make shifts in norms and social values (Perry dan Lindell 2003 in Han, Ba, dan Xin 2015).

According to (Coppola, 2015, p. 235) mitigation subjective needs to consider crucial proper mitigation options for dealing with hazard risks, whether for risk probability reduction, reduction consequence, avoidance, acceptance, also risk transfer, sharing, or spread. Coppola (2015, p. 230) disaster mitigation is divided into two types, namely structural and non-structural mitigation.

If structural mitigation is more about construction or changes in the physical environment then Coppola (2007) mentions that nonstructural mitigation is considered of "human adapt to nature” mechanism that tends to be cheaper and easier for people with few technological resources, examples background up safe zones, creating green areas / urban forests, community awareness education programs or others awareness programs.

2.3 Spiritual Capital in Disaster and Wellbeing

Kolade & Egbeotukun (2018) in their conceptual model of spiritual capital states that existence in spiritual capital becomes a reinforcing capital to have a nature that is life to something that happens outside of oneself to face something difficult, detrimental, from failures that occur, natural disasters, wars, or conflicts. With this existence obsessed, according to Kolade & Egbeotukun, the individual can gather non-material resources and give rise to the desire to overcome difficulties and change contrary conditions.

In the social benefit area, the discussion of spiritual capital falls within the area of spiritual capital and its practice in social work. The ideas and understandings of spiritualism become the basis for the
implementation of are carried out by categorizing, synthesizing, comparing, and writing the collected data then interpreting and elaborating it (Neuman, 2014).

In public service based on secularism in practice, because on their opinion, secularism is a neutral position between religion and beliefs, but spiritual ideas regarding wholeness and contentedness, in the end, contribute important human goals and values to social work, in the interaction the body as an example, the mind also a soul which is an organizing concept in spiritual concern. Payne (2014) mentions that between humanism and spiritualism in practice cross, humanistic values are also the shape of spiritualists.

Meanwhile, (Canda & Furman, 2010) argues that policies related to social benefit are largely influenced by religious teachings that directly also indirectly each the concept of charity and responsibility to the community and provide willing social service. Some country with a large Buddhist population of social benefit services both formal and informal are provided by Buddhist temples (Canda & Canda, 1996; Kubotani & Engstrom, 2005 in Canda & Furman, 2010). Meanwhile, in Islam, social services emphasize a complementary relationship between individuals as well as social benefits, which there is a process of helping which is a spiritually significant action and relationship, not only between fellow human beings but also with God (Canda & Furman, 2010). It means spiritually, there is a significant relationship between fellow human beings involved in process of helping, serving, and sacrificing, which is a spiritual capital that can be the initial capital to surface the way to self-well-being.

III. RESEARCH METHOD

This research used a qualitative descriptive approach. According to Rubin & Babbie (2017), qualitative research is very appropriate to examine social processes over time. Collecting data techniques using deep interviews, documentation studies, and online observation. Rubin & Babbie (2008) said that interviews in qualitative research tend to be unstructured and structured questions. Informant selection technique using purposive sampling (table 1). Purposive sampling is non-random sampling, and researchers use a variety of methods to look for all possible cases that are so specific (Neuman, 2014).

A Location chosen by the researcher was Sumberjaya Village, Sumur district, Pandeglang Regency, Banten, Indonesia which is directly opposite The Child of Krakatau Mountain based on predictions of potential disasters, there is a location inclined to earthquakes and tsunamis. More or less 100 houses were destroyed so difficult to identify because they were destroyed to the ground (Universitas Indonesia, 2019).

Because the time when data was collected in 2020-2021, The Large-Scale Social Restrictions (LSSR) were imposed to break the chain of the spread of Covid-19 in Indonesia, so interviews were conducted online through telephone media also social media by informants. Online interviews are now increasingly valued by themselves as valid and legitimate research methods (O’Connor & Madge, 2017). Then documentation is carried out to obtain public documents and private documents from participants or informants (Creswell, 2009).

Hine (2017) means that conditions in the field, including online activities, can provide more comprehensive possibilities about what types and forms of activities will be observed depending on the objectives of the researcher. Meanwhile, data processing and analysis are carried out by categorizing, synthesizing, comparing, and writing the collected data and then interpreting and elaborating it (Neuman, 2014).

<table>
<thead>
<tr>
<th>Number of Informants</th>
<th>Gender</th>
<th>Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 people</td>
<td>Male</td>
<td>Freelancer/Coordinator of Shelter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fisherman and ustadz/Religion teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fisherman and once served as RW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freelancers and YouTubers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employees at the Pandeglang Regional Disaster Management Agency</td>
</tr>
<tr>
<td>2 people</td>
<td>Female</td>
<td>Housewife and business group coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of Sumberjaya Village</td>
</tr>
</tbody>
</table>

Source: Researcher data processing results, 2020-2021
IV. RESULT AND DISCUSSION

4.1 Citizen Spirituality

Disaster mitigation is an activity that also needs to be carried out in areas with a high level of disaster risk, such as in the Sumur area, Pandeglang. As residents who are inshore areas and inclined to disasters, there are warning from their parents or older to always be careful in their actions and behaviors because they live inshore areas. The warning of parents or older if it is violated can cause the seawater to rise. In addition, there is also a belief from the religious teachings that they agree to, which is preponderantly Muslim, is not to act carelessly, let alone commit disobedience inshore areas because it can cause disasters. The characteristics of Sumberjaya residents as disciples of the Islamic religion make the role of religious figures central, especially in the role of deciding on the village.

Because of the characteristics of the population who are religious with the majority Islam Religion, that is why one of the NGO (Non-Governmental Organizations) PATTIRO Banten when holding disaster mitigation education for the community in Sumberjaya used an approach with a lightning boarding school system. Pesantren is a place where students learn how to live an Islamic life in accord with the Syariat taught in Islam (Krisdiyanto, Muflikha, Sahara, & Mahfud, 2019), which was originally a traditional education system and Islamic faith-based teaching where students or so-called Santri lived around the Kiai house mosque which later became a lodge system (Zaini, 2015). The spirit of the Islamic boarding school system was adopted by PATTIRO in instilling the spirit and values as well as learning in students in Sumberjaya related to disaster mitigation.

Accepting and being grateful

Related to the spirit of a feeling of acceptance or gratitude to residents after the tsunami so their residences also place of business were lost to the tsunami which made them placed in temporary shelters or...
In the conditions of living in Huntara, they still have a feeling of acceptance and gratitude for being able to enjoy the rest, they also feel safe and comfortable in Huntara because they are no longer thinking about their homes, property, and businesses in the shore area that has been lost in the tsunami. Being of them makes it easier for them to let go of their feelings of attachment to their possessions and then makes them accept and grateful.

Responsibility

Another portrait that appears of survivors is related to the role and responsibility to take care of their family post-disaster and their preparation or mitigation for the future because they are in disaster-inclined areas. The family was so important and needs to be guarded against possible dangers. Wife and children positions require the role and responsibility of a head of the family, a father, and a husband. This responsibility to take care of and save their families was so important because of the impact of the trauma experienced by survivors when disasters happen and the moment of saving families. One of their responsibilities is to advise their family that if traveling to the shore area, be more alert and be prepared to immediately save themselves and their families if there are any signs of danger.

Awareness

Spiritual capital as awareness to support the direction in which a person will act, for example from residents whose homes also places of business are in the red zone and are on the coast, also arises from the survivor's self. His destroyed home and business premises that were in the locality of the beach were not repaired. They so understand also remember that the location is a red zone, which if occupied as a place of residence will be a risk for him. Nevertheless, they still have hope that if there is a decent and safe place to live and help from the government to rebuild, it will be accepted. Meanwhile for business places located around the beach, if only they would improve it, just as a place of business, considering that the strategic location.

Meanwhile, local governments' activity to build awareness and provide an understanding of disaster mitigation, use more local wisdom and existing need approaches, for example adjusting to the tribes in the region, religions adopted by local communities who are both servants of God. So that the understanding given is also about religious efforts such as how to get closer to God as His servant, then humanize humans as an effort to get the hearts of residents so the disaster mitigation programs socialized by the local government can be accepted.

Effort and Do'a (Prayer)

Regarding the efforts and resignation (tawakkal) of residents regarding the destiny of death and awareness of efforts to equip themselves with disaster mitigation or disaster risk reduction, residents consider that the destiny of death is on Allah Ta’ala hand, nevertheless, humans must try or effort first, for example by learning about disaster mitigation or disaster risk reduction, so that they do not just immediately surrender without trying. Almost all residents have participated in socialization regarding disaster risk reduction, as well as some are active in disaster risk reduction communities formed by relevant institutions, for example, PMI (Indonesian Red Cross) and PATTIRO.

From the perspective of spirituality, there is an element of value as spiritual capital in the characterization of understanding disaster mitigation above, namely the existence of a deep and stored motivation and spirit to give birth to the strong efforts and endeavors to understand disaster mitigation owned by informants.

In the case and conditions that happen in Sumberjaya village, mitigation disaster as an effort or endeavor is to save oneself and reduce the risk of victims must take priority first than to assume and give up that death is fate, without any effort to mitigate.

4.2 Implications of Spiritual Capital in the Disaster Mitigation Phase

Compliance

Local wisdom is like following the advice of ancestors in protecting the environment around the beach not damaging it with behaviors that are outside the norms of society. Then it is related to following the religious teachings they have to agree to so far to keep the shore area from being used to do maksiat (vice/sin). They
believed that if this was violated, it would cause the sea water to rise as a result of the actions of those who were unable to keep the shore area in a safe condition by the advice of the ancestors, as well as religious teachings. As the result of (Mulianto & Setiawan, 2017) research that the values of spirituality are doctrine, worship, and becoming a moral role model in carrying out one's addiction manifested in attitudes also behaviors.

However, to the spiritual capital owned by the community in Sumberjaya to carry out disaster mitigation, the doctrine of obedience to the advice of ancestors and religious teachings not to carry out these acts of maksiat (vice/sin) can be thinking and asset in cultural sustainability both in a society that praises norms and ethics. In addition, it can be developed into local culture and assets for community development. According to (Green & Haines, 2016), local culture is often a neglected asset in community development, because in the global economy, local culture makes places different and characteristic, which should not only include "high culture" but also involve cultural assets of the poor.

Under these conditions, it is better to carry out disaster mitigation in Sumberjaya, both from the government and from LSM to pay more attention to and use the approach of local wisdom and religious teachings that they agree to. So that it is in line with local culture and there is no conflict let alone cause conflict between them, considering that for so long they have been declining residents have had their teachings. Likewise, it is also expected to continue to involve the participation of local religious leaders, because residents pay more attention to also listen to the asking of religious leaders.

It can be seen in the findings above that local governments that have the authority to handle disasters have made efforts to approach based on local wisdom and the general character of the community based on local religion, so that no conflict rises up.

Likewise, PATTIRO Banten did when direction the disaster mitigation education, by looking at the local culture and characteristics of the local population who are Muslim-majority religions and have obedience to religious figures. The approach used by PATTIRO Banten is to hold a pesantren kilat (short islamic boarding school) with religious materials also material on disaster mitigation and preparation. This gave rise to a good synergy between residents and PATTIRO Banten as an LSM so that the disaster mitigation education program ran well and was in demand by school-age children in Sumberjaya.

Accepting and Being Grateful

The gratitude shown by residents after experiencing the tsunami incident and then getting temporary housing shows humility. (Zohar & Marshall, 2004) said to humility is a value that can pass the ego of the self, 'knowing my place' in the social world, helping to realize and see one's humanity, and this sense of humility becomes an associate of gratitude.

Zohar and the Marshal perspective, then in the survivors, that sense of humility arises, especially when their condition is a worsening, there is nothing to do except be grateful, because gratefully they feel comfortable. And this has implications for disaster mitigation, they are in the red zone so they don't want to build their business any longer.

Responsibility

In post-disaster conditions, concerns still exist in some residents. It can be seen in the results of the interview above, of a father figure who has a sense of being able to always protect his family from danger or the possibility of a tsunami disaster that will arise. This is because the sense of responsibility to protect his family arises from the existence of a vision and goal for the property of the lives of his period in the future.

As stated by (Zohar & Marshall, 2004) that the creation of goals, vision, and responsibilities provides motivation and deep services to achieve human values and goals, which helps make the future of humankind property and contribute to its broad environment, as well as something property so that it requires purpose as well as loyalty. To protect the family from possible harm, there is the value of Egoism which means putting content self-selfishness and not always missing to be number one, willing to sacrifice for the survival of him and the group, doing the right thing for the lives of others for the sake of mutual living (Zohar & Marshall, 2004, p. 18).
Awareness

No matter how much effort is made by different elements for a disaster mitigation program, if it is not initiated by awareness, it will be in vain. Awareness fills the initial stage in initiating anything. Improve awareness is part of building oneself "build our self", "to improve the quality of compassion, service, gratitude, and humility, and this means exposing oneself to the 'deep stuff'(Zohar & Marshall, 2004, p. 34).

While in terms of disasters, the results of research by (Mileti & Noji, 1999, p. 228) show that greater awareness of the consequences of disasters and the impacts that disasters will cause is the main information for higher levels of preparation and more effective responses. (Coppola, 2015, pp. 297–298) also states that since in times of disaster resources for emergency response are temperamental, communities need to prepare resource needs for a response, which is why public preparation is an important measure to empower citizens and to help themselves, their families, neighbors, also foreigners.

Effort and Do'a as a faith in God for disaster mitigation

The efforts and do'a made by the residents of Sumberjaya in act of the possibility of another disaster are part of their religious beliefs. There is the term endeavor (effort) or all existing efforts to prepare for future disasters, for example, as said by one of the informants is to learn about disaster risk reduction. According to Long (2020) in (Wahyuna & Fitriana, 2020) respect the term endeavor which comes from the Arabic language (ikhtiar), which means to seek better results, which means human efforts to meet the needs of his life either materially, health, spiritually, even his future to fulfill life goals.

The second term is to be manned or praying to surrender and whatever the result of his efforts to the Allah Ta’ala. As (Wahyuna & Fitriana, 2020) states that tawakkal or giving up is to entrust and represent, meaning that the person who is in charge is a person who gives up, reaches, and leaves his affairs only to Allah Ta’ala.

According to (Fahm, 2019), the way people respond to disasters has to create by mental acts from praying to God for preventative measures and through various human efforts such as disaster research to understand and reduce danger. Because, preparation requires the activity of appropriate response plans for different disasters that may be experienced by the community because the more the community is not prepared for disasters, the more extreme the impact. Fahm further added, that believing in God can stimulate the negative effects of preparing for disasters in anxiety and fear, believing in God that knows what is best for His servant is one way to prepare for disaster.

From the description of the discussion above attention to the spiritual capital of citizens in disaster mitigation, it appears that the spiritual values that are practiced to maintain their property, as Zohar & Marshall (2004, p. 28) state that the wealth helps to make the future of humankind property and that raising also sustains the human spirit is spiritual capital. Sharonova & Ildarhanova (2015) state that faith as spiritual capital is a moral component of society where strong belief/faith is the guarantor of political stability, moral welfare, and economic justice.

To describe the values of spiritual capital in practice and its meaning for mitigation it would look like the following table.

<table>
<thead>
<tr>
<th>Spiritual Capital</th>
<th>Existing Spiritual Values</th>
<th>Implications for disaster mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td>- Compliance to the advice of parents and elders to maintain behavior</td>
<td>- The existence of local wisdom of values and morals as well as religious teachings in attitudes also behaviors in shore areas.</td>
</tr>
<tr>
<td></td>
<td>- Compliance to religious teachings so do not perform maksiat (vice/sin)</td>
<td>- Religious leaders have a central role in decision-making in the village</td>
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<td></td>
<td>- Regulations made by local governments, or programs organized by LSM pay attention to and take into account the characteristics of local communities</td>
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<tr>
<td></td>
<td></td>
<td>- New innovations in disaster mitigation education with</td>
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<tr>
<td>Spiritual Capital</td>
<td>Existing Spiritual Values</td>
<td>Implications for disaster mitigation</td>
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</tr>
<tr>
<td>Accepting and Grateful</td>
<td>Accepting existence in a limited state.</td>
<td>the pesantren kilat (short islamic boarding school) approach</td>
</tr>
<tr>
<td>Responsibility</td>
<td>The desire to always protect his family from the emergence of another tsunami</td>
<td>Grateful and humble, able to go beyond self-ego, feel safe and comfortable so that he no longer has the mind to build his business again which is in the red zone</td>
</tr>
<tr>
<td>Awareness</td>
<td>- Realizing that the location where he previously lived was in the red zone - The approach of local wisdom and humanizing people by the local government to the residents of Sumberjaya</td>
<td>The existence of altruism, willing to sacrifice for the survival of him and his group, doing the right thing for the lives of others for the sake of the common survival and property of his generation.</td>
</tr>
<tr>
<td>Faith in effort and prayer</td>
<td>Believing that the destiny of death is the business of Allah Ta’ala, nevertheless human must try or effort first, for example, to learn about disaster mitigation</td>
<td>Higher preparedness rate, with no desire to rebuild homes already lost to the tsunami because they were in the red zone - It is important to empower citizens so that they can help themselves, their families, and strangers - Efficiency, effectiveness, as well as sympathy of successful programs held by the government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Have clear goals and motivations when attending education and instruction disaster risk reduction or disaster mitigation - Collective awareness of risk reaction, being a member of the disaster risk reaction community.</td>
</tr>
</tbody>
</table>

Source: Researcher analysis results, 2022

V. CONCLUSION

The existence of values in achieving better survival through disaster mitigation shows spiritual capital in the social life of disaster victims. The spiritual side keeps survivors on the moral and humanitarian path of a human being in living life. The role of spiritualism has implications for disaster mitigation in three domains, namely the micro realm in the form of the appearance of calm also self-comfort in individuals to make them have the awareness not to build old residences in the red zone anymore; in general, there is egoism in relationships to maintain and protect each other for the survival of generations, the last one macro-wise which has a wide impact on the existence of regulations taken or programs implemented in the context of disaster mitigation or disaster risk reaction.

These conditions can be considered also recommended for social workers to practice in the micro, mezzo, or macro domains, so social work practices to improve social welfare can be applied to intervention practices in disaster mitigation. The morals and local wisdom of the existing community must be a concern so that the approach taken can be effectively run well, and be compatible.

The results of this study support previous research, such as the theory of Zohar and Marshal regarding spiritual capital, in Spiritual Capital: Wealth We Can Live By. However, if the purpose of this research is expanded further, it is not only spiritual capital and its implications in the disaster mitigation phase but also disaster management to achieve wellbeing, then it is possible to use Midgley’s welfare theory, about the role of social functions, so that survivors can still role socially to improve their well-being and not be re-trapped in a circle of vulnerability that is caused by disasters. For this reason, the researcher recommends that further research take place to develop a theme for the intended research objective.
REFERENCES


