

Assessing Religious Orientation, Prosocial Behaviour & Behavioural Problems in Adolescent Girls

Faiz Younas

Lecturer, Institute of Applied Psychology,
University of the Punjab, Lahore, Pakistan.
Email: faizyounasbutt.appsy@pu.edu.pk

Ummama Ashraf

MSc Scholar, Institute of Applied Psychology,
University of the Punjab, Lahore, Pakistan.
Email: ummamaashraf@gmail.com

Shazia Qayyum

Institute of Applied Psychology,
University of Punjab, Lahore, Pakistan.
Email: shazia.appsy@pu.edu.pk

Abstract:

This comparative study aimed to investigate the association between religious orientation, prosocial behaviour and behavioural problems in adolescent girls studying in traditional and modern madrassas systems. Following APA-mandated ethical guidelines, 172 (n = 86 traditional madrassa, n = 86 modern madrassa) adolescent girls of 11-17 years of age (M = 13.69, SD = 1.80) were recruited through purposive sampling technique in this cross-sectional correlational research. Apart from providing sociodemographic information, all participants responded to the Religious Orientation Scale-Revised (Gorsuch & McPherson, 1989) and The Strength and Difficulty Questionnaire (used both for prosocial behaviour and behavioural problems; Goodman et al., 1998). The findings indicated that intrinsic religious orientation had a negative association with behavioural problems including conduct problems, peer relationship problems, emotional problems and hyperactivity/inattention, while a positive relationship with prosocial behaviours. Also, intrinsic religious orientation positively predicted prosocial behaviour whereas extrinsic religious orientation positively predicted behavioural problems. Moreover, adolescents from traditional madrassas showed more extrinsic religious orientation and behavioural problems than those studying at modern madrassas who demonstrated more intrinsic religious orientation and prosocial behaviour. These outcomes have important implications for mental health professionals, policymakers and researchers focused on educational settings and adolescent development.

Keywords: Extrinsic Religious Orientation, Intrinsic Religious Orientation, Prosocial Behaviour, Behavioural Problems, Madrassa Students.

I. Introduction

Religious identity has historically been a momentous aspect of one's life, making religion a noteworthy contributor to shaping human personality and attitude (Zamani-Farahani & Musa, 2012; Ullah et al., 2021). That is why the religious attitudes, beliefs, and behaviours of individuals as well as the circumstances that may influence them have been the focus of extensive research scholarship. Religiosity encourages a person to dedicate their vocation, education, and other pursuits in a way indicative of their religious conviction, which is why individual behaviour and religious attitude are thought to be influenced by religious commitment (Ashfaq, 2022). This also highlights the purpose of religion which is to affect human behaviour and attitudes (Pratono, 2019). Munir and Malik (2020) argued that religious orientation shed light on how people look at the role of religion in their life and identified the nature of interaction they had with it.

Several theoretical perspectives have acknowledged the pivotal role of religion in one's life. Like Freud considered religion as the unconscious mind's drive to fulfil its desires. He believed that people choose to believe in God to feel secure and to relieve themselves of their guilt (Clarke & Byrne, 1993). Similarly, Allport and Ross (1967) developed a theory for understanding religious orientation and recognized two aspects of it namely extrinsic religious orientation (ERO) and intrinsic religious orientation (IRO). Those who have an ERO frequently employ religion within the context of its usability as their primary motivation is to assess the gains they can get by serving religion. In this way, ERO validates their ways of life and protects them from reality while boosting their self-confidence and social status. Therefore, it can be inferred that though individuals with ERO are frequently perceived as better people, yet in reality, their behaviour is no better than most of the others. It indicates the fact that being religious and being religiously oriented might not be the same thing (Batara et al., 2016). On the other hand, individuals with IRO exhibit an internalized religious drive focused on structuring and motivating all aspects of their lives on religion. They make an effort to internalise and adhere to the teachings of their faith (Damirchi et al., 2017).

Considerable studies have inspected the influence of religious orientation on the prosocial attitudes of individuals. Generally, religion is viewed as a form of a community resource; dependent upon social mores while it promotes prosocial behaviour and discourages selfishness. Selflessness and supportive behaviour are considered synonymous with the nature and essence of religion (Asad et al., 2021), which means that every religion promotes prosocial behaviour. People tend to help others out through charity and financial support (Naqshbandi et al., 2022). Keeping the view of all this evidence, this study aimed to investigate the relationship between religious orientation (intrinsic and extrinsic religious orientation), prosocial behaviours (selflessness, generosity, social support, indulgence in charity) and behavioural problems (emotional and conduct problems, issues with peers, hyperactivity) in adolescent girls studying in madrassas.

II. Literature Review

Exploring what entails prosocial behaviour within the context of research scholarship indicates that helping out, giving support, volunteering, calming and cooperating with others are all multiple facets of prosocial behaviour, hence it is a type of activity that benefits other people or society at large (Chi et al., 2018).

There are many explanations for why religion affects young people's prosocial behaviours. Since the majority of religious organizations place a great emphasis on initiating selfless deeds, religious people tend to have a more prosocial attitude. The majority of studies that examined the connections between religion and prosocial behaviour found a strong interrelationship between the two (Stagnaro et al., 2019). Children from religiously inclined homes observed high moral standards and were more likely to perform prosocial behaviours such as benevolence, friendliness, and helping (Ashfaq, 2022). Similarly, Wasim and Siddique (2020) reported a link between employees' religiosity and prosocial conduct.

Likewise, another study highlighted that when people felt more valuable and accomplished in their religious beliefs, they experience increased motivation to engage in socially beneficial behaviours and in religious activities that would advance their levels of self-actualization (Hu & Cheng, 2020). Asad et al. (2021) investigated the influence of religious orientation on young female students' prosocial behaviour and found a strong association between both variables. Also, another study found kindness and altruism to be favourable predictors of religious orientation while prosocial behaviours were found to be increased by priming religious ideas, particularly the spiritual prime (Fraser, 2022). Furthermore, Samiha et al. (2023) reported that Islamic religious identity showed a robust correlation with several positive character traits including prosocial behaviours in students. Similarly, another study informed that the transmission of Islamic ideas and religious ideologies influenced the moral and ethical values of the participants (Niazi et al., 2019).

Moreover, it is thought that the Islamic belief system has an impact on people's moral standards, good behaviours, and better lifestyles (Setiawati & Ernawati, 2020). According to Fatima et al. (2018), Islam refers to moral principles for students that make it impossible to ignore the beneficial influence of religion on human existence. Similarly, Ahmed (2009) found that in Pakistan, students who attended religious schools gave more to charity than their non-religious school peers.

It is also pertinent to note that research scholarship has also explored the nature of religious orientations in the context of attitudes and behaviours aspects of individuals. Also, studies have further elaborated on the deterring role of religion and religious orientation on the development of behavioural problems among the participants. Consequently, Arli et al. (2022) reported that ERO causes harmful behaviours such as stealing, drug use and addiction, poor emotional regulation and delinquency; IRO results in prosocial actions. Similarly, You and Lim (2018) reported that ERO is a significant predictor of behavioural problems while IRO is a substantial predictor of prosocial behaviour.

Moreover, another research investigated the association between religious inclination and the propensity for substance misuse in addicts and non-addicts and discovered that the predisposition for substance addiction had unsatisfactory religious orientation as one of its major contributing factors (Abadi et al., 2020). Likewise, IRO demonstrated a substantial inverse correlation with perceived stress and nicotine dependency (Banazadeh et al., 2019), indicating that people's religious convictions play a protective function in perceived stress and nicotine dependency. Similarly, a study showed that having an IRO had good effects on the participants whereas having an ERO

had negative effects (Lew et al., 2018). Munir and Malik (2020) also found that ERO was favourably correlated with delinquency whereas moral character was adversely correlated with delinquency in adolescents.

The overview of the latest research scholarship indicated that IRO is a contributing factor towards the inculcation of prosocial attitudes in individuals, while in contrast to it; ERO is seemed to be linked with behavioural problems and patterns. Meanwhile, most of the studies included participants living in Western countries, suggesting a potential W.E.I.R.D. (white, educated, industrialised, rich and democratic) sample (Henrich et al., 2010), and leaving behind a gap for indigenous exploration. Though indigenous divulged in the investigation of religious orientation in adolescents they were studying in regular educational institutions like schools and universities (Munir & Malik, 2020; Ghani & Ghani, 2021) leaving behind a space for those studying in madrassas. This is the gap that the current study aimed to fill by exploring the potential interrelations between religious orientation, prosocial behaviours and behavioural problems in madrassa-going students, especially girls. Further, our study undertook samples from traditional and modern madrassas and hence gave a comprehensive comparative inquiry of the madrassa-going girls that has been mainly ignored in the previous literature. Therefore, this study probed the following objectives:

- To explore the interrelations between religious orientations, prosocial behaviour and problems in adolescent girls from traditional and modern madrassas.
- To examine the potential predictability of religious orientations in connection to prosocial behaviour and problems in adolescent girls from traditional and modern madrassas.
- To look into the differences in religious orientation, prosocial behaviour and problems in adolescent girls across traditional and modern madrassas.

A. **Hypotheses of the Study**

In the current study, the following hypotheses were developed:

- **H1a:** Extrinsic religious orientation would have a significant positive relationship with behavioural problems.
- **H1b:** Extrinsic religious orientation would have a significant negative relationship with prosocial behaviour.
- **H2a:** Intrinsic religious orientation would have a significant positive relationship with prosocial behaviour.
- **H2b:** Intrinsic religious orientation would have a significant negative relationship with behavioural problems.
- **H3a:** Extrinsic religious orientation would positively predict behavioural problems.
- **H3b:** Intrinsic religious orientation would positively predict prosocial behaviours.
- **H4:** There would be significant differences in religious orientation, prosocial behaviour and behavioural problems across traditional and modern madrassa students.

III. Methodology

Employing a cross-sectional correlations research design, a sample of 172 ($n = 86$ each from traditional and modern madrassas) adolescents girls of 11-17 years of age ($M = 13.39$, $SD = 1.80$) was recruited purposively from the traditional and modern madrassas for girls of Lahore district. After taking formal approval from the institutional board of studies (BOS), the researchers strictly observed the APA-mandated ethical standards for data recruitment, handling and analysis. Due to logistical and time constraints, madrassas within the Lahore district were approached and took consent from the parents of the adolescents for participation in this study.

Moreover, with the consent of the respective authors, the assessment scales were translated into Urdu by using the Linguistic Validation Technique of MAPI Institute (Acquardo et al., 2012). Only those adolescents were recruited whose parents signed the consent form and all the information was kept confidential and anonymous throughout the research process. In the end, data was analyzed and interpreted for results.

A. Assessment Measures

Sociodemographic Information Sheet:

All participants shared their basic sociodemographic information that included their age, monthly family income, educational level and employment status of both parents.

Religious Orientation Scale-Revised:

The Religious Orientation Scale-Revised (ROS-R; Gorsuch & McPherson, 1989) comprised 14 items and assessed both intrinsic and extrinsic religious orientations. On a five-point Likert scale where 5 indicated 'strongly agree' while 1 denoted 'strongly disagree'.

A total of 11 items assess IRO, with three items with reverse coding while three remaining items measure ERO. Moreover, the score range for IRO is 8-40 while for ERO is 3-15. Higher scores are indicative of higher levels of a specific religious orientation. Reliability indices for IRO showed $\alpha = 0.83$, while the alpha value for ERO was 0.65.

The Strengths and Difficulties Questionnaire:

Prosocial behaviour and behavioural problems were measured through the administration of The Strengths and Difficulties Questionnaire (Goodman et al., 1998) which is comprised of 25 items and included five subscales with five items each. Emotional symptoms, conduct problems, hyperactivity/inattention and peer relationship problems subscales are combined to assess behavioural difficulties while the prosocial behaviour subscale measures behavioural strengths. Participants check the box from the given three-point Likert scale options (completely false, slightly true and true) for each statement which is representative of their experience. The estimate of reported reliability for conduct problems is .74, for hyperactivity/inattention it is .71, for peer relationship problems its .63, for emotional symptoms its .79 and for prosocial behaviour it is .64 respectively.

IV. Results

The sociodemographic information of the sample revealed that the data revealed that the mean age of the adolescents was 13.69 years ($SD = 1.80$) while 22202.38 PKR emerged as their average monthly family income. Most of the fathers were employed

(79.7%) while most of the mothers were homemakers (72.1%). As far as educational experience is concerned, the fathers had an average of 10.16 years of education whereas the mothers had 8.48 years of educational experience.

Results of Table 1 showed that IRO and ERO had a positive relationship with prosocial behaviour and behavioural problems respectively. Moreover, it also indicated that IRO and ERO negatively correlated with behavioural problems and prosocial behaviour respectively.

Table 1: Inter-correlations among Study Variables (N = 172)

Variables	1	2	3	4
IRO	-	-.44**	-.24**	.58**
ERO		-	.48**	-.26**
Behavioural Problems			-	-.01
Prosocial Behaviour				-

Note: IRO = intrinsic religious orientation; ERO = extrinsic religious orientation * $p < .05$, ** $p < .01$

Table 2: Intrinsic Religious Orientation Predicting Prosocial Behaviour (N = 172)

Predictors	Prosocial Behavior	
	ΔR^2	B
Step 1	.13	
Father's Employment Status		.34***
Father's Education		.12
Mother's Employment Status		-.08
Mother's Education		-.00
Family Income		-.01
Step 2	.29	
IRO		.61***
ERO		.07
Total R ²	.42	

Note: *** $p < .001$

Furthermore, Table 2 showed that Model 1 explained 13 % variance as $F_{\text{change}}(5, 161) = 4.62, p = .001$ while Model 2 explained 29 % variance in prosocial behaviour as

$F_{\text{change}}(2, 159) = 15.89, p = .001$. This indicated that the overall model explained a 42% variance for prosocial behaviour. Therefore, it specified that IRO positively predicted prosocial behaviours in madrasa students.

Similarly, Table 3 highlighted that Model 1 explained 10 % variance as $F_{\text{change}}(5, 161) = 3.71, p = .003$ and the model was significant. However, Model 2 explained 19 % variance in behavioural problems as $F_{\text{change}}(2, 159) = 9.70, p < .001$, while the overall model explained 29% variance which indicated that ERO positively predicted behavioural problems in madrasa students.

Table 3: Extrinsic Religious Orientation Predicting Behavioural Problems (N = 172)

Predictors	Behavioural Problems	
	ΔR^2	B
Step 1	.10	
Father's Employment Status		.16*
Father's Edu.		.05
Mother's Employment Status		-.04
Mother's Edu.		-.32**
Family Income		-.06

Step 2	.19
IRO	.02
ERO	.47***
Total R ²	.29

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 4: Differences across Study Variables (N = 172)

Variables	Traditional Madrassas (n=86)		Modern Madrassas (n=86)		t(170)	p	Cohen's d
	M	SD	M	SD			
IRO	27.67	8.03	31.22	4.02	-3.66	.000	0.56
ERO	21.09	5.99	18.89	4.53	2.72	.007	0.41
BP	16.60	5.28	14.62	5.43	2.43	.016	0.37
PB	6.67	3.06	7.89	1.89	-3.15	.002	0.48

Note: M = mean; SD = standard deviation; IRO = intrinsic religious orientation; ERO = extrinsic religious orientation; BP = behavioural problems; PB = prosocial behaviour

Lastly, Table 4 showed significant differences in study variables across traditional and modern madrassa students. Results showed that adolescent girls from traditional madrassas showed higher ERO and behavioural problems while girls studying in modern madrassas showed higher IRO and prosocial behaviour.

V. Discussion

This study purported to look into the relational, predictive and differential aspects of religious orientation, prosocial behaviour and behavioural problems in adolescent girls studying across traditional and modern madrassas systems. The first of our findings indicated that IRO positively correlated with prosocial behaviour while ERO positively associated with behavioural problems. These results are congruent with several previous studies that aimed to understand the nature of the possible relationship between these variables like Han and Carlo (2020) who revealed that religiousness influences young adults' prosocial conduct through empathy. Similarly, another study found religiosity to be positively correlated with assisting a stranger (Guo et al., 2020). More specifically, Arslantürk and Harput (2020) reported a link between prosocial behaviour and intrinsic religiosity in Turkish adolescents. Likewise, a substantial association emerged from another study which highlighted the interrelations between IRO and prosocial behaviour (Wong & Chui, 2022).

On the other hand, current findings also showed a positive link between ERO and behavioural problems, which can also be corroborated by a study that found a positive relationship between ERO and juvenile criminal behaviour (Miller & Vuolo, 2018). Also, Oh (2020) reported ERO to be a significant factor in participants' propensity for substance addiction.

Current findings also showed that IRO positively predicted prosocial behaviour which is exactly what Reddish and Tong (2021) reported while investigating female madrassa students and claimed that only one's local religious groups and participation in religious services might reliably predict eventual generous behaviour. Furthermore, a study conducted on Iranian Muslims also shared similar findings where IRO predicted prosocial conduct (Mikani et al., 2022)

Subsequently, the present findings revealed that ERO positively predicted problematic behaviours. This finding gets support from Allport's theory of religious orientation which indicated the relational and predictive interaction between ERO and dysfunctional behavioural patterns (Allport & Ross, 1967). Similarly, while investigating religious orientation in the context of consumerism, Arli et al. (2020) also reported a significant link between unethical decisions and extrinsic religious beliefs. Moreover, another research looked at the links between political efficacy, extrinsic religiosity, support for violent extremism and symptoms of existential dread and observed that the connection between more support for violent extremism and existential anxiety was mediated by ERO (Iqbal et al., 2022).

Lastly, our research also demonstrated significant differences across traditional and modern madrassas systems with higher IRO and prosocial behaviour in modern madrassa students while higher ERO and behavioural problems in traditional madrassa students. These differences can be attributed to several structural and cultural factors Zafar (2022), argued that due to the presence of several intra-religious sects, each group impart education following their interpretation and faction, thus potentially contributing towards the development of different religious orientations and behavioural manifestations. Similarly, Ghani and Ghani (2021) observed that various educational systems in Pakistan also play a role in shaping students' social, religious, and political beliefs. However, due to the diverse theological approaches, certain madrassas in Pakistan participate in militant extremist actions. This indicates the critical role of religious ideation which can be a contributing factor to the development of either behavioural problems or prosocial behaviour in students.

VI. Limitations and Recommendations

To fully understand phenomena like religious orientation and the development of prosocial conduct and behavioural problems, a qualitative approach, as well as a longitudinal research method, can be used that would provide comprehensive indigenous data. This could further facilitate and enable the development of indigenous scales for the study variables as well. Moreover, unlike just focusing on adolescent girls, future studies can include both gender and expand the sample across other significant demographic variables that could have an impact on the findings. Lastly, apart from just focusing on the Muslim participants, future studies could also be designed for Non-Muslim participants as well or a comparative analysis across religious groups could be demonstrated to enhance the scope of the literature on these variables.

VII. Conclusions and Implications

This study concluded the fact that modern madrassas were playing a significant role in instilling IRO among adolescents as they were more involved in prosocial behaviours than those girls studying in the traditional madrassa system. This is indicative of the structure of the educational system across madrassas and also shed light on the religious faction in control of such establishments who actively play a role in the development of adolescents' behaviours. These findings implicate that traditional madrassa administrators and teachers must be aware of the negative impact of forced ideals, a constrained atmosphere, and severe restrictions and should expand the course curriculum by incorporating such instructional directives that can encourage adolescents to proactively engage in prosocial behaviours and can naturally reduce their behavioural issues. Hence, students must be encouraged to practice religion for its purpose, without

thinking about how it would benefit them personally or socially. Also, teachers and parents should value, encourage and promote IRO in adolescents as it will provide them with a deeper comprehension of the prosocial values which will make them a healthy addition to civic life.

References

- Abrar, K., Zaman, S., & Satti, Z. W. (2017). Impact of online store atmosphere, customized information and customer satisfaction on online repurchase intention. *Global Management Journal for Academic & Corporate Studies*, 7(2), 22-34.
- Abadi, H. Z. M., Soorshjani, R. H., Rizi, F. R., & Akrami, L. (2020). Investigating the relation between religious orientation and locus of control with tendency toward substance abuse case study: Addicts and non-addicts men, Isfahan, 2018. *Journal of Community Health Research*, 9(4), 233–240. <https://doi.org/10.18502/jchr.v9i4.4976>
- Acquadro, C., Conway, K., Giroulet, C., & Mear, I. (2012). *Linguistic validation manual for health outcome assessments*. Mapi Institute.
- Ahmed, A. M. (2009). Are religious people more prosocial? A quasi-experimental study with madrasah pupils in a rural community in India. *Journal for the Scientific Study of Religion*, 48(2), 368–374. <https://doi.org/10.1111/j.1468-5906.2009.01452.x>
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5(4), 432–443. <https://doi.org/10.1037/h0021212>
- Arli, D., Septianto, F., & Chowdhury, R. M. M. I. (2020). Religious but not ethical: The effects of extrinsic religiosity, ethnocentrism and self-righteousness on consumers' ethical judgments. *Journal of Business Ethics*. 171, 295-316. <https://doi.org/10.1007/s10551-019-04414-2>
- Arli, D., van Esch, P., & Cui, Y. (2022). Who cares more about the environment, those with an intrinsic, an extrinsic, a quest, or an Atheistic religious orientation?: Investigating the effect of religious ad appeals on attitudes toward the environment. *Journal of Business Ethics*. 185, 427-448. <https://doi.org/10.1007/s10551-022-05164-4>
- Arslantürk, G., & Harput, D. (2020). Prosociality, religiosity and values in adolescence: Comparing the impact of religious and general schooling in Turkey. *Journal of Beliefs & Values*, 42(3), 348-362. <https://doi.org/10.1080/13617672.2020.1848150>
- Asad, D. S., Khalid, S., Rehman, S., & Abdullah, M. (2021). Religious orientation and development of prosocial behavior in young female students. *Journal of Professional & Applied Psychology*, 2(2), 189–198. <https://doi.org/10.52053/jpap.v2i2.52>
- Ashfaq, M. S. (2022). Analysis of relationship between character strength and religiosity of university and madrasa students. *Review of Applied Management and Social Sciences*, 5(1), 15–30. <https://doi.org/10.47067/ramss.v5i1.203>
- Banazadeh, N., Sabahi, A., Ziaadini, H., Jalali-Khalilabadi, A., & Banazadeh, M. (2019). The relationship between extrinsic and intrinsic religious orientation with perceived stress and cigarette addiction among university students. *Addict Health*, 11(2), 73–80. <http://dx.doi.org/10.22122/ahj.v11i2.226>

- Batara, J. B. L., Franco, P. S., Quiachon, M. A. M., & Sembrero, D. R. M. (2016). Effects of religious priming concepts on prosocial behavior towards ingroup and outgroup. *Europe's Journal of Psychology, 12*(4), 635–644. <https://doi.org/10.5964/ejop.v12i4.1170>
- Chi, K., Lay, J., Graf, P., Mahmood, A., & Hoppmann, C. (2018). Links between everyday intergenerational prosocial behaviour And emotional well-being in old age. *Innovation in Aging, 2*(1), 966–966. <https://doi.org/10.1093/geroni/igy031.3579>
- Clarke, P. B., & Byrne, P. (1993). Psychological theories of religion. In P.B. Clarke & P. Bryne (Eds.), *Religion defined and explained* (pp. 173-203). Palgrave Macmillan. https://doi.org/10.1057/9780230374249_8
- Damirchi, E. S., Mohamadi, N., Fayazi, M., & Afsar, A. (2017). Examining the relationship of psychological well-being with religious orientation and forgiveness among students at The University of Mohaghegh Ardabili. *Journal of Research on Religion and Health, 3*(2), 20–30.
- Fatima, S., Sharif, S., & Khalid, I. (2018). How does religiosity enhance psychological well-being? Roles of self-efficacy and perceived social support. *Psychology of Religion and Spirituality, 10*(2), 119–127. <https://doi.org/10.1037/rel0000168>
- Fraser, C. D. (2022). Faith? Hope? Christian charity? Religion explains giving when warm glow and impure altruism do not. *The Manchester School, 90*(5), 500-523. <https://doi.org/10.1111/manc.12415>
- Ghani, F., & Ghani, B. (2021). Madrassa education system and political socialization in Pakistan. *Ihyā' al'ulūm - Journal of Department of Quran O Sunnah, 21*(1), 51-71. <https://doi.org/10.46568/ihya.v21i1.85>
- Goodman, R., Meltzer, H., & Bailey, V. (1998) The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry, 7*(3), 125-130. <https://doi.org/10.1007/s007870050057>
- Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/Extrinsic Measurement: I/E-Revised & Single-Item Scales. *Journal for the Scientific Study of Religion, 28*(3), 348-354. <http://dx.doi.org/10.2307/1386745>
- Guo, Q., Liu, Z., & Tian, Q. (2020). Religiosity and prosocial behavior at national level. *Psychology of Religion and Spirituality, 12*(1), 55–65. <https://doi.org/10.1037/rel0000171>
- Han, Y., & Carlo, G. (2020). The links between religiousness and prosocial behaviors in early adulthood: The mediating roles of media exposure preferences and empathic tendencies. *Journal of Moral Education, 50*(4), 419-435. <https://doi.org/10.1080/03057240.2020.1756759>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences, 33*(2–3), 61–83. <https://doi.org/10.1017/s0140525x0999152x>
- Hu, X., & Cheng, S. (2020). Religious orientation, religious involvement, and religious coping predict university students' thinking styles. *British Journal of Religious Education, 43*(4), 421–433. <https://doi.org/10.1080/01416200.2020.1867960>
- Iqbal, M., O'Brien, K. S., & Bliuc, A.M. (2022). The relationship between existential anxiety, political efficacy, extrinsic religiosity and support for violent extremism in Indonesia. *Studies in Conflict & Terrorism, 1*–9. <https://doi.org/10.1080/1057610x.2022.2034221>

- Lew, B., Huen, J., Yuan, L., Stack, S., Maniam, T., Yip, P., Zhang, J., & Jia, C. (2018). Religious orientation and its relationship to suicidality: A study in one of the least religious countries. *Religions*, *9*(1), 15. <https://doi.org/10.3390/rel9010015>
- Mikani, M., Tabatabaei, K. R., & Azadfallah, P. (2022). Who would Iranian Muslims help? Religious dimensions and moral foundations as predictors. *Archive for the Psychology of Religion*, *44*(1), 23–39. <https://doi.org/10.1177/00846724211062944>
- Miller, T., & Vuolo, M. (2018). Examining the anti-ascetic hypothesis through Social Control Theory: Delinquency, religion, and reciprocation across the early life course. *Crime & Delinquency*, *64*(11), 1458–1488. <https://doi.org/10.1177/0011128717750393>
- Munir, A., & Malik, J. A. (2020). Mediating role of religious orientation and moral character for the relationship between parent and peer attachment and delinquency. *Cogent Psychology*, *7*(1), 1761042. <https://doi.org/10.1080/23311908.2020.1761042>
- Naqshbandi, K., Mah, K., & Ahmadpour, N. (2022). Making space for faith, religion, and spirituality in prosocial HCI. *Interactions*, *29*(4), 62–67. <https://doi.org/10.1145/3544301>
- Niazi, M. A. K., Ghani, U., & Aziz, S. (2019). Impact of Islamic religiosity on consumers' attitudes towards Islamic and conventional ways of advertisements, attitude towards brands and purchase intentions. *Business & Economic Review*, *11*(1), 1–30. <https://doi.org/10.22547/ber/11.1.1>
- Oh, H. Y. (2020). Religion and alcohol use among second generation Korean Americans: Commentary on “Assessing the associations between religiosity and alcohol use stages in a representative U.S. sample” by Lin et al, 2020. *Substance Use & Misuse*, *55*(14), 2443–2444. <https://doi.org/10.1080/10826084.2020.1818104>
- Pratono, A. H. (2019). Linking religiosity to citizenship behaviour under materialism attitude. *International Journal of Ethics and Systems*, *35*(1), 75–89. <https://doi.org/10.1108/ijoes-07-2018-0104>
- Reddish, P., & Tong, E. M. W. (2021). A longitudinal investigation of religious prosociality: What predicts it and who benefits? *Psychology of Religion and Spirituality*. Advance online publication. <https://doi.org/10.1037/rel0000442>
- Samiha, Y. T., Candra, A., & Rusdi, A. (2023). Internalization of the value of Islamic education through the system of kindness and religious harmony in village communities of 10 ULU Palembang. *Edukasi Islami: Jurnal Pendidikan Islam*, *12*(1), 181-190. <https://doi.org/10.30868/ei.v12i01.3830>
- Setiawati, E., & Ernawati, I. (2020). The evaluation of students' prosocial behavior on primary education level. *Al-Bidayah: Jurnal Pendidikan Dasar Islam*, *11*(2), 226–237. <https://doi.org/10.14421/al-bidayah.v11i2.205>
- Stagnaro, M. N., Arechar, A. A., & Rand, D. G. (2019). Are those who believe in God really more prosocial? *Religion, Brain & Behavior*, *10*(4), 444-458. <https://doi.org/10.1080/2153599x.2019.1695656>
- Ullah, K., Haider, S., & Hameed, G. (2021). Examining Islamic religiosity and youth perception towards socio-economic and cultural impact of tourism development in Gilgit-Baltistan, Pakistan. *Pakistan Social Sciences Review*, *5*(1), 456–476. [http://dx.doi.org/10.35484/pssr.2021\(5-1\)35](http://dx.doi.org/10.35484/pssr.2021(5-1)35)
- Wasim, A., & Siddiqui, D. A. (2020). Effect of religiosity and spirituality on employees prosocial behavior with the mediatory role of humanism and ethics.

International Journal of Social Work. 7(2), 17-36.
<https://doi.org/10.5296/ijsw.v7i2.17796>

- Wong, J. K. K., & Chui, R. C. (2022, December). The mediating role of prosocial behavior and meaning in life in the relationship between religiosity and attitude towards people with Intellectual Disability (ID) of Hong Kong young adults. In *Meaning in Life International Conference 2022-Cultivating, Promoting, and Enhancing Meaning in Life Across Cultures and Life Span (MIL 2022)* (pp. 217-232). Atlantis Press
- You, S., & Lim, S. A. (2018). Religious orientation and subjective well-being: The mediating role of meaning in life. *Journal of Psychology and Theology*, 47(1), 34–47. <https://doi.org/10.1177/0091647118795180>
- Zafar, S. (2022). Madrassah education system: Evolution and contemporary challenges. *Journal of Development and Social Sciences*, 3(1), 1-14. [https://doi.org/10.47205/jdss.2022\(3-i\)01](https://doi.org/10.47205/jdss.2022(3-i)01)
- Zamani-Farahani, H., & Musa, G. (2012). The relationship between Islamic religiosity and residents' perceptions of socio-cultural impacts of tourism in Iran: Case studies of Sare'in and Masooleh. *Tourism Management*, 33(4), 802–814. <https://doi.org/10.1016/j.tourman.2011.09.003>