



Religiosity and its Relationship with Prosocial Behavior: The Mediating Role of Intentional Self-regulation

Abdullah Mohammad Abu Alghanam^{*1} , Jumana Hussien Shehadeh² 

¹Department of Educational Psychology, Faculty of Educational Sciences- The University of Jordan, Jordan

²Department of Community Health Nursing, School of Nursing - The University of Jordan, Jordan

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* Corresponding author:

Abd_198963@yahoo.com

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Abstract

Objectives: The study aimed to examine the hypotheses that gender differences in religiosity and prosocial behavior are not statistically significant, that religiosity is positively associated with prosocial behavior among adolescents, and that this relationship is mediated by deliberate self-regulation.

Methods: The study used a cross-sectional design, with adolescents self-reporting on questionnaires about religiosity, prosocial behavior, and deliberate self-regulation. A total of 394 Jordanian adolescents aged 18 to 19 from the University of Jordan participated, selected using a convenience sampling method.

Results: The results showed that gender differences in religiosity and prosocial behavior were not statistically significant. Religiosity predicted prosocial behavior, and deliberate self-regulation mediated the relationship between religiosity and prosocial behavior.

Conclusions: The findings provide evidence that religiosity is associated with prosocial behavior and deliberate self-regulation during late adolescence among Muslim adolescents. The results also align with findings from other studies conducted on adolescents of different religions and cultures. Furthermore, the results call for more academic attention to adolescents in the Middle East to gain a better understanding of their motivations for engaging in prosocial behaviors.

Keywords: Religiosity, prosocial behavior, intentional self-regulation.

الدين وعلاقته بالسلوك الاجتماعي الإيجابي في ضوء الدور الوسيط لتنظيم الذات المقصود

عبدالله محمد أبو الغنم¹، جمانة حسين شحادة²

¹قسم علم النفس التربوي / كلية العلوم التربوية / الجامعة الأردنية

²قسم تمريض صحة المجتمع / كلية التمريض / الجامعة الأردنية

ملخص

الأهداف: هدفت الدراسة إلى فحص الفرضيات القائلة بأن الفروق بين الذكور والإناث في الدين والسلوك الاجتماعي الإيجابي ليست ذات دلالة إحصائية. كما أن الدين مرتبط بشكل إيجابي بالسلوك الاجتماعي الإيجابي للمراهقين، وأن هذه العلاقة يتوسطها تنظيم الذات المقصود.

المنهجية: استخدمت الدراسة تصميمًا مقطعيًا من خلال إجابة المراهقين الذاتية على استبيانات الدين، السلوك الاجتماعي الإيجابي وتنظيم الذات المقصود، حيث شارك 394 مراهقًا أردنيًا تتراوح أعمارهم بين 18 و19 عامًا من الجامعة الأردنية تم اختيارهم باستخدام طريقة العينة المتسلسلة.

النتائج: أظهرت النتائج أن الفروق بين الذكور والإناث في الدين والسلوك الاجتماعي الإيجابي ليست ذات دلالة إحصائية. وأن الدين تنبأ بالسلوك الاجتماعي الإيجابي. كما أظهرت النتائج أن تنظيم الذات المقصود توسط العلاقة بين الدين والسلوك الاجتماعي.

الخلاصة: تقدم النتائج دليلًا على أن الدين يرتبط مع السلوك الاجتماعي الإيجابي والتنظيم الذاتي المقصود خلال فترة المراهقة المتأخرة بين المراهقين المسلمين. وتتوافق النتائج أيضًا مع نتائج أخرى من الدراسات التي أجريت على المراهقين من ديانات أخرى ومن ثقافات متعددة. كما تدعو النتائج إلى مزيد من الاهتمام الأكاديمي بالمراهقين في الشرق الأوسط لاكتساب المزيد من الفهم حول دوافعهم للمشاركة في السلوكيات الاجتماعية الإيجابية. الكلمات الدالة: الدين، السلوك الاجتماعي الإيجابي، تنظيم الذات المقصود.

1.1 Background

Religion is an influential societal factor which possesses a psychological influence that can affect how each person's life will become, and it has been connected to a host of largely favorable outcomes for teenagers, such as reduced problem behavior and increased prosociality (Eisenberg et al., 2010) beside better capacity for self-regulation (Purwono et al., 2018). Religion's definition according to French and his colleagues (2008) is a "combination of internal religious experiences and external religious practices". Which is important in adolescence stage; because adolescence is a period when adolescents change their adherence to religion (Smith et al., 2002). They begin to solidify their religious beliefs and integrate them alongside other facets of their structures, such as behaviors (King et al., 2013) motivated by exploring their beliefs, values, and goals which can be religious. In addition, Adolescence may be a pivotal period as a component of a greater endeavor to define and create identity, in the development of religiosity (Erikson, 1968).

One commonality the three largest religions (Islam, Christianity, and Judaism) share is prosocial behavior which is defined by (Krauss et al 2012) as a "social behavior that benefits another person and makes him happy and promotes harmony between individuals and benefits society". All religions are based on the notion of sharing, donating and helping others (Stamataoullakis, 2013). Also, according to Saroglou et al. (2013), most of psychological theories deduct that religion contributes to prosocial behaviors. Religion also effects intentional self-regulation which is a conscious control of goal-directed thought and action by influencing the abilities related to it in various ways; like managing goals selection (Wilson, 2002) and by increasing the importance of some goals and sets priorities regarding goals and reduces conflicts (Emmons, 1999). Additionally, religion may have an impact on self-regulation through affecting how objectives are internalized and transformed into crucial values. (Ryan, et al., 1993). In addition, Religion affects self-regulation by encouraging self-monitoring, which is a crucial component of self-regulation. (Carver & Scheier, 1998). These connections between religion and objectives point to some significant ways that religion might affect intentional self-regulation, since it depends essentially on three components which are goals selection, optimization and compensation and as a result religion extends its effect to prosocial behavior through it, which is one of our hypotheses in this research.

1.1.1 Religion and Prosocial behavior

Stolz and his colleagues (2013) observed that youth prosocial conduct was adversely predicted by antisocial behavior and favorably connected with religiosity. Which is demonstrated by numerous researches that show prosociality, at least toward non-value-threatening individuals, is positively correlated with significant elements of religiosity (e.g., religious conviction, mosque prayers) (Preston, Salomon, & Ritter, 2014; Saroglou, 2013). The function of religion in encouraging what are seen as prosocial ideals and attitudes and condemning what are seen as problematic ones (e.g., show kindness to others, abstain from stealing) may be the most logical explanation for these positive correlations. Also, it can be noticed that socialization is the most well-established process via which religiosity may influence prosocial conduct by emphasizing prosocial behavior, as can be seen (Ellison, 1992; Mattis et al., 2000). Besides that, prosocial values can be noticed in the vast majority of religious scriptures and thoughts which offer incentives to behave prosocially and abstain from problematic behavior in the form of occasionally eternal rewards and penalties (such as heaven and hellfire). (Hardy & Carlo, 2005).

This relation between religion and prosocial behavior in adolescence was studied by several studies, which showed that religion associated positively with prosocial behavior (Bridges & Moore, 2002; Regnerus, 2003). For instance, Mattis and her colleagues (2000) found that Religious attendance is also associated with volunteerism. Also it was discovered that Religion was, in a research by Hardy & Carlo (2005), a substantial positive predictor of various forms of prosocial conduct among teenagers.

In a study done by Malhotra (2010) showed that those who frequently attended church had a higher propensity to donate to charities than those who did not. Similarly, Einhoff (2011) revealed that people's motivation to help was influenced by their religion. Also, According to a study conducted in Morocco in (2015) by Duhaime, prosocial behavior is increased by religious salience. Kaneez and Imtiaz (2020) also found a major effect that is statistically significant for varying levels of religion on prosocial behavior of adolescents.

1.1. 2 Intentional self-regulation and prosocial behavior

Intentional self-regulation is considered as a personal asset according to positive youth development perspective suggested by Lerner and colleagues, which is a perspective that asserts personal-context exchanges (Lerner et al., 2015). From this perspective, Prosocial behavior and other beneficial and desirable developmental outcomes have been linked to intentional self-regulation throughout development. (Geldhof et al., 2010) especially in adolescence, as the ability for intentional self-regulation is constantly advanced (Gestsdottir & Lerner, 2008) and chances for prosocial behavior increase (Padilla-walker et al., 2015) as a result of new psychological, social, emotional needs that define this time period (Gilchrist, 2017; Steinberg, 2005).

Prosocial behavior is facilitated by intentional self-regulation, especially when adolescents have the ability to reach outside resources like as religious prosocial models who are provided by religion scriptures and may use their intentional self-regulation to actively select, adhere, and accomplish prosocial goals (Hardy & Carlo, 2005). This is facilitated by their ability to surpass anxiety or potentially unpleasant feelings, concentrate on the current supportive circumstance, choose the best course of action for helping others, and acting in accordance with their religion's values and goals.

Intentional self-regulation and prosocial behavior have been the subject of several studies. Elison and colleagues (2020), for instance, discovered a bidirectional relationship between intentional self-regulation and prosocial behavior toward others in mid-to late adolescence. Also, prosocial behavior facilitated intentional self-regulation. According to some findings presented in Bandura's (1991) study, that young people who consciously practice self-regulation participate more in similarly functioning behaviors, like prosocial behavior toward strangers, or to see themselves as doing so. Further studies in the area of moral development show that adolescents who actively set, adhere, and accomplish prosocial goals through intentional self-regulation are more inclined to participate in and believe they are participating in beneficial behaviors toward others (Hardy & Carlo, 2005). Accordingly, repeated engaging in prosocial behaviors strengthens individuals' regulatory capacities (Muraven, 2010) therefore it's possible that the sense of prosocial activity promotes the gradual improvement of self-regulation abilities.

1.1.3 Mediating role of intentional self regulation

Religion promotes prosocial goals because it has cognitive, emotional, and behavioral components that arise from awareness of supernatural force and affect behavior and thoughts (Hill & Hood, 1999), in concordance with this; religious people select their goals according to religion using intentional self-regulation skills, because Intentional self-regulation refers to the way an individual manages their own behavior in order to achieve goals and uphold moral principles. (Baumeister & Vohs, 2004), therefore, when a person intentionally self-regulates, he is guiding and adjusting his behavior in an effort to achieve some desired objectives which can be religious goals (Carver & Scheier, 1998).

Beside selecting goals and adhering to it, Religious belief systems have an impact on how people prioritize their goals and can inspire people to achieve them by giving them sacred importance, such as prosocial goals. (Mahoney et al., 2005). Furthermore, by lessening the degree to which people perceive conflict between aims, religion may improve goal harmonization. (Emmons, 1999). So, when a person confronts a situation which creates a conflict inside him like helping a person in dangerous situation, his self-regulation ability will direct his behavior towards desirable response according to his religious belief.

Mediating role of intentional self-regulation was supported by several studies, for instance a meta-analysis done by Saroglou and his colleagues (2004) of data from twelve earlier researches, revealed that Being religious encourages pursuing objectives related to relatives and society concord, but on the other hand, Religion may encourage the rejection of aspirations of autonomy and individuality, which are negatively associated to prosocial behavior and religiousness too. Similarly, the results of Roberts and Roben's (2000) analysis of the 38 life goals scored by 672 American undergraduate students showed that the students' objectives could be grouped into areas related to the economy, the arts, politics, society, hedonism, and religion.

The majority of religions hold that gods or spirits watch over human behavior, render judgment, and subsequently

impose punishments or rewards. (Bering & Johnson, 2005). All religions, these beings are believed to be able to read thoughts, are often believed to be impervious to human trickery. According to research on intentional self-regulation, people become more self-aware when they believe a monitoring audience to be present, which prompts them to judge their behavior according to their values (Carver & Scheier, 1998). And since religion asserts on doing positive social behaviors, it will influence intentional self regulation through promoting self- monitoring to correct one's behavior to conform to a norm (Schmeichel & Baumeister, 2004).

1.2 Current study

Based on the framework of the Institute of Family Health's developmental assets and Lerner and colleagues' (2015) positive youth development perspectives, additionally to emphasize the data showing that a number of nations with a majority of Muslims, such as Jordan, are having difficulty meeting the needs of their youthful populace in terms of positive development (Krauss, 2018) and steer adolescents toward desirable adulthood and away from deviant norms (Bazemore & Terry 1997). Beside that some Research revealed conflicting results on religion's impact on prosocial behavior (Kirchmaier et al., 2018). Consequently, this study's objective was to investigate the predictors of prosocial behavior of Jordanian adolescents especially religion it remains to be essential to both individual and societal life (Anderson, 2015). We estimated a regression model assessing the impact of adolescents' religiosity on prosocial behavior in light of intentional self regulation.

First, we hypothesized that there wouldn't be a discernible difference between males and girls in terms of prosocial behavior and religion. Secondly, we postulated a positive correlation between prosocial conduct and the religiosity of adolescents. In our third hypothesis, we postulated that the relationship between religion and prosocial behavior would be mediated by purposeful self-regulation.

1.2.1 Method

A cross-sectional Study design was used to study the predictors of prosocial behavior of Jordanian adolescents. Data collection was through self-administered questionnaire in relation to religiosity, intentional self-regulation and prosocial behavior.

1.2.2 Settings

This study took place in Jordan at the University of Jordan.

1.2.3 Sample

This study utilized a convenience sampling method, targeting students enrolled in the first or second year of their bachelor's degree program. Data was collected by a trained research assistant following these steps:

1. The assistant approached students on campus in common areas such as lecture halls and libraries.
2. The research purpose was explained to the students, highlighting the study's objectives and their role.
3. Interested students were checked for the inclusion criteria (first or second-year students) and asked to provide informed consent.
4. Qualified students received the questionnaire and were asked to complete it on the spot.
5. The research assistant collected the completed questionnaires immediately.

1.3 Measures:

1.3.1 Religiosity:

Purwono's (2010) scale, which gauges the degree of commitment to religious practice, was used to measure religiosity. The participants were asked to rate their frequency of engaging in compulsory (e.g., "I pray all of the daily obligatory prayers (salah)") and recommended (e.g., "I pray the nonobligatory (sunnah) prayer before or after the obligatory prayers") activities by answering 16 statements on a five-point Likert scale. Before being used in this study, the original items were

modified for Jordanian use and reviewed by Jordanian specialists with backgrounds in both psychology and Islam. Developmental psychologists and Islamic scholars recommended that four items be eliminated because they were deemed inappropriate for the Jordanian community. There was internal consistency ($\alpha = 0.76$).

1.3.2 Prosocial behavior

The prosocial conduct of the participants was evaluated using the Adults' Prosocialness Scale for Caprara and colleagues (2005). It assesses acts and emotions that can be linked to one of the following four: caring for, sharing, assisting, and feeling sympathetic toward the needs and desires of others. On a five-point Likert scale that went from "never/ almost never true" (1) to "almost always/always true" (5), participants answered 16 items. Achieved internal consistency ($\alpha = 0.81$).

1.3.3 Intentional Self- Regulation

Freund and Baltes' (2002) "SOC" scale, which assesses goal selection (e.g., "I concentrate all my energy on few things"), goal optimization (e.g., "I think about exactly how I can best realize my plans"), and goal compensation (e.g., "when something does not work as well as before, I get advice from experts or read books"), was used to measure intentional self-regulation in 2002. On a five-point Likert scale that went from "not at all like me" (1) to "very much like me" (5), participants answered 18 items. There was internal consistency ($\alpha = 0.78$).

1.4 Results

Correlations, means and standard deviations of the measures are presented in Table 1. Also Independent sample T-Test was conducted to find out if there are significant differences in religiosity and prosocial behavior scores for males and females presented in tables 2 & 3. In order to find out if religiosity predicts prosocial behavior and to find out if intentional self-regulation is a mediator variable between Religiosity and prosocial behavior; Baron & Kenny (1986) method was used.

Descriptive statistics

Table (1)

Variables	1	2	3
1 Religiosity	-	0.271**	0.330**
2 Intentional Self Regulation		-	0.404**
3 Prosocial behavior			-
M	42.34	63.48	63.53
SD	7.46	9.06	9.74

** Correlation is significant at the 0.01 level

T-Test analysis showing differences in religiosity and prosocial behavior score for males and females

Table (2)

		Number	Mean	Std. deviation	T value	T significance
religiosity	Male	183	42.12	8.85	0.5	0.618
	Female	211	42.50	5.98		
prosocial behavior	Male	183	64.04	9.603	1.023	0.307
	Female	211	63.03	9.847		

Results showed that differences between males and females were not statistically significant on religiosity and prosocial behaviorscales.

1.5 Main analyses

PROCESS macro v4.1 was used, model 4 (Figure 1; Hayes, 2013). Intentionalself-regulationwas found to mediate the effect of religiosity on pro-social behaviors (Unstandardized interaction B = 0.136, Bse = 0.043, t= 3.207, p = 0.001).

Religiosity was associated with higher pro-social behaviors, $B = 0.253$, $Bse = 0.037$, $t = 6.903$, $p < 0.001$. The overall mediation model was supported with the index of mediation = 0.066 (95% CI = 0.027; 0.116). As zero is not within the CI this indicates a significant mediating effect of religiosity on pro-social behaviors on the indirect effect via intentional self-regulation (Hayes, 2015).

Path A = 0.253 (<0.001)

Path B = 0.136 (0.001)

Path C = - 0.203 (<0.001)

Summary of regression coefficient for pro-social behaviors

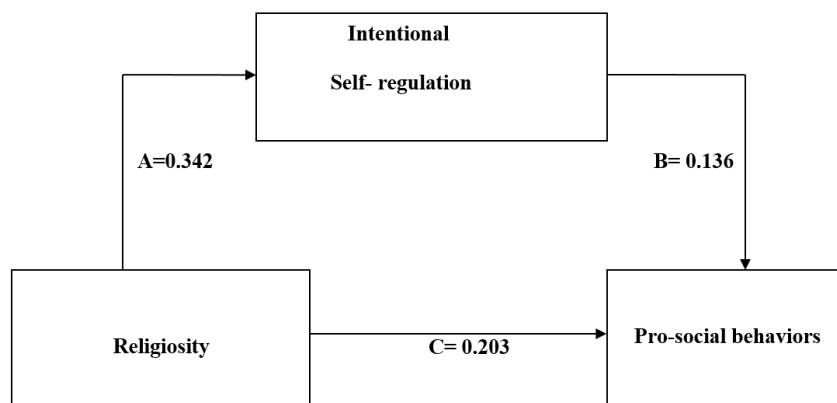


Figure (1)

1.6 Discussion and conclusion

The present study postulated four hypotheses, the first hypothesis hypothesized that there wouldn't be any appreciable variations in religiosity between Males and females. The findings revealed no discernible variation in pupils' levels of religiosity between male and female. This makes sense given that the religiosity scale did not account for demanding religious duties like regular attendance at houses of worship or other physically demanding practices like girls donning headscarves. This outcome is comparable to that of (Rathee& Singh, 2018), which found no discernible variations in religiosity based on gender. Nonetheless, a study by Hardy and Carlo (2005) discovered that women reported being more religious than men.

The second hypothesis postulated that there wouldn't be any appreciable variations in prosocial behavior between males and females. There was no discernible variation in prosocial conduct between male and female pupils, according to the findings. This can be explained by that in late adolescence both males and females inclination to behave prosocially possibly faced and met by the same interpersonal experience and contexts (Caprara et al., 2005) leading them to act similarly especially that university provides them with nearly the same experiences and opportunities for prosocial behavior. Similar research by Kaneez and Imtiaz (2020) showed that the levels of prosocial behavior in boys and girls are equal. This, however, runs counter to a research done by Madsen and his colleagues (2017) that found men are more inclined than women to offer assistance to those in need.

Our study in the third and fourth hypotheses also delve into the intricate relationship between religiosity, intentional self-regulation, and prosocial behavior among adolescents, uncovering insights with both theoretical and practical significance. Building upon prior research, we confirm the positive association between religiosity and prosocial behavior, promoting the notion that religious convictions and rituals operate as guiding principles that steer individuals towards actions that foster social cohesion and altruism. The notable coefficient ($B = 0.253$, $p < 0.001$) highlights that higher levels of religiosity correlate with increased engagement in prosocial behaviors; which is in harmony with Islam's primary focus on helping those in need, which is one of the five pillars of Islam (Homerin, 2005). Beside that religious scriptures including

Islamic are rich of role models, teachings and rewards as a results of prosocial behaviors leading adolescents to act prosocially (Hardy & Carlo, 2005) Underlining the influential role of religion in shaping moral development during adolescence. These results are consistent with findings from U.S. such as (carlo& Hardy, 2005) and Malaysia (French et al., 2008).

In our fourth hypothesis We predicted intentional self-regulation to mediate the relation between religiosity and prosocial behavior. The results demonstrated through our mediation analysis which sheds light on the underlying mechanisms driving this relationship, revealing intentional self-regulation as a key mediator. By examining the indirect effect of religiosity on prosocial behavior through intentional self-regulation (Unstandardized interaction $B = 0.136$, $p = 0.001$), we demonstrate that adolescents with stronger religious convictions are inclined to participate in intentional self-regulatory processes. This suggests that religious beliefs and practices may instill intentional self-regulation by effecting goals selected by adolescents like prosocial goals and prioritize these goals by sanctifying them through connecting goals with sacred source (Emmons, 1999) therefore, when an adolescent intentionally self regulates, he is guiding and adjusting his behavior in pursuit of some desired goals which can be religious goals such as prosocial goals (Carver & Scheier, 1998) Subsequently influencing adolescents' propensity for prosocial behavior. These results agree with researches from U.S. (Elison et al. 2020) and (Padilla-walker, 2020).

Practically, our study has implications for interventions intended to encourage constructive youth development. Recognizing the role of religion as a potential catalyst for intentional self-regulation and prosocial behavior, educators, parents, and community leaders can leverage religious teachings and practices to cultivate adolescents' self-regulatory skills. By integrating religious values into programs designed to enhance intentional self-regulation, practitioners can empower adolescents to become active contributors to their communities, fostering a culture of empathy, compassion, and social responsibility. This approach not only harnesses the potential of religion as a positive influence but also offers a holistic framework for nurturing adolescents' moral and ethical development in diverse cultural and religious contexts.

The current study has three limitations. Initially, study's three measures are self-reported; consequently, study evaluated how behaviors of adolescents were recognized instead of their real actions. Furthermore, self-report measures raised concerns from certain researchers. For instance, social desirability bias may arise from the usage of these measures in studies of prosocial and religious studies (Batson & Ventis, 1982). Secondly, it is possible that the results of this study cannot be applied to all adolescents globally. The bulk of the adolescents in our sample were Jordanian Muslims who were either living with both biological parents or just one of them. Additionally, the results may be more useful to Muslim adolescents than those from other religious backgrounds. This is because all adolescents in our current sample were Muslim, and only Muslim adolescents are eligible to participate in answering the measures. Lastly, we measured prosocial behavior by asking adolescents to rate their own prosocial behavior instead of how frequently they engage in prosocial behavior. In addition, our measure doesn't measure all types of prosocial behavior, such as public prosocial behavior. Besides that, a number of academics claim that behavioral frequency measures of prosocial behavior have clear limits (EI Mallah, 2019).

The data availability statement:

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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