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## Influence of Spirituality and Prosocial Behaviour on Psychosocial Functioning among International Students the Midst of Covid-19

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#### **Abstract**

This study is an attempt to examine the relationship between spirituality and prosocial behaviour with psychosocial functioning among international students of Universiti Putra Malaysia (UPM). By using snowball sampling technique, a total of 202 respondents were obtained. The Spirituality Scale (SS) was the chosen instrument to measure spirituality, Prosocialness Scale for Adults (PSA) will measure prosocial behaviour and the Inventory Psychosocial Functioning (IPF) Scale by Marx will measure psychosocial functioning. The result revealed that most of the respondents had high level of spirituality (78.2%) and prosocial behaviour (88.6%), whereas a moderate level for psychosocial functioning (65.8%). Moreover, the result from the Mann-Whitney U Test showed that there are no significant differences in psychosocial functioning between male and female. Using the Spearman's Rank Correlation Test, spirituality was significantly correlated with all aspects of psychosocial functioning such as family (r=0.215, p<0.05), friendships and socializing (r=0.334, p<0.05), education (r=0.286, p<0.05) and self-care (r=0.224, p<0.05). Variable such as prosocial behaviour was also significantly correlated with psychosocial functioning in family (r=0.165, p>0.05), friendships and socializing (r=0.290, p>0.05), education (r=0.249, p>0.05) and self-care (r=0.163, p>0.05). This study concluded that the international students' spirituality and prosocial behaviour were important in influencing the level of their psychosocial functioning.

**Keywords**: Spirituality, COVID-19, Prosocial Behavior, Psychosocial Functioning, International Students

#### Introduction

We are living in a new era of COVID-19 pandemic where all aspects in our lives from behavioral, to cognitive, physical, emotional, spiritual and psychosocial are affected. According to Dubey et al (2020), the increasing number of COVID-19 cases have affected the psychosocial health of humans globally due to a widespread distress, low economy and financial problems. The pandemic of COVID-19 together with the Movement Control Order (MCO) which is an act to battle against COVID-19, has induces panic attacks, anxiousness, compulsive behaviours, hoarding, delusions, and depressive symptoms, as well as post-traumatic stress disorder (PTSD) within a long period of time (Dubey et al., 2020). Students are part of the people that are hugely affected with the pandemic situation due to changes

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that have been made upon their educational systems and routines. Kulyar et al (2020) reported that a large number of international students are highly affected psychosocially during the COVID-19 pandemic. Psychosocial functioning refers to an individual's capability to carry out everyday tasks and interact with everyone else in ways that are beneficial to oneself and others, as well as satisfying the needs of the society in which he or she lives (Mehta et al., 2014). Based on Marx et al (2020), psychosocial functioning involves one's frequency connecting with their interpersonal relationships and the environment such as romantic relationships, family relationships, work, friendships and socializing, parenting, education, and self-care. Hence, the psychosocial functioning defined and measured by Marx et al (2020) is being used throughout the present study.

Interestingly, a number of studies have found that spirituality helps humans in times of pandemic. Ebadi et al (2009); Schuster et al (2001); Thune-boyle et al (2006) explained that religion and spirituality are often used upon dealing with difficult times and tension for ages (as cited in Lucchetti et al., 2020). Another study done by Hsu et al (2009) speculated that international students might use spirituality to cope with their struggles, which leads to the findings of obtaining zero number of international students with low levels of spirituality (as cited in Chai, 2009). Spirituality also induces good psychosocial functioning. This is supported by Reymann et al (2008) where the study has concluded that building a foundation for the aspect of spirituality amongst bachelor students will benefit their well-being in all aspects of psychosocial development. Furthermore, Lucchetti et al (2020) have found that spirituality and religiosity act as a coping mechanism upon social distancing consequences during the pandemic of COVID-19 and have extraordinary effects on psychological well-being.

Jones et al (2016) described spirituality as a complex interdependence to own selves, people, existence, or divinity in significant structures that is wider than religious belief (as cited in Roberto et al., 2020). This means that anybody could experience spirituality regardless of beliefs, whether they are religious or not. According to Tanyi (2002), spirituality is a human search for meaning and purpose in life that is not necessarily religious. It comprises a connection to religious beliefs, ideals, and practices that provide meaning to life, inspiring and driving people to reach their full potential and wholeness (as cited in Rudolfsson et al., 2014) towards clarification of the meaning of spirituality. Spirituality also has other key elements for its definition. Dyson et al (1997) have discovered that hope, meaning, connectedness and beliefs are the key elements which resulted from having spirituality in oneself and spirituality could be expressed in many ways where religious practice, caring and appreciation are included. Spirituality is one's interdependence on its relationships with the supreme being and the environment, with others as well as awareness of oneself where it is also being influenced by personal and demographic attributes (Delaney, 2003). Hence, Delaney's (2003) definition of spirituality will be used throughout this present study.

Nevertheless, it is found that prosocial behaviour helps in the growth of humans' psychosocial aspects. Afolabi (2014) has found that there is a direct relationship between psychosocial well-being and prosocial behaviours where prosocial behaviour influences various social actions, increases happiness and encourages people to assist other people. In addition, Flynn et al (2015) also concluded that stronger prosocial behaviour predicted lower aggressive behaviour, feeling sad, lonely and having anxious thoughts (internalizing symptoms) as well as reducing tension in social relationships. According to Eisenberg and Fades (1998),

generally, prosocial behaviour is defined as any action that is intended to give an advantage to others (as cited in Carlo & Randall, 2002). Eisenberg (1991) explained that many researchers have defined prosocial behaviour as the big domain where it has two subdomains which are egoism (helping behaviour that expects a reward from another person) and altruism (a helping behaviour that does not expect any reward from another person). Carpara et al (2005) also described prosocial behaviour as the act which is being done voluntarily due to wanting to aid, support, console and care for other people. Thus, the definition of prosocial behaviour given by Carpara et al (2005) will be used throughout the present study.

With regard to the above findings and recommendations, this present study aims to verify the results of previous studies and identify either spirituality or prosocial behaviour that gives a direct effect to the psychosocial functioning of undergraduate international students during the pandemic of CoVid-19. There are a number of studies that have considered combining these two variables (i.e. spirituality and psychosocial functioning) and (i.e prosocial behaviour and psychosocial functioning) that had relationships to one another, but it is limited. Huber II and MacDonald (2011) recommended testing these variables (i.e. spirituality and altruism) with psychosocial functioning for future study. Hence, this present study takes this recommendation; however, this study replaces altruism with prosocial behaviour as prosocial behaviour has a larger definition as compared to altruism, which is a much narrower perspective of prosocial behaviour. Therefore, it is vital to understand the relationship between spirituality, prosocial behaviour and psychosocial functioning. This study is an effort to determine the relationship between the variables, particularly in the context of undergraduate international university students in Universiti Putra Malaysia (UPM). This particular location has been chosen due to having one of the highest numbers of international students enrolled in Malaysia with a total population size of 5,699 international students and 1,894 of undergraduate international students, according to (Universiti Putra Malaysia, 2021). It is also important to raise awareness in our society on the importance of human's psychosocial functioning especially within the context of COVID-19 pandemic that may benefit all of the populations.

#### **Research Objectives**

This article seek to identify the levels of spirituality, prosocial behaviour and psychosocial functioning among international students. This is also an attempt to know the differences in psychosocial functioning between male and female and to analyze the relationships between spirituality and prosocial behaviour on psychosocial functioning among undergraduate international students of Universiti Putra Malaysia (UPM).

#### **Literature Review**

Psychosocial functioning refers to an individual's capability to carry out everyday tasks and interact with everyone else in ways that are beneficial to oneself and others, as well as satisfying the needs of the society in which he or she lives (Mehta et al., 2014). In other words, psychosocial functioning is related to the growth of an individual's social, mental and emotional conditions. Mehta et al (2014) explained psychosocial functioning within the context of depressive patients where the poor psychosocial functioning may involve three domains (i.e. physical, cognitive and emotion). Physically, patients may lose interest or excitement in doing a daily routine, quite slow in processing their thoughts, feeling

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uncomfortable and always exhausted. Cognitively, patients tend to distance themselves in relationships and feel uncomfortable, less active and unable to decide and poor concentration as well as more vulnerable to being injured. Emotionally, they will always find a way or a reason to validate why they shouldn't be around people, lower self-worth, trust and hope. Hence, in-depth evaluation of psychosocial functioning needed to be done within a variety of aspects such as occupation, relationships and satisfaction of life instead of assessing one aspect (Mehta et al., 2014).

Another study done by Rucklidge et al (2007) on adult's psychosocial functioning within the context of ADHD, have found otherwise where males are more impaired psychosocially than females. Even though Rucklidge et al (2007) have hypothesised based on past studies that females are usually more impaired than males in all aspects, they concluded from their study that males have lower self-confidence, lack of internal locus of control and are not satisfied with their childhood life as compared to females. A study done by Borges et al (2021) also shows otherwise where one of the analyses was analysing the relationship between demographic background of respondents (i.e. gender, race and profession) and psychosocial functioning. The study has found that there is no significant difference in demographic or jobrelated factors that were detected based on their reports.

Based on the literature review done by Dyson et al (1997) on the meaning of spirituality, conceptually, spirituality is the dynamic interdependence between oneself, other people, nature and the Higher Power or 'God'. This article explained that the term 'God' or higher power has a wide range of meaning within its literature across culture and time based on how people perceive their lives. The term 'God' could be referred to as a thing or a factor that gives a person a sense of meaning and reasons to pursue their lives. It is undeniable that the term 'God' could be related to religious beliefs, but it could also be a person's job or career, wealth, self-gain goals, life principles and values. Dyson et al (1997) has found that there are key elements which result from the relationships that occur in self, other people, nature and the higher power or 'God' (spirituality). The key elements are meaning, hope, connectedness and beliefs. In addition, Dyson et al (1997) discovered that the interaction between the relationships mentioned above would be nothing without the expressions of caring and appreciation. Spiritual expressions are not only just limited to religious beliefs, but also being expressed through multiple ways (Dyson et al., 1997).

Delaney (2003) described spirituality as one of the human components that is wide and abstract. The term 'spirituality' originates from a Latin word, spiraire which means to breathe. The condition, nature, or reality of being spiritual is referred to as spirituality (Delaney, 2003). Moreover, Delaney (2003) defined spirituality as a multifaceted concept that generally occurs, partly developed within the social and individual context and evolved over time. It is also known as the human's interpersonal dimension that unites all sources of life to build other dimensions such as transcendence, that gives a way upon increasing one's state of awareness, the supreme being or universe. Furthermore, it involves a complex process on the quest of truth, meaning, purpose, affection and relationship with other people, environment and the supreme being (Higher Power). Theoretically, spirituality has 4 dimensions where it involves one's interdependence on its relationships with the supreme being and the environment, with others as well as awareness of oneself where it is also being influenced by personal and demographic attributes (Delaney, 2003).

Klemola (2013) described that the term 'prosocial behaviour' is an intentional or voluntary act and it is different from altruistic behaviour. People are often confused between the two but truly, altruistic behaviour is the one of the components that drives prosocial behaviour. Klemola (2013) explained that there are 4 factors that drive prosocial behaviour which are egoism, altruism, collectivism and principlism as well as kinship selection. Egoism prosocial behaviour is known as reciprocal selection where a person helps another person with hopes that the other person would help him or her in return either in the future or when they needed it. The ultimate goal of this egoistic behaviour is to benefit oneself. Moreover, altruism prosocial behaviour is the act of helping another person genuinely for the other person's sake and not their own or expecting any rewards in return. The next motive is collectivism and principlism where people tend to help each other due to sharing common moral principles. Lastly, kinship selection is another factor based on Bierhoff (2002) that evokes prosocial behaviour where an individual would prefer to help their relatives due to subconscious motive of wanting to continue the survival of common genes (as cited in Klemola, 2013).

#### **Conceptual Framework**

In this study, there is one antecedent variable which is the student's background which comprises age, gender, year of study, region and current living status. This study also has two independent variables which are spirituality and prosocial behaviour as well as one dependent variable which is psychosocial functioning.

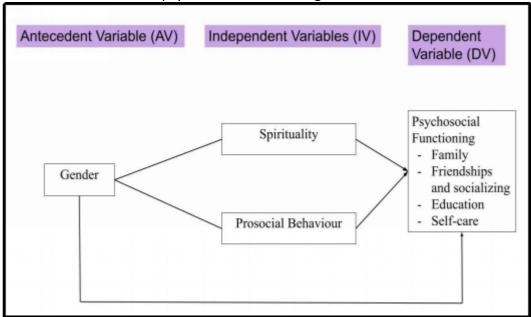


Figure 1.1: Conceptual framework for the study on the Influence of Spirituality and Prosocial Behaviour on Psychosocial Functioning among International Students in Universiti Putra Malaysia (UPM)

#### **Research Methodology**

This study employed WHOQoL-BREF questionnaire which is short questionnaire consists of originally 26 items version of World Health Organization Quality of Life assessment (WHOQoL-100). For this article, only those items that are directly applicable to the problem have been discussed in this article. The focus of the cross-sectional analysis is restricted to students from different faculties who take compulsory university courses for the academic year 2019/2020

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in this second semester, with a total of 160 samples. This analysis also uses a systemic approach, where problem-solving is objectively evaluated on the basis of information gathered from previous studies, and a new concept emerges with a new conclusion. This applies to any research that attempts to include an overview of current work, such as a completion report, a literature review, and so on.

Generally, the current study aimed to determine the spirituality, prosocial behaviour and psychosocial functioning among undergraduate international students of UPM. Snowball sampling technique was used upon collecting respondents where the respondents of the study help the researcher to attract other people to participate as one of the respondents in the study. Data was collected by using a self-administered questionnaire and was being shared to the respondents through WhatsApp Messenger and Telegram application. After that, the data was being analyzed using the SPSS software.

The instruments used in this study were Spirituality Scale (SS) for spirituality, Prosocialness Scale for Adults (PSA) for prosocial behaviour and the Inventory Psychosocial Functioning (IPF) Scale for psychosocial functioning. There were four statistic tests were being used for this study which were the Descriptive Statistics (Univariate Analysis), the Non-Parametric Tests (i.e. Mann-Whitney U Test and Spearman's Rank Correlation Test), and lastly is the Multiple Linear Regression (Multivariate Analysis).

Descriptive Statistics (Univariate Analysis) was used to determine demographic background (i.e. age, gender, year of study, region and current living status) among international students of Universiti Putra Malaysia (UPM) as well as identifying the levels of spirituality, prosocial behaviour and psychosocial functioning among international students). The Mann-Whitney U test was used to compare differences in psychosocial functioning between male and female international students and as for the Spearman's Rank Correlation Test was used to analyze the relationships between spirituality and prosocial behaviour on psychosocial functioning among international students. The Multiple Linear Regression (Multivariate Analysis) was used to examine the unique predictors of psychosocial functioning among international students of Universiti Putra Malaysia (UPM).

#### **Finding and Discussion**

This study used the descriptive approach to summarize the percentage of data represented. Rate based on the percentage of those elements that are directly linked to the facets of spirituality. Spirituality in this context is defined as having a specific meaning, purpose, and value of life through a spiritual connection with the superpower, transcendence of self, others, and nature, which results in a feeling of inner peace, harmony, and satisfaction.

During the data analysis process, the following three forms of relationship emerged: relationship with higher beings, self, and other people. Spirituality goes beyond self: it fosters sense of meaning, wholeness, harmony, and interaction with all others, including nature and the universe.

Table 1 Levels of Spirituality, Prosocial Behaviour and Psychosocial Functioning (n = 202)

Variables	Mean	Level	Frequency (f)	Percentage (%)
Spirituality	2.78	Low Moderate High	0 44 158	0 21.8 78.2
Prosocial Behaviour	2.88	Low Moderate High	0 23 179	0 11.4 88.6
Psychosocial Functioning	2.34	Low Moderate High	0 133 69	0 65.8 34.2

In order to identify the levels of spirituality, prosocial behaviour and psychosocial functioning among international students, descriptive statistics was used in the SPSS software to analyse. The results have shown that prosocial behaviour has the highest mean (2.88), followed by spiritually (2.78) and then psychosocial functioning (2.34). Most of the international students have high levels of spirituality at the frequency of 158 (78.2%) and about 44 international students (21.8%) have moderate levels of spirituality. Furthermore, there are 179 international students (88.6%) who have high levels of prosocial behaviour and about 23 international students (11.4%) who have moderate levels of prosocial behaviour. However, the levels of psychosocial functioning have more international students on moderate levels of psychosocial functioning (65.8%, n=133) and then followed by the high levels of psychosocial functioning (34.2%, n=69). Apparently, all of the variables have zero number of students who have low levels of spirituality, prosocial behaviour and psychosocial functioning.

As for the relationships between spirituality and prosocial behaviour on psychosocial functioning among international students, the Spearman's Rank Correlation Test was used to analyse it. Upon testing the relationships between all variables in the SPSS software, it was found that there were significant differences in both relationships between spirituality and psychosocial functioning as well as prosocial behavior and psychosocial functioning. All aspects of psychosocial functioning (i.e. family, friendships and socializing, education and selfcare) were significantly correlated with both independent variables (i.e. spirituality and prosocial behaviour. On top of that, all of the findings were also weak positive relationships, which mean all of the variables have a direct relationship with each other. In an overall perspective, the relationship between spirituality and psychosocial functioning seems to be more significantly correlated than the relationship between prosocial behaviour and psychosocial functioning

The results showed that most students have high levels of both spirituality and prosocial behaviour whereas most students have moderate levels for psychosocial functioning. The

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results were supported by three past researches (Hsu et al., 2009; Shachat, 2021; Kulyar et al., 2020).

Table 2

Mann-Whitney U Test for Psychosocial Functioning (Family)

Tests	Psychosocial Functioning (Family)
Mann Whitney U	4525.000
Z	-1.197
Significance (p)	0.231

Table 3
Mann-Whitney U Test for Psychosocial Functioning (Friendships and Socializing)

Tests	Psychosocial Functioning (Friendships and Socializing)
Mann Whitney U	4857.000
Z	-0.387
Significance (p)	0.699

As Table shows, it was found that there were no significant differences in all aspects of psychosocial functioning (i.e. family, friendships and socializing, education and self-care) between male and female international students using the Non-Parametric Test (i.e. Mann-Whitney U Test). The findings of this study were reliable as it is supported by previous study done by Borges et al (2021) where the study tested on the relationship between gender and psychosocial functioning. The variable psychosocial functioning in the study was defined and measured the same as this current study due to use of the same instrumentation of Inventory Psychosocial Functioning (IPF) by (Marx et al., 2020). Borges et al (2021) analysed the relationship between demographic background of respondents (i.e. gender, race and profession) and psychosocial functioning. The study has found that there is no significant difference in demographic or job-related factors that were detected based on their reports.

Spearman's Rank Correlation Test was used to analyse the relationships between spirituality and prosocial behaviour on psychosocial functioning among undergraduate international students.

Table 4
Spearman's Correlations for Spirituality, Prosocial Behaviour and Psychosocial Functioning

Psychosocial Functioning	Spirituality	Prosocial Behaviour
Overall Psychosocial Functioning	0.336***	0.295***
Family	0.215**8	0.165**
Friendships and Socializing	0.334***	0.290***
Education	0.286***	0.249***
Self-Care	0.224***	0.163**

<sup>\*\*\*.</sup> Correlation is significant at the 0.001 level

The Spearman's Rank Correlation Test was used to analyse the relationship between spirituality and prosocial behaviour on psychosocial functioning among international students. The results have indicated that both spirituality and prosocial behaviour were significantly correlated with all aspects of psychosocial functioning (i.e. family, friendships and socializing, education and self-care). These findings were also supported by a number of previous studies. For the significant relationship between spirituality and psychosocial functioning, Goeke-Morey et al (2014) supported the family aspect of psychosocial functioning of this current study where youth's spirituality and family functioning (i.e. specifically on the relationship with their mothers) has an interactive effect (as cited in Mahoney & Cano, 2014). As for the friendships and socializing aspect, Mattis et al (2001) discovered that spirituality seems to have a significant part in African American men's interpersonal relationships especially on the quality of their friendships. Besides that, Cox et al (2011) supported the educational aspect of psychosocial functioning where the study has found that spirituality improves the academic background of students by reducing stress, shifting views and having meaning and responsibility in life with the motivation and support received from friends. Finally, the self-care aspect was supported by a study done by Fleming, Purnell and Wang (2013) where they discovered that students improve their self-care when they participate in the domains of spirituality, career and education.

As for the significant relationship between prosocial behaviour and all of the aspects of psychosocial functioning, there were also many past researches that supported this current study's findings. To support the family aspect of psychosocial functioning, a study done by Yoo et al (2013) mentioned that prosocial behaviour affects the youths' family functioning through the 'parent-child relationship'. Next on the friendships and socializing aspect was supported by Proothuis et al (2012) where the study reported that the quality of friendships among low to average popular participants increases as they do more acts of prosocial behaviour. Apart from that, Kharluni (2020) also supported the education aspect of psychosocial functioning where the study has found that there is significant positive correlation between prosocial behaviour and academic achievement of higher secondary students of East Khasi Hills District. Lastly et al (2007) supported the self-care aspect where the study reported that there is a significant relationship between prosocial behaviour with psychological health and self-related well-being.

<sup>\*\*.</sup> Correlation is significant at the 0.01 level

#### Conclusion

To conclude, the findings of this current study have a number of implications for many significant parties and future research. This current study has contributed to the existing literature of psychosocial functioning. The data analysis of the current study focused on the influences of spirituality and prosocial behaviour on psychosocial functioning among undergraduate international students, particularly at UPM. Thus, this study was an effort to investigate whether spirituality or prosocial behaviour helps the psychosocial functioning of students. It gives a better understanding on the effects of spirituality and prosocial behaviour on psychosocial functioning among international university students. This study also were able to investigate more on how these two variables (i.e. spirituality and prosocial behaviour) affect each aspect of psychosocial functioning among the international students, which are family, friendships and socializing, education and self-care. The findings of this study are important and act as a foundation of knowledge on psychosocial functioning, which is relevant to be applied within the context of Malaysian institutions that have international students.

#### References

- Afolabi, O. A. (2014). Psychosocial predictors of prosocial behaviour among a sample of Nigerian undergraduates. *European Scientific Journal*, 10(2).
- Allen, J. P., Moore, C., Kuperminc, G., & Bell, K. (1998). Attachment and adolescent psychosocial functioning. Child development, 69(5), 1406-1419.
- Bovin, M. J., Black, S. K., Rodriguez, P., Lunney, C. A., Kleiman, S. E., Weathers, F. W., Schnurr, P. P., Spira, J., Keane, T. M., & Marx, B. P. (2018). Development and validation of a measure of PTSD-related psychosocial functional impairment: The Inventory of Psychosocial Functioning. Psychological Services, 15(2), 216–229. https://doi.org/10.1037/ser0000220
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of youth and adolescence*, 31(1), 31-44.
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. *European Journal of psychological assessment*, 21(2), 77-89.
- Chai, P. M. (2009). Religion/spirituality as a stress coping mechanism for international students. Unpublished Doctoral dissertation, Auckland University of Technology.
- Clark, N. (2009). What Defines an International Student? A Look Behind the Numbers. Retrieved from https://wenr.wes.org/2009/09/wenr-september-2009-feature
- Cox, C. J. (2011). The relationship between spirituality, stress, and academic performance. Unpublished Doctoral dissertation, Bowling Green State University.
- Delaney, C. (2003). The spirituality scale: Development, refinement and psychometric testing of an instrument to assess the human spiritual dimension. Unpublished Doctoral Dissertation, University of Connecticut.
- Desrosiers, A., Kelley, B. S., & Miller, L. (2011). Parent and peer relationships and relational spirituality in adolescents and young adults. Psychology of religion and spirituality, 3(1), 39.
- Dev, R. D. O., Kamalden, T. F. T., Geok, S. K., Abdullah, M. C., Ayub, A. F. M., & Ismail, I. A. (2019). Influence of Psychosocial Factors on Health Behaviours Among Undergraduates in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 9(11), 1382–1401. DOI: 10.6007/IJARBSS/v9-i11/6707

- Eisenberg, N. (1991). Meta-analytic contributions to the literature on prosocial behavior. Personality and Social Psychology Bulletin, 17(3), 273-282.
- Kulyar, F-E-A. M., Bhutta, Z. A., Shabbir, S., & Akhtar, M. (2020). Psychosocial impact of COVID-19 outbreak on international students living in Hubei province, China. Travel medicine and infectious disease, 37, 101712. https://doi.org/10.1016/j.tmaid.2020.101712
- Flynn, E., Ehrenreich, S. E., Beron, K. J., & Underwood, M. K. (2015). Prosocial behavior: Longterm trajectories and psychosocial outcomes. Social Development, 24(3), 462-482. https://doi.org/10.1111/sode.12100
- Govender, N., Reddy, P., & Bhagwan, R. (2021). Academic and psychosocial challenges of Health Sciences students during the COVID-19 pandemic: A University of Technology perspective. Perspectives in Education, 39(3), 44-61.
- Imam, S. S., Nurullah, A. S., Makol-Abdul, P. R., Rahman, S. A., & Noon, H. M. (2009). Spiritual and psychological health of Malaysian youths. In Research in the Social Scientific Study of Religion, Volume 20 (pp. 85-101). Brill.
- Jackson, M., & Tisak, M. S. (2001). Is prosocial behaviour a good thing? Developmental changes in children's evaluations of helping, sharing, cooperating, and comforting. *British Journal of Developmental Psychology*, 19(3), 349-367.
- Kapetanovic, S., Gurdal, S., Ander, B., & Sorbring, E. (2021). Reported Changes in Adolescent Psychosocial Functioning during the COVID-19 Outbreak. Adolescents,1,10–20. DOI:10.3390/adolescents1010002
- Kharluni, M. L. (2020). Social Intelligence and Pro-Social Behaviour in Relation to Academic Achievement of Higher Secondary Students in East Khasi Hills District in Meghalaya. Retrieved from https://repository.tribal.gov.in/bitstream/123456789/74376/1/IIPA\_2019\_Research\_0 100. pdf
- Kleiman, S. E., Bovin, M. J., Black, S. K., Rodriguez, P., Brown, L. G., Brown, M. E., & Marx, B. P. (2018). Psychometric properties of a brief measure of posttraumatic stress disorder-related impairment: The Brief Inventory of Psychosocial Functioning. Psychological Services. doi:10.1037/ser0000306
- Klemola, A. (2013). Motivations Behind Prosocial Behaviour: Why Plan Finland's long-term volunteers participate in the work and how they communicate about it to others. Retrieved from https://www.theseus.fi/bitstream/handle/10024/64454/Klemola\_Arto.pdf?sequence=1
- Lucchetti, G., GOes, L. G., Amaral, S. G., Ganadjian, G. T., Andrade, I., Almeida, P., do Carmo, V. M., & Manso, M. (2020). Spirituality, religiosity and the mental health consequences of social isolation during Covid-19 pandemic. *The International journal of social psychiatry*. https://doi.org/10.1177/0020764020970996
- Mahoney, A., & Cano, A. (2014). Introduction to the special section on religion and spirituality in family life: Pathways between relational spirituality, family relationships and personal well-being. *Journal of Family Psychology*, 28(6), 735.
- Manerikar, V., & Manerikar, S. (2015). Cronbach's alpha. A Peer Review Research Journal, 19(1), 117-119.
- Manuel, M., Cesar, M., & Marcelo, R. L. (2020). Measurement Invariance of the Prosocial Behavior Scale in Three Hispanic Countries (Argentina, Spain, and Peru). Frontiers in Psychology, Vol. 11, p. 29. DOI:10.3389/fpsyg.2020.00029

- Marx, B. P., Schnurr, P. P., Lunney, C., Weathers, F. W., Bovin, M. J., & Keane, T. M. (2020). The Inventory of Psychosocial Functioning (IPF). Retrieved from https://www.ptsd.va.gov
- Mattis, J. S., Murray, Y. F., Hatcher, C. A., Hearn, K. D., Lawhon, G. D., Murphy, E. J., Washington, T. A. (2001). Religiosity, spirituality, and the subjective quality of African American men's friendships: An exploratory study. Journal of Adult Development, 8(4), 221-230.
- Mehta, S., Mittal, P. K., & Swami, M., K. (2014). Psychosocial Functioning in Depressive Patients: A Comparative Study between Major Depressive Disorder and Bipolar Affective Disorder. Depression Research and Treatment. DOI: 10.1155/2014/302741
- Moore, Q. L., Kulesza, C., Kimbro, R., Flores, D., & Jackson, F. (2020). The role of prosocial behavior in promoting physical activity, as an indicator of resilience, in a low-income neighborhood. Behavioral Medicine, 46(3-4), 353-365.
- Poorthuis, A. M., Thomaes, S., Denissen, J. J., Van Aken, M. A., & de Castro, B. O. (2012). Prosocial tendencies predict friendship quality, but not for popular children. *Journal of Experimental Child Psychology*, 112(4), 378-388.
- Roberto, A., Sellon, A., Cherry, S. T., Hunter-Jones, J., & Winslow, H. (2020). Impact of spirituality on resilience and coping during the COVID-19 crisis: A mixed method approach investigating the impact on women. Health Care for Women International. DOI:10.1080/07399332.2020.1832097
- Rucklidge, J., Brown, D., Crawford, S., & Kaplan, B. (2007). Attributional styles and psychosocial functioning of adults with ADHD: Practice issues and gender differences. *Journal of Attention Disorders*, 10(3), 288-298.
- Rudolfsson, G., Berggren, I., & da Silva, A. B. (2014). Experiences of spirituality and spiritual values in the context of nursing an integrative review. *The Open Nursing Journal*, 8, 64–70. https://doi.org/10.2174/1874434601408010064
- Schneiderman, J. U., Davis, J. P., & Negriff, S. (2021). Associations between psychosocial functioning and physical health in youth with maltreatment experiences. Children and Youth Services Review, Volume 127. https://doi.org/10.1016/j.childyouth.2021.106080
- Schwartz, S. J., Zamboanga, B. L., Weisskirch, R. S., & Wang, S. C. (2009). The relationships of personal and cultural identity to adaptive and maladaptive psychosocial functioning in emerging adults. *The Journal of social psychology*, 150(1), 1-33.
- Shachat, J., Walker, M. J., & Wei, L. (2021). How the onset of the Covid-19 pandemic impacted pro-social behaviour and individual preferences: Experimental evidence from China. *Journal of economic behavior* & organization, 190, 480-494. https://doi.org/10.1016/j.jebo.2021.08.001
- Waggoner, M. D. (2016). Spirituality and contemporary higher education. *Journal of College and Character*, 17(3), 147-156.
- Walsh, F., & Pryce, J. (2003). The spiritual dimension of family life. Normal family processes: Growing diversity and complexity, 337-372.
- Yoo, H., Feng, X., & Day, R. D. (2013). Adolescents' empathy and prosocial behavior in the family context: A longitudinal study. *Journal of youth and adolescence*, 42(12), 1858-1872.