

Social and Spiritual Determinants of Mental Health among Persons Deprived of Liberty: A Basis for Program Development¹

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Abstract

Issues of mental health among persons deprived of liberty [PDLs] are seen, but mostly are not recognized in the Philippines. This cross-sectional study aimed to identify the social and spiritual determinants of mental health among PDLs. The dimensions of mental health surveyed were self-esteem, aggressiveness, and outlook. This research was also conducted to establish the predictors of mental health. Through convenience sampling, 143 PDLs from a jail institution were selected. A self-constructed questionnaire was utilized, and the data gathered were analyzed using descriptive statistics, Pearson's correlation, analysis of variance, and linear regression. The study revealed that the respondents have high levels of social and spiritual determinants, high levels of self-esteem, a positive outlook, and low levels of aggression. Aggressiveness and outlook were significantly related to social and spiritual determinants. Furthermore, females had higher self-esteem and a more positive outlook than males, while the oldest age group had the highest aggression rate. Gender was the only predictor for self-esteem; social determinants and age were predictors for aggressiveness; and spirituality was the only predictor for respondents' outlook. A proposed program was developed based on the results and – if implemented – aims to enhance the promotion of mental health among persons deprived of liberty.

Keywords: *Psychosocial health, self-esteem, aggressiveness, outlook, inmates*

Introduction

Mental health is a state of well-being in which individuals are able to realize their potential, can cope with normal stresses in life, can work effectively, and can contribute to the community (World Health Organization, 2016). There are several factors that exacerbate the mental health of persons deprived of liberty [PDLs] during or before imprisonment. They tend to have disturbing behaviors, which possibly develop due to inside and outside determinants of their condition. Thus, it is important to utilize therapeutic communication and provide special care to PDLs. Mental health disorders among PDLs affect cognitive, emotional, and volitional aspects and functions of personality. A relationship between mental health and criminality was described to be one of the reasons that a number of mental patients were imprisoned (Gonzalez & Connell, 2014). Some mental health dimensions were delved into by the researchers: mainly self-esteem, aggressiveness, and outlook of PDLs.

Self-esteem is described as a person's sense of self-worth or self-respect. It makes a person have a positive attitude towards self and the ability to succeed in the meaningful areas of life (Mruk, 2013). PDLs' sense of self-worth and personal value diminish in prison since their basic privacy rights and some aspects of their existence are taken for granted. Cherry (2018) stated that different factors can greatly influence a person's self-esteem. People who are repeatedly judged or are recipients of negative assessment from family members, caregivers, or friends often experience problems with low self-esteem. In addition, factors like the way a person thinks, possible illness, age, physical problems, or a job can affect a person's self-esteem. In relation, Monroe (2012) stated that having a positive or negative attitude or outlook towards life is one factor that affects mental health. If PDLs exhibit positive attitudes in prison, they show acceptance and change for themselves. However,

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when PDLs show negative attitudes, they manifest self-pity, are self-blaming, and have feelings of discrimination. These negative attitudes can result in aggressiveness and anger, incidents that have increased in the last few decades, and are evidence of negative effects in human relationships as well as in a person's physical and mental health (Bahrami, Mazaheri, & Hasanzadeh, 2016).

Nurse, Woodcock, and Ormsby (2003) mentioned that many determinants affect mental health in prison. Being locked up with little activity or mental stimulation, and the prison environment itself has a negative impact on the mental health of PDLs, whether or not they have a diagnosed mental illness. This can cause problems that can affect inmates of different ages, genders, and socio-economic status. These determinants have negative psychological effects on inmates leading to psychological deterioration (Tomar, 2013).

Since limited studies have been conducted in the Philippines about the mental health of PDLs, the researchers wanted to study this topic further. Since mental health issues are very prevalent nowadays, the researchers focused their study on PDL's self-esteem, aggressiveness, and outlook. Going further with the study, the researchers may develop nursing interventions and proper activities for people who are suffering mentally inside prisons. This can also be a guide to jail officers and other workers in institutions on useful interventions for mentally-challenged PDLs.

Ranges of mental health management techniques can be done through therapeutic communication, good client and nurse rapport, and with safe and quality nursing care. Observing and identifying inmates with mental health issues enable nurses to identify the PDL's behavior.

Objectives of the Study

The study aimed to determine the social and spiritual determinants of self-esteem, aggressiveness, and outlook of persons deprived of liberty. Specifically, it sought to determine:

- if there is a significant relationship between the social and spiritual determinants and the self-esteem, outlook, and aggressiveness of the PDLs;
- if there is a significant difference in the self-esteem, outlook, and aggressiveness of the PDLs when age, gender and length of imprisonment are considered;
- which of the variables significantly predict self-esteem, outlook, and aggressiveness?

Methodology

Research Design

A descriptive design was used to determine how social and spiritual determinants influence PDLs' mental health. This study is descriptive in nature, as it provides information about the naturally-occurring mental health state, behavior, or other characteristics of a group.

Population and Sampling Technique

Through convenience sampling, 143 PDLs (68 males and 75 females) were selected as respondents from a jail institution in Region IV-A. The focus of this study were PDLs of any ethnic group and religion, 18 years and older, who could answer the questionnaire. PDLs who were uncooperative or were diagnosed with mental disorders were excluded from this study.

The age group distribution of respondents was as follows: 31 (21.7%) were 30 years old or below; 57 (39.9%) were 31 to 39 years old; 38 (26.6%) were 40-49 years old, and 17 (11.9%) were 50 years old or above. For the length of imprisonment, 47 (32.9%) had been PDLs for less than 1 year; 52 (36.4%) for 1 to 2 years; and 44 (30.8%) inmates were incarcerated for more than 2 years.

Instrumentation

A constructed questionnaire conceptualized from the literature was used to identify the determinants that affect the PDLs' mental health. The questionnaire underwent expert validation by three validators who were nursing clinical instructors related to mental health education, one nursing clinical instructor unrelated to mental health education, a methodologist, a statistician, and a psychologist. The questionnaire was also translated from English to Tagalog by a faculty member of the Languages Department, Adventist University of the Philippines. The researchers also conducted

a pilot study, utilizing 40 PDLs in one jail institution in the Calabarzon Region IV-A, for questionnaire modification and reliability testing.

Data Gathering Method

Prior to conducting the study, the researchers obtained permission from the thesis committee. Approval was also secured from the municipal jail officer in-charge of the Inmates Welfare and Development Program (IWD), and consent from the participants was acquired. The researchers discussed the study's purpose with the surveyed population before giving the questionnaire to the respondents. Clarifications about the questions and instructions were made before and while the survey was being answered to avoid unnecessary errors. After the survey, the questionnaires were retrieved and were secured confidentially.

Ethical Considerations

The research study was conducted in full conformance with the principles of the Declaration of Helsinki, good clinical practice, and the laws and regulations of the Philippines. Participants were given a full explanation of the study through a briefing process prior to the beginning of data collection. Participants were asked to sign a consent form translated into the local language. Participation in the study was completely voluntary, and participants were free to refuse to take part or choose to stop taking part in the study at any time. Non-participation did not affect their parole or their relationship with the institution in any way.

There were no costs to the participants for participating in the study. The study posed no risk to the participants greater than what they routinely encounter in day-to-day life. No specimens were extracted or gathered from the participants. As a token for their participation, the participants were given snacks.

It was possible that participation in this study has caused the PDL to recall unpleasant experiences during incarceration. To address this risk, a debriefing session was conducted by the researchers after data collection. The debriefing session utilized a script approved by the psychologist.

To ensure minimal external influence on their answers and to remove any feeling of coercion, no prison staff were present during the 'informed consent' process. The participants were assured that prison personnel would not have access to any of their individual answers.

To mitigate the minimal risk of breach of confidentiality, there were no personal identifiers involved in the data collected. The names of the participants were not written on the surveys. Any published document resulting from the study did not disclose the identities of the participants.

The research data in hard copy form were stored in secure files and folders. The electronic data were password-protected and stored in a secure, password-protected computer. Only study team members have access to both the hard and soft copies of the files.

Analysis of the Data

The data collected were statistically tested to extract answers to the problem asked in the study. Descriptive statistics, means, and standard deviations were used to determine the levels of social and spiritual determinants, self-esteem, outlook, and aggressiveness among inmates, along with a profile of the inmates in terms of age, gender, length of imprisonment, and religion. Pearson's correlation coefficient was used to measure the strength of the association of two variables. Analysis of Variance (ANOVA) and *t*-test were used to determine the difference in the mental health of the inmates in regards to their age, gender, length of imprisonment, and religion. ANOVA was used to examine differences among the means of several different groups at once. Linear regression was used to determine the variable/s that mostly predicted the independent variables in terms of social, spiritual, age, gender and length of imprisonment.

Results and Discussion

Social Determinants

Social determinants referred to PDLs' relationships with their families, correctional officers, and other PDLs, as well as how they dealt with these relationships. Table 1 shows that there was a high level ($M = 4.19$) of social relationship of the respondents with their families, correctional officers, and other PDLs. The most influential support that inmates may receive was from their families. A study conducted among incarcerated women showed that if they do not receive good social support either from family or correctional officers, they were more likely to develop negative behaviors. Inmate-to-inmate social relationships were also found to have a positive influence on female inmates, but had a negative effect on the behavior of the male inmates, especially on inmates who were drug abusers (Fournelle & Hofferber, 2014).

Table 1. Level of Social Determinants of the Respondents ($N = 143$)

Questions	Mean	SD	Scaled Response
1. There is mutual respect between the correctional officers and inmates.	4.76	0.43	Strongly Agree
2. I can approach the correctional officer on duty, if I need to.	4.55	0.55	Agree
3. I have good relationships with the inmates here.	4.69	0.52	Strongly Agree
4. My expressed concerns were addressed duly by the officers in charge.	4.43	0.84	Agree
5. This institution provides adequate facilities for recreational activities.	4.31	0.84	Agree
6. Correctional officers seem distant and unapproachable.	3.57	1.14	Agree
7. Jail officers show concern and understanding towards me.	4.47	0.72	Agree
8. There is a lot of disagreement between different groups of inmates.	3.66	1.18	Agree
9. I am able to keep in touch with my family either by phone or through mail.	3.26	1.59	Neither agree nor disagree
Level of Social Determinants	4.19	0.38	Agree (High)

4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Neither Agree nor Disagree; 1.50-2.49 = Disagree, 0.00-1.49 = Strongly Disagree

Social relationship of inmates to jail officers is also an important factor that influences the well-being of the incarcerated (Beijersbergen, Dirkzwager, van der Lann, & Nieuwbeerta, 2016). Correctional officers are specialists in mediation. They help inmates by creating a less oppressive atmosphere. Having mutual respect, trust, and good communication between both inmates and correctional officers provides a more peaceful environment for the inmates, lessening their stressors and worries, as incarceration is a stressor itself (Crewe, Liebling, & Hulley, 2014).

Inmate-to-inmate relationships are also important among the incarcerated. Chong (2013) conducted a study among males who were incarcerated, and he learned that inmate-to-inmate social interaction made them more aware of each other's behavior and development, especially when they were in the right setting. Additionally, they were able to develop trust. Being open to each other lessens the fear of abandonment.

Spiritual Determinants

Spirituality of the inmates pertains to their personal beliefs and a sense of connection with God or a higher Being that they believe in. Table 2 shows that there was a high level ($M = 4.77$) of spirituality among the respondents. Spirituality is an important part of human life and therefore should be examined in relation to a person who is incarcerated. One study conducted in this area found that inmates who were involved in religious activities were less anxious and depressed compared to those who isolated themselves from the spiritual life that was offered to them (Skowroński & Domżańska, 2017).

Table 2. Level of Spiritual Determinants of Respondents (*N* = 143)

Questions	Mean	SD	Scaled Response
1. My faith keeps me secure while in this institution.	4.78	0.65	Strongly agree
2. I find satisfaction when I can engage in conversation about God with my fellow inmates.	4.73	0.55	Strongly agree
3. In certain moments of my life I feel very close to God.	4.75	0.52	Strongly agree
4. I feel peace deep inside me every time I pray or have quiet time with my God while in this institution.	4.83	0.48	Strongly agree
5. I know that God is merciful to see me through while I serve my sentence.	4.81	0.57	Strongly agree
6. I enjoy attending religious gatherings organized here.	4.70	0.58	Strongly agree
7. I feel happy when different religious organizations come and share the word of God with us.	4.71	0.62	Strongly agree
8. Knowing God gives me hope and helps me to never give up.	4.89	0.43	Strongly agree
Level of Spiritual Determinants	4.77	0.43	Strongly agree (High)

4.50-5.000= Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Neither Agree nor Disagree; 1.50-2.49 = Disagree; 0.00-1.49 = Strongly Disagree

Self-esteem

Self-esteem could be referred to as self-worth or self-respect; it is the ability of an individual to succeed in the meaningful areas of life (Mruk, 2013). Table 3 shows that there was a high level (*M* = 3.66) of self-esteem among the respondents.

Table 3. Level of Self-esteem of Respondents (*N* = 143)

Questions	Mean	SD	Scaled Response
1. I feel that I do not have much to be proud of.*	3.09	1.33	Neither agree nor disagree
2. I feel worthless at times.*	3.72	1.25	Agree
3. I feel that I am a failure.*	3.62	1.38	Agree
4. I compare myself to others.*	3.80	1.07	Agree
5. I feel I am no good at all.*	4.08	1.17	Agree
Level of Self-esteem	3.66	0.96	Agree (High)

*4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Neither Agree nor Disagree; 1.50-2.49 = Disagree; 0.00-1.49 = Strongly Disagree; *(Negative items recoded)*

Self-esteem plays a significant role in a person's motivation and success. High self-esteem helps a person achieve their aims in life, have an assertive attitude, and believe in accomplishing goals, while low self-esteem may hold back a person from succeeding in life, and from believing that they are even capable of being successful (Cherry, 2018).

High self-esteem is often referred to as the affective or emotional characteristic of self, and in general suggests how a person feels about or values him/herself (Amuche & Mayange, 2013). A person's self-esteem is said to be one of their most valuable assets. Once it is destroyed, individuals could lose their sense of self-worth; therefore, inmates should be encouraged to esteem their value and worth.

Self-esteem is not inborn; it is built and developed by the person through contacts with the environment and people around them, as well as the reflections made from those interactions (Amuche & Mayange, 2013). Greve and Enzmann (2003) showed that self-esteem can rise during

imprisonment. Also, this rise or increase rests on a person's ability to cope. This increase in self-esteem is easily enhanced in people who are accommodating.

Aggressiveness

Aggression is the act of violence of PDLs; it may be both physical and verbal violence towards self and towards others. Prison is a perfect place for anger and aggressiveness to develop (Fisher & Bloomstrand, 2013). Table 4 shows that there was a low level ($M = 1.92$) of aggressiveness among the respondents.

Table 4. Level of Aggressiveness of Respondents ($N = 143$)

Questions	Mean	SD	Scaled Response
1. If somebody hits me, I hit back.	1.80	0.99	Disagree
2. I have trouble controlling my temper.	2.29	1.22	Disagree
3. I get irritated when I am frustrated.	2.04	1.04	Disagree
4. I feel the need to defend myself constantly.	2.70	1.36	Disagree
5. I often find myself disagreeing with people.	1.92	1.06	Disagree
6. I get into fights more than other people	1.56	0.77	Disagree
7. At times, I cannot control the urge to hit someone.	1.60	0.91	Disagree
8. I can't help getting into arguments when people disagree with me.	1.88	1.03	Disagree
9. I break things when I'm angry.	1.52	0.84	Disagree
Level of Aggressiveness	1.92	0.73	Disagree (Low)

4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Neither Agree nor Disagree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Aggression, which is believed to be present in each individual, is defined as a behavior intended to cause harm or pain to others or self. Aggression can be indirect or direct, emotional or physical, and active or passive. It can also be verbal or non-verbal (Chandrashekar et al., 2007).

An experiment was conducted at Snake River Correctional Institute (Ontario, Oregon, USA), showing that inmates are less likely to have aggressive behavior when watching videos about nature. The research team believed that the pictures shown helped the inmates feel relaxed, reducing negative emotions and behaviors, which are distress, irritability, and anxiety that can cause them to be aggressive (Micu, 2016).

Outlook

The outlook of PDLs can be positive or negative. This refers to the attitude regarding how inmates perceive their stay in incarceration. A positive attitude is shown when one is feeling optimistic, using coping strategies like social support and emphasizing positive aspects when facing stressful situations (Conversano et al., 2010). Self-pity and helplessness are usually found in inmates who have negative attitudes (Monroe, 2012).

Table 5 shows that respondents had a positive outlook on life ($M = 4.79$). A positive outlook can be explained as the difference between recovery and reversion. Having a positive outlook enables people to put better value on their lives, and not just think of themselves as someone who committed something awful. It also reduces stress and negative thoughts in life (Counselling Directory, 2016).

A positive attitude is shown when one is feeling optimistic, using coping strategies like social support and emphasizing positive aspects when facing stressful situations. Optimism is said to be a great influence on one's mental and physical well-being. It assists in the promotion of a healthy lifestyle, as well as in expressing an adaptive pattern and active cognitive responses, along with enhanced problem-solving capacity (Conversano et al., 2010).

Table 5. Level of Outlook of Respondents ($N=143$)

Questions	Mean	SD	Scaled Response
1. I look at the brighter side of life.	4.67	0.64	Strongly agree
2. I still have hope that my family is waiting for me when I go out of this place.	4.85	0.39	Strongly agree
3. I believe I will have job opportunities after I go out of this institution.	4.72	0.71	Strongly agree
4. I believe I can start a new life after my release from this institution.	4.85	0.40	Strongly agree
5. I think I will be a better person after my imprisonment.	4.85	0.38	Strongly agree
Level of Outlook	4.79	0.37	Strongly agree (High)

4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Neither Agree nor Disagree; 1.50-2.49 = Disagree; 0.00-1.49 = Strongly Disagree

Table 6 shows that there was no significant relationship between self-esteem and social determinants ($r = 0.102$, $p = 0.228$), or self-esteem and spiritual determinants ($r = 0.095$, $p = 0.260$). For aggression, there was a low negative correlation ($r = -0.280$, $p = 0.001$) with social determinants. PDLs who have better social relationships either with family, jail officers, or other inmates were less likely to exhibit aggressive behavior. Further, 7.8% ($r^2 = 0.078$) of the variance in aggression can be explained by social determinants. Aggression also has a significant low negative correlation ($r = -0.257$, $p = 0.002$) with spiritual determinants. Inmates with high spirituality are less likely to show aggressiveness. In addition to this, 6.6% ($r^2 = 0.066$) of the variance in aggression can be explained by the spiritual determinants.

The PDLs' outlook had a positive correlation ($r = 0.235$, $p = 0.005$) with social determinants. Social interactions of PDLs among their families, jail officers, and other PDLs most likely contributed to their positive outlook. Further, 5.5% ($r^2 = 0.055$) of the variance in outlook can be explained by the social determinants. Outlook also had a positive correlation ($r = 0.306$, $p < 0.005$) with spiritual determinants. Having a high level of spirituality among inmates indicates that they have a more positive outlook. Additionally, 9.4% ($r^2 = 0.094$) of the variance in outlook can be explained by the spiritual determinants.

Table 6. Relationship of Social/Spiritual Determinants to Respondent Self-esteem, Aggression, and Outlook

Mental Health	Social Determinants			Spiritual Determinants		
	<i>r</i>	<i>p</i>	VI	<i>r</i>	<i>p</i>	VI
Self-esteem	0.102	0.228	Not Significant	0.095	0.260	Not Significant
Aggression	-0.280	0.001	Significant	-0.257	0.002	Significant
Outlook	0.235	0.005	Significant	0.306	0.000	Significant

VI - Verbal Interpretation

According to Wallace et al. (2014), social support – whether it comes from families, other correctional officers, or other inmates – plays an important role in the mental well-being of the incarcerated. Inmates who have better spirituality scores are better able to reshape, correct, and acquire hope and meaning in life, which means that they will have better mental health. This lessens their aggressiveness and increases their self-esteem, and helps them to have a more positive outlook on life (Vane & Dirga, 2016). Having good social relationships and social support increases the self-esteem of inmates and gives them a more positive outlook. When inmates' social relationships and support decrease, there will be an increase in their aggressive behaviors.

Gender is a critical determinant of mental health and mental illness. A gender approach to mental health provides guidance to the identification of appropriate responses from the mental healthcare system, as well as from public policy (Afifi, 2012).

Table 7 shows that there was a significant difference in the self-esteem ($t = -2.00, p = 0.047$) and outlook ($t = -1.99, p = 0.049$) between male and female PDLs, while there was no significant difference in their aggressiveness. Female inmates had higher self-esteem, $M = 3.82$ ($S = 0.89$) than male inmates, $M = 3.50$ ($S = 1.01$). A more positive outlook was also seen in female inmates, $M = 4.85$ ($S = 0.32$) than male inmates, $M = 4.72$ ($S = 0.41$).

Table 7. Mental Health of Respondents in Terms of Gender

Mental Health	Gender	<i>M</i>	<i>S</i>	<i>t</i> (141)	<i>P</i>	VI
Self-esteem	Male	3.50	1.01	-2.00	0.047	Significant
	Female	3.82	0.89			
Aggression	Male	1.98	0.77	0.92	0.360	Not Significant
	Female	1.87	0.70			
Outlook	Male	4.72	0.41	-1.99	0.049	Significant
	Female	4.85	0.32			

M - Mean, *S* - Standard Deviation, *p* - Significance, VI - Verbal Interpretation

Our results on self-esteem contrast with those obtained in a study conducted among female inmates in Kenya. The study conducted there showed that women who are incarcerated are more likely to have lower self-esteem. Most inmates felt guilty most of the time inside the prison. They experienced a sense of helplessness, especially when they were forced to undergo strip-inspection, causing them to have low self-esteem. This may lead inmates to experience depression and eventually suicide as their psychological well-being is affected (Kamayo, 2018). A study conducted in Germany showed that the male population's self-esteem decreases as their prison term begins, but eventually stops getting lower as their time inside the prison becomes longer (Greve & Enzmann, 2003). Another contrasting result comes from an extensive study involving respondents from 48 countries, which showed that males have better self-esteem than females (Bleidorn et al., 2016).

In relation to outlook and gender, our results show that females have a more positive outlook than the male population. According to Monroe (2012), both males and females have a negative outlook while incarcerated. He believed that people can never have a positive attitude when they feel that other people are blaming them for what has happened to them. He added that inmates have this mentality of self-pity and the feeling of being discriminated against, and they simply cannot accept that they are incarcerated. This contrasts with our data in Table 7, which shows that inmates in both gender groups had a positive outlook in life even while incarcerated. There are many factors that may have contributed to this better outlook.

As shown in Table 7, there is no significant relationship between aggressiveness and gender. In contrast with this, a study conducted in Nigeria among prisoners and non-prisoners indicated that inmates, either male or female, juveniles or old offenders, exhibited aggressive behavior. In addition to this, aggressive behaviors among inmates were violence towards others, suicide, and destruction of public property (Awopetu & Happiness, 2015). Aggression is more often seen in men than in women. According to Furtuna (2014), men and women are educated to perform different social roles, in which men are taught that fighting is more suitable for them compared to women. This practice is still adopted by today's generation, wherein people know and learn that men should be aggressive and women should not be.

Table 8 shows that there was no significant difference between self-esteem across age groups. This is in contrast to the result of a large study conducted by Bleidorn et al. (2016) relating age and gender to self-esteem. They showed that self-esteem was low during the adolescence period, rose gradually through adulthood, and declined or even disappeared during old age. Male and female are both affected by these gradual changes in their self-esteem. As a person gets older,

there are many factors that may change, such as negative events across the lifespan and decreasing self-esteem (Chui, 2016).

Table 8. Differences in Mental Health of Respondents in Terms of Age

Mental Health	Age	<i>M</i>	<i>S</i>	<i>F</i>	<i>P</i>	VI
Self-esteem	<30	3.75	0.90	0.455	0.714	Not Significant
	31-39	3.71	0.87			
	40-49	3.51	1.08			
	50 and above	3.69	1.12			
Aggression	<30	1.75	0.66	3.550	0.016	Significant
	31-39	1.81	0.61			
	40-49	2.04	0.87			
	50 and above	2.37	0.73			
Outlook	<30	4.90	0.21	2.362*	0.082	Not Significant
	31-39	4.78	0.38			
	40-49	4.75	0.35			
	50 and above	4.72	0.56			

*Welch *F*; VI - Verbal Interpretation

There was a significant difference in the aggressiveness among different age groups, $F = 3.550$, $p = 0.016$. PDLs who are 50 years old and above, $M = 2.37$ ($S = 0.73$) tend to be more aggressive than those who are in the age bracket of 31 to 39 years old, $M = 1.81$ ($S = 0.61$), and those who are 30 years old and younger $M = 1.75$ ($S = 0.66$). Therefore, the results suggest that older PDLs are more aggressive than younger PDLs. The oldest age group (50 years old and above) had the highest aggression rate. This is in partial agreement with another study indicating that older adults have more aggressive behavior compared to middle-aged adults and the younger age group. The study explained that because of loneliness or frustration, aggressive behaviors may be present in older adults (Evans, Lewis, & Liu, 2012). These results contrast with the study conducted by Khan (2006) among men and women of different ages. The results showed that the younger group had a higher expression of aggression than the middle-aged group but the study did not show aggression among the older group. This is partially confirmed by a study by Sparks (2015), who also showed that aggressive behavior is more common in younger inmates. They became violent because they were more likely to have difficulties adjusting to prison life. Likewise, they were likely to engage in conflict with other inmates. Younger inmates also viewed violence as an appropriate way of dealing with conflict with others. Perhaps a complex mix of factors including cultural, social, and incarceration practices all played a role in the differences observed.

Lastly, the study shows that there was no significant difference between outlook and age. A positive outlook can impact mental health and physical functioning. Yelland (2015) indicated that as a person gets older, a more positive attitude and outlook were displayed. This, however, does not agree with the results shown in Table 8.

Further analysis showed that there was no significant difference in the self-esteem ($p = 0.203$), aggressiveness ($p = 0.949$), and outlook ($p = 0.628$) of respondents when length of imprisonment was considered. However, other research studies have found otherwise. For instance, according to Lichtenberg (2016), a lot of negative psychological effects may happen to those incarcerated for prolonged stays. She believed that one cause of inmates' mental health issues was their length of imprisonment. This conclusion has been reinforced by Garcia and Marco's (2012) view that keeping inmates for a long time inside the prison just increases their feelings of rejection, depression and mental health issues.

In an attempt to find *predictors* of self-esteem, aggression and outlook, some further analysis was necessary for two dimensions. It has been observed already in Table 7 that a more positive outlook was seen in female inmates compared with males, leading us to provisionally

conclude that in the Philippines, gender ($R = 1.66$, $R^2 = .028$, $F = 4.00$, $p = 0.047$) may be a predictor of self-esteem scores. Gender explained the 2.8% variance of self-esteem among PDLs, positively influencing their self-esteem.

In examining aggressive behavior, a post hoc analysis using Tukey's HSD test was conducted. Based on the results, significant differences were found between those in the age group of less than 30 years old ($p = 0.025$) and those 50 and above, and between the 31 to 49 years old and 50 and above groups ($p = 0.029$). Social determinants and age are significant predictors of aggression ($R = 0.365$, $R^2 = 0.133$, $F = 10.77$, $p < 0.005$). Together, they explained 13.3% variance in aggression, of which 7.8% is for the social determinants and 5.5% is age. Social determinants negatively influenced aggression ($B = -0.498$, $t = -3.25$, $p = 0.001$). As social determinants increased, aggression among PDLs decreased. Age positively influenced aggression ($B = 0.017$, $t = 2.99$, $p = 0.003$). The equation for prediction was: Aggressiveness = $3.38 + -0.498$ Social Determinants + 0.017 Age.

A controversial experiment was conducted by Harry Harlow in the 1950s on social isolation of baby monkeys. They were placed in an isolated area, or a "pit of despair" away from their mothers. After 6 months, Harlow found that the monkeys became distressed and depressed, leading to more aggressive and hostile behavior both to self and others. Emma Harries (2017) stated that solitary confinement is a human example of social isolation which distresses prisoners, and she emphasized the need for them to have connectedness or good social interaction and relationship with others, such as family members who visit them, correctional officers, and other inmates. Good social interaction and relationships decreased the level of aggressiveness among inmates.

In seeking a predictor of outlook among respondents, the spiritual dimension measured in Table 2 was examined. The analysis conducted showed that the spiritual determinant is the only predictor of outlook among PDLs ($R = 0.306$, $R^2 = 0.093$, $F = 14.54$, $p < 0.005$). Spiritual determinants positively influenced outlook in PDLs ($B = 0.266$, $t = 3.81$, $p < 0.005$). The higher the spirituality of PDLs, the more positive was their outlook on life. The predictive equation was: Outlook = $3.519 + 0.266$ Spiritual determinants. A study conducted by Jodi et al. (2014) about the psycho-spiritual health of Muslim female inmates in Malaysia indicated the value of tapping the spiritual dimension there. Respondents ($n = 40$) were exposed to religious teachings, practices, and obligations, including prayer, religious law, and pilgrimage. These aspects were instilled into inmates to build character and change attitudes towards amending their past bad lifestyle. The inmates were trying, with the help of spirituality, to fully transform their bad habits into more acceptable ones. This study appeared to show that spirituality had a positive influence on the outlook of the women inmates using the strict regimes imposed. It may not be surprising that the inmates' goal after this long experience was a "determination to be the best" upon leaving prison. The applicability of this positive outcome to other situations remains to be assessed.

Conclusions and Recommendations

The main objective of the study was to determine the influence of social and spiritual determinants on the self-esteem, aggressiveness, and outlook of PDLs. After the data was analyzed, findings revealed that PDLs in a jail institution of Region IV-A (Calabarzon region) possessed high levels of social relationship, spirituality, self-esteem, a positive outlook, and low aggression tendencies. Furthermore, females have higher self-esteem and a more positive outlook than males, while the oldest age group has the highest aggression rate. It can also be concluded that PDLs who have high spirituality and better social relationships are less likely to exhibit aggressive behavior. Moreover, the social interaction of PDLs with their families, jail officers, and other PDLs most likely contributed to their positive outlook. Lastly, spirituality was the only predictor of a positive outlook for PDLs.

The researchers recommend that nurses and other health professionals, especially those who are in the Bureau of Jail Management and Penology, should be aware of and ready to properly manage and minister to PDLs' mental health needs and problems. Further research must also be

done on a larger group or population. The reason of imprisonment may also be included in the variables to see if there are any correlations between it and the PDLs' mental health.

A proposed program has been constructed based on the results of the study. This program will focus on the fundamental ways in which the incarcerated live, in terms of their social, spiritual, psycho-emotional, and intellectual environments, and their ability to acquire livelihood skills. Once implemented, it is hoped that it will greatly help PDLs to live their lives as residents in a community, and not as prisoners in a facility.

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