



# **An Investigation of Moral Development: the Effect of Religiosity on Kohlbergian Moral Reasoning**

Meg Stapleton

Trinity College, Dublin

Correspondence: [stapleme@tcd.ie](mailto:stapleme@tcd.ie)

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## ***abstract***

The relationship between religious faith and moral reasoning was examined. The hypotheses that those who identify as non-religious will display different levels of moral reasoning to those who identify as religious were investigated. Of the religious sample, education, gender, strength and type of religion were assessed in relation to predicting postconventional moral reasoning.

One hundred and ten participants currently in third level education completed Rest's Defining Issues Test, the Revised Religious Life Inventory, and The Santa Clara Strength of Religious Faith Questionnaire as part of an online survey.

An independent-samples t-test showed a significant difference between principled morality scores between religious and non-religious participants ( $t(108) = -2.12, p = .04$ ).

A hierarchical multiple regression was carried out on the religious sample ( $N = 50$ ). The overall model was significant ( $F(6, 43) = 4.83, p < .001, R^2 = .40, \text{Adj } R^2 = .32$ ). Quest religiosity was a significant predictor of postconventional moral reasoning. Other variables did not significantly predict any of the variance.

Both principle hypotheses were supported. Results are discussed in with reference to methodological flaws and future recommendations.

### Introduction

Increasing debate around the role of religion in society has led to attempts to identify its merits in relation to matters of both commonwealth and the individual. Psychology can contribute to this debate by providing insights into elements of religiosity that may affect cognitions such as decision-making and considerations of social convention. This study aims to address issues of religion in relation to moral reasoning based on previous psychological investigation.

Moral reasoning can be considered as the process by which an individual makes a judgment of a situation based on the ethical principles that they hold. The decision can be shaped by numerous factors across a lifetime and is subject to influence from both the individual and wider culture.

Moral reasoning was initially grounded in theory by Jean Piaget who identified two stages of moral development (Crain, 1985). However, the theoretical framework of moral reasoning remains topical, with new challenges and models frequently proposed. This study will focus on the theory of moral development as proposed by Lawrence Kohlberg in the mid-20th century (Crain, 1985) and the most psychologically applicable aspects of its principles today.

Expanding on the work of Piaget,

Kohlberg proposed a more detailed model for moral development. Within the Kohlbergian tradition, moral reasoning is defined as the individual's socio-moral perspective, the characteristic point of view from which a person formulates moral judgments (Rest, Thoma, Navaez and Bebeau, 1997). The theory states that moral development is a universal process that develops in stages of ordered acquisition and with a lack of reversal. Kohlberg put forward three levels of development, each with two sub-stages, as part of his theory (1969). Each level identifies a different stage of morality:

(i) Level one is referred to as pre-conventional morality. Within this level social norms are either not understood or ignored and as such fail to enter into the moral reasoning process. In general the strategies of this level are based on avoiding punishment (stage one) and satisfying one's needs (stage two).

(ii) Level two is conventional morality. Social norms, rules, and roles are considered as part of moral reasoning within this level. This level centres on acknowledgment and respect of authorities, rules and convention. The focus of this level is being a good person (stage three) and maintaining social order (stage four).

(iii) Level three is postconventional morality, also known as principled moral reasoning. The most complex level, post-

conventional reasoning entails independent thinking. This level is not based upon social norms but on individual moral principles. Alternatives to the law when it is seen as being at odds with social convention (stage five) are considered at this stage. Abstract ethical principles are also addressed at this level (stage six). When conventions and principles conflict, post-conventional reasoning will be based upon a person's own moral evaluation of a situation over social conventions (Duriez and Soenens, 2006).

According to Kohlberg, the nature of moral instruction (e.g. early exposure to socio-moral conflicts) can enhance or hinder moral development but the course of development should be universally the same in all socio-cultural contexts (Kohlberg, 1969). It is hypothesised that moral behaviour is more consistent and predictable at the higher stages because the stages themselves employ increasingly more stable standards (Kohlberg, 1976). The majority of research suggests that level one is completed by most by early adolescence and level two by late adolescence through to adulthood (Rest, Thoma, Navaez and Bebeau, 2000).

Debate remains over attainment of the third level of moral reasoning. Some research suggests that the postconventional level of moral reasoning will be achieved by mid adulthood, while others propose some may never reach this level (Colby

and Kohlberg, 1987). Longitudinal evidence supports the theory of ordered acquisition and lack of reversals as proposed by Kohlberg (Dawson, 2002). Both Kohlberg's original longitudinal study of New England schoolboys (Colby and Kohlberg, 1987) and various other research such as a longitudinal study of Israeli kibbutz residents (Snarey, Reimer and Kohlberg, 1985), and country dwelling Turkish children (Nisan and Kohlberg, 1982) support this sequential theory.

It is proposed that the postconventional level of moral reasoning reflects the highest level of moral maturity that can be attained (Colby and Kohlberg, 1987). Research has indicated that this level of moral reasoning may be particularly sensitive to particular factors. This study will address some of these variables and their relationship with the postconventional level of moral reasoning.

*Religiosity.* Kohlberg denied that religion had any effect on moral development. He proposed that religiosity and moral reasoning are two separate processes where the former is based upon revelations by religious authority and the latter is grounded in rational arguments of justice. These arguments are said to be influenced by higher levels of cognitive development and exposure to sociomoral experiences and debate, such as in higher education (Kohlberg, 1981). Likewise, in an early cross-cultural study of various religions

none differed on levels of moral development (Kohlberg, 1967). However, research has pointed to evidence of a relationship between moral development and aspects of religiosity, including the type and strength of religion involved (Wahman, 1981).

Allport (1954) first distinguished types of religious faith in the mid-part of the 20th century in which he identified an intrinsic and an extrinsic orientation of faith. Intrinsic religiosity has been described as being the supreme value, in which religion is the motive itself. Faith is internalised and followed as closely as possible (Ji, 2004). Extrinsic religiosity is characterised as instrumental and self-serving, in which religion is used as a social means to acquire security and self-justification (Shee, Ji and Boyatt, 2002). It has been reported those who are extrinsically orientated have a tendency to conform to authority and support what is believed to be 'normal' for social approval (Ji and Suh, 2008).

This model of religiosity was later modified to include a third construct. Batson and colleagues added a dimension labelled as quest in order to create a multi-dimensional model of religiosity (Batson, Schoenrade, and Ventis, 1993). Quest religiosity has been defined as an open-ended, questioning approach to religion, one more interested in the on-going quest for truth than simple answers (Ji, 2004). Those

who exhibit a preference for the quest dimension are believed to be predisposed to think in less rigid and more complex ways about various issues and to have lower levels of tolerance for social conventions (Ji and Suh, 2008).

Based on this theory, it was proposed that the distinctions between the extrinsic-intrinsic constructs are comparable to those between Kohlberg's conventional and postconventional levels of moral reasoning (Ernsberger and Manaster, 1981). Although those with religious affiliations have been reported to display decreased preference for postconventional reasoning (Deka and Broota, 1988), it may be the type of religious orientation that dictates the cognitions involved rather than religion itself.

Previous research has investigated the link between the three different types of religiosity (intrinsic, extrinsic, and quest) and moral reasoning. Some research has indicated that those who identify themselves as having religious traits or commitment often lag behind non-religious people in terms of progressing to the postconventional level of moral reasoning (Glover, 1997). In a college student sample, Sapp and colleagues found an inverse relationship between intrinsic religiosity and principled moral reasoning (Sapp and Gladding, 1989; Sapp and Jones 1986). Additionally, the quest scale was noted in particular as being associated with the pos-

tconventional level of moral development. The authors suggested that those with high levels of quest religiosity might use differentiated mental processes when dealing with moral issues (Sapp and Jones, 1986). Those who feel driven to question their own faith are thought to be more likely to display principled moral reasoning (Batson et al, 1993). However, research carried out by Ji found that both intrinsic and quest orientations increase the likelihood of exhibiting postconventional reasoning (2004). In an investigation into a solely Islam sample there was evidence that intrinsic religiosity was positively related to principled moral reasoning (Ji, Ibrahim and Kim, 2009). In the same study those who attended congregational worship were linked with the lower conventional level of moral reasoning, as were those who practice for personal benefits, i.e. extrinsically-orientated. Research appears to support the idea that the quest dimension is positively related to postconventional reasoning (Glover, 1997) and extrinsic negatively related (Ji et al, 2009). However, debate remains over the influence of intrinsic religiosity on moral reasoning, with conflicting data on the direction of the relationship (Sapp and Gladding 1989; Ji, 2004).

*Factors that may impact the relationship between religious faith and level of moral reasoning.* The strength of an individual's religion may have an impact on

the type of moral reasoning they exhibit, particularly when considered in tandem with the type of religious dimension they display. Ernsberger and Manaster have argued that the moral reasoning employed by religious individuals depends on the seriousness of their religious commitment (1981). The strength of one's religiosity has been simply classified as ranging from high, medium or low (Plante and Boccacini, 1997). However, little research has been carried out in relation to this aspect of religion and moral reasoning.

Strong correlations have been found between levels of education and the level of moral reasoning reached. Kohlberg posited that moral development is encouraged through direct and repeated experiences with moral conflicts in social contexts (Kohlberg, 1969). A common arena for these experiences is that of formal education, particularly at the higher levels of college and university. Research has suggested strong positive relationships between educational attainment and the level of moral development procured (Rest, 1993).

Some have suggested that Kohlberg's model may be gender biased. Gilligan suggested that women base moral decisions on different types of reasoning than men (1982). The initial investigations into the Kohlbergian model were carried out with male samples. This gender bias may have resulted in an androcentric model. Howev-

er, later research appears to refute a significant gender difference in moral reasoning with evidence suggesting only slight differences between male and female samples (Jaffee and Hyde, 2000; Ji, 2004).

More recent research in moral psychology has challenged the Kohlbergian paradigm with the suggestion that morality may take some form of intuition and are both innate and learned (Haidt and Joseph, 2004). This theory of intuition opposes the concept of reasoning as outlined above and instead incorporates a greater role of affective response (Cushman, Young and Greene, 2010). Similarly, Moral Foundations Theory proposes five psychological foundations of morality, presented as two individualising foundations – Harm and Fairness; accompanied by three binding foundations – Purity, Loyalty, and Authority (Haidt and Joseph, 2004). Theoretical parallels between the levels of moral reasoning as proposed by Kohlberg and the moral foundations as set by Haidt and colleagues have been suggested (Graham and Haidt, 2010). However, empirical evidence has been found lacking in this area (Baril and Wright, 2012), providing the stage theory of moral development with more support.

The current study will consider religious faith in relation to postconventional moral reasoning. Similarly, education, gender, strength and type of religion in relation to principled moral reasoning will

be assessed.

Moral reasoning will be measured using Rest's Defining Issues Test [DIT-1, short form] (Rest, 1979). The DIT stands as the most researched and validated objective measure of moral judgement (Glover, 1997).

Levels of religiosity will be measured using the Revised Religious Life Inventory (RLI; Hills, Francis and Robbins, 2004). This instrument was selected as it has been successfully used in previous studies and is applicable to many religious affiliations (Hills, Francis, Argyke and Jackson, 2004).

The strength of religiosity will be ascertained using the Santa Clara Strength of Religious Faith Questionnaire (SCSORF; Plante and Boccaccini, 1997). This is a simple yet effective measure of an individual's strength of religion, regardless of religious denomination (Plante, Vallaey, Sherman and Watson, 2002).

**Hypotheses.** Based on the findings to date and the literature reviewed, this study will focus on the relationship between a person's type of religiosity and their level of moral reasoning. The principle hypotheses are:

i) Those who identify as non-religious will display different levels of moral reasoning than those who identify as religious

ii) In a religious sample, differences between individual's strength of religion; type of religious faith; gender, and education will predict different levels of moral reasoning

### Method

**Design.** *Part 1.* A within-groups design was used. All participants completed the survey in which the independent variable for H1 was religious belief. The principled morality score was the dependent variable. An a-priori power analysis indication that for H1 102 participants were required to achieve a medium effect size with  $p < .05$ . It was expected that P-scores would differ for religious and non-religious participants.

*Part 2.* The predictor variables for H2 were gender, education, strength and type of religiosity. The criterion variable was the principled morality score of each participant. An a-priori power analysis indication that for H2 97 participants were required to achieve a medium effect size with  $p < .05$ . It was expected that one or more of the above variables could predict differences in P-scores amongst a religious sample.

**Participants.** One hundred and ten participants took part in this study of which 37 (33.6%) were male and 73 (66.4%) were female. Participant ages ranged from 18-49 (Mean=22.6, SD=4.1). Fifty-two

(47.3%) participants had completed the Leaving Certificate, 34 (30.9%) an Undergraduate degree, and 22 (20%) a Master's degree or equivalent. All participants were currently enrolled in third level education.

The most popular response for religious affiliation was 'None', selected by 52 participants (47.3%), followed by Roman Catholic (40.9%). For a full summary of demographic findings see Appendix B.

Participants were recruited through both the researcher's contacts and through the School of Psychology at Trinity College, Dublin. Psychology students at Trinity College participated in exchange for research credits. First and second year students received two research credits for their participation. All other participants operated on a voluntary basis.

**Measures.** (i) Rest's Defining Issues Test (Rest, 1979) is an instrument designed to assess stages of moral development as based on Kohlberg's model. The three item short form was used in this study. This version of the test retains high levels of validity and reliability while taking less time to complete

The three stories on the short form were selected based on their having the highest correlation of any 3 stories with the full 6 story set, with the P-score from the short version found to correlate .93 with the P-score of the 6 story version



(Rest, 1986). The DIT short form consists of reading three moral dilemmas followed by rating twelve short issue statements based on each scenario. These items are rated in terms of importance on a five-point scale, ranging from great importance to none. Following this the twelve items are considered as a set and the four highest rated items are then ranked in order of importance. From these four rankings a P-score (principled morality score) is

calculated based on the relative importance given to items representing stages 5 and 6, the postconventional level of moral reasoning (Rest and Navarez, 1994). The P-score ranges from 0 to 95 and represents a percentage. A higher score indicates higher moral judgment development (Rest, 1993). Rest puts forward the following examples of normative P-scores based on longitudinal research (1993):

Table 1: Normative P-scores and stage of education

P-score range	Education range
30 – 40	High School/Pre-College
40 – 50	College undergraduate
50 – 60	College postgraduate
60 + morality*	College postgrad studying

\*Students undertaking study in areas such as Philosophy, Psychology etc.

(ii) The Revised Religious Life Inventory (Hills, Francis and Robbins, 2004) was used to measure type of religiosity. It is a 24-item survey that is a shortened version of Batson and Schoenrade's original 32-item Religious Life Inventory (1991). This instrument uses a nine-point scale ranging from "strongly agree" to "strongly disagree" in order to assess an individual's levels of intrinsic, extrinsic and quest religiosity. The elimination of unreliable items from the original measure resulted in stronger internal consistency (0.83 in the Revised RLI versus 0.77 in the original) and Cronbach's alpha remained the

same for both at 0.93 (Hills, Francis and Robbins, 2004). The simplified method of scoring for this scale was employed with standard scores for each scale calculated by subtracting the mean for each scale from each participant's mean score then dividing the remainder by the standard deviation for that scale (Batson, Schoenrade, & Ventis, 1993, p. 176).

(iii) The Santa Clara Strength of Religious Faith Questionnaire (Plante and Boccaccini, 1997) is a 10-item measure designed to assess an individual's strength of religiosity, regardless of religious

denomination. The scale uses a 4-point Likert scale ranging from “strongly disagree” to “strongly agree”. Scores can range from 10 to 40 with higher aggregates representing stronger religious faith. The scale has been found to be internally consistent, with an alpha coefficient of .93 (Lewis, Shevlin, McGuckin and Navratil, 2001). It is an effective measure of an individual’s strength of religiosity regardless of religious denomination (Plante et al., 2002).

(iv) A short demographic questionnaire was also used as part of this study. Participants were required to identify their gender and age. To ascertain level of education each participant had to identify the level completed up to the time of testing. Finally, participants identified their religious affiliation.

**Procedure.** Ethical approval for this study was granted in January 2013 by the ethical review board of the School of Psychology, TCD. The survey was carried out online. Participants were provided with the link to the study via email. Upon opening the link, they were redirected to the SurveyMonkey questionnaire platform. Before the study began, a consent form providing information on the study and instructions for proceeding was presented. Participants provided consent by reading this form and clicking on ‘Next’ and proceeding to the demographic questionnaire.

*Part One.* Following the completion of the demographic questionnaire, religious and non-religious individuals (N = 110) completed Rest’s Defining Issues Test.

*Part Two.* Participants also completed the Revised Religious Life Inventory followed by The Santa Clara Strength of Religious Faith Questionnaire. However, only the data attained from the religious sample (N =50) was utilised in the analysis of this data as it pertained to the second hypothesis.

Participants completed the survey by following the instructions provided for each section. All questions were mandatory. Participants could take as much time as they wished to complete the survey, and could return to complete unfinished questions at their leisure.

Upon completion of the survey, participants viewed a debriefing form that clarified the purpose of the study and provided appropriate contact information for those who required it.

## Results

*i) H1 –Those who identify as non-religious will display different levels of moral reasoning than those who identify as religious.* An independent-samples t-test was conducted to evaluate the hypothesis that those with religious faith will display low-

er principled morality scores than those who are not religious. The independent variable was religion and the dependent-variable was participant's P-scores. All parametric assumptions were met. Levene's test for equality of variances was not significant ( $F = 2.7, p = .10$ ), ensuring homogeneity of variance.

Results showed there was a significant difference between P-scores between religious and non-religious participants ( $t(108) = -2.12, p = .04$ ). Principled morality scores of religious participants ( $M = 38.1, SD = 15.2$ ) on average were lower than non-religious participants ( $M = 45.1, SD = 18.7$ ).

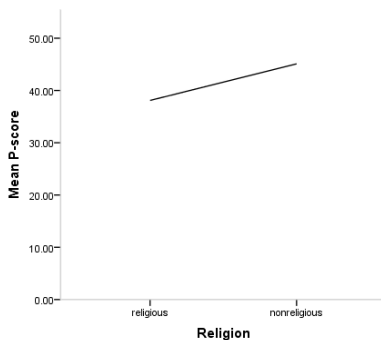


Figure 1. Mean P-scores for religious and non-religious participants

*ii) H2 - In a religious sample, differences between individual's strength of religion; type of religious faith; gender; and education will predict different levels of moral reasoning. A hierarchical multiple regression was employed to evaluate*

whether gender, education, strength of religion and type of religiosity predicted principled morality scores. Gender and education were controlled for in Step 1, strength of religion in Step 2, and types of religiosity were all entered in Step 3.

The overall model was significant ( $F(6, 43) = 4.83, p < .001, R^2 = .40, \text{Adj } R^2 = .32$ ).

Gender and education did not significantly predict any of the variance ( $F(2, 47) = 2.72, p = .08, R^2 = .10, \text{Adj } R^2 = .06$ ). In step 2 religious strength scores were entered into the regression equation. The change of variance accounted for ( $R^2$ ) was .16 and the overall step did not significantly predict any of the variance ( $F(1, 46) = 3.22, p = .08$ ). Type of religiosity (extrinsic, intrinsic and quest) accounted for 40% of the variance in principled morality scores in this sample ( $F(3, 43) = 5.78, p = .002, R^2 = .40, \text{Adj } R^2 = .32$ ). Quest religiosity was a significant predictor of P-scores ( $\beta = .50, p < .001$ ). Extrinsic ( $\beta = .01, p = .96$ ) and intrinsic religiosity ( $\beta = .01, p = .60$ ) did not significantly account for any of the variance.

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Table 1. Hierarchical Regression for Predictors of Percentage of P-scores Variable change

	R <sup>2</sup>	Adj R <sup>2</sup>	F
Step 1 2.72	.10	.06	
Gender	0.24		
Education	0.24		
Step 2 3.22	.16	.11	
Religious strength	0.24		
Step 3 5.78	.40	.32	
Extrinsic religiosity	0.01		
Intrinsic religiosity	0.01		
Quest religiosity	0.50*		

Significance level: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

was found to be statistically significant and in line with previous research (Glover, 1997). Likewise, these results appear to refute Kohlberg's original claim that religion shows no correlation with moral development (Kohlberg, 1967).

The second hypothesis considered the religious sample and what elements of religiosity would predict moral reasoning. Based on previous research, the role of gender, education, strength of religion and type of religion (extrinsic, intrinsic and

	P-score	Gender	Education	Strength	Extrinsic	Intrinsic	Quest
P-score:		.296*	.081	-.131	-.098	.194	.515***
Gender	.296*		-.149	.171	-.301*	.101	-.233
Education	.081	-.149		.309*	-.144	-.289*	.047
Strength	-.131	.171	.309*		-.415***	-.739***	-.124
Extrinsic	-.098	-.301*	-.144	-.415***		.233	.209
Intrinsic	.194	.101	-.289*	-.739***	.233		.068
Quest	.515***	-.233	.047	-.124	.209	.068	
* $p < .05$ , ** $p < .01$ , *** $p < .001$							

## Discussion

Both principle hypotheses of this study were confirmed.

Religious participants were less likely to display postconventional moral reasoning. Results indicated that participants who identify as religious displayed lower principled morality scores than those who identify as non-religious. This difference

(quest) were all assessed as possible predictors in this model. The overall model was significant. Quest religiosity was found to make significant contributions to predicting principled moral reasoning amongst participants. In contrast, there was little evidence to show significant links between postconventional reasoning and the other religiosity variables. Extrinsic and intrinsic religiosity did not make significant contributions, nor did religious strength. These results appear to support the literat-

re that points to quest religiosity as the strongest associate with postconventional moral reasoning amongst religious samples (Sapp and Jones, 1986). The other factors explored in this study were not found to be significant predictors of post-conventional reasoning.

The significant difference in P-scores amongst religious and non-religious participants could be explained by decision-making processes as suggested by previous investigations and theory. Research suggests religious people are more likely to prefer order, traditions and conformity in their lives, as well as displaying a tendency to base decisions on expectations of authority figures (Duriez, 2004). This may explain lower principled morality scores among this cohort as in line with Kohlberg's stages of moral development. Adherence to authority and social norms is indicative of the conventional level of reasoning according to Kohlberg's theoretical framework, thereby resulting in diminished P-scores. It is important to note that this is not to suggest that religious people hold prejudiced attitudes or lack empathy, rather they may simply employ different methods of decision-making based on their faith. Although they may exhibit greater levels of conservatism than non-religious people this does not correspond with a greater lack of tolerance overall (Duriez, 2004).

Of the religious sample, quest religiosity was found to be a significant predic-

tor of postconventional moral reasoning. As mentioned previously those of quest religiosity are thought to be predisposed to think in less rigid ways when dealing with social issues (Ji and Suh, 2008). Similarly, they are seen to display lower levels of tolerance for social conventions and norms, a hallmark of postconventional reasoning exhibited in Kohlberg's higher stages (Batson et al, 1993). This stands in contrast to those who hold an extrinsic dimension to their religious faith. Extrinsic religiosity is believed to be adhered to by those who seek social and institutional approval and favour, again a hallmark of the conventional stages (Vainio, 2011).

Intrinsic religiosity was not seen to predict postconventional moral reasoning in this study. This appears to follow the line of Sapp and colleagues who reported an inverse relationship between intrinsic religiosity and the postconventional levels (Sapp and Gladding, 1989). A possible explanation for this may rest with the description of the intrinsic dimension as being internalised and followed as closely as possible (Ji, 2004). Depending on the doctrine of a particular religion this may affect the reasoning employed by an individual. Research has found that some religious believers justify moral choices by references to divinity-based concepts (Jensen, 1997).

Religious strength did not predict P-scores. Strength of religion appeared to be correlated with extrinsic and intrinsic

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religiosity. This may be explained by both the internalising aspect of religion displayed by intrinsic religiosity as well as the possible desire to appear religious as seen with extrinsic religiosity (Ji, 2004). This element of religiosity has not been thoroughly examined in relation to moral reasoning. It would appear type of religion exerts much stronger influence over the interpretation and solving of moral dilemmas than possession of strong faith. Future research would benefit from more stringent investigation into this area. Analysis of the different types of religiosity grouped by strength of faith could provide another dimension to the relationship between religion and moral development.

It has been noted that higher education can provide contexts and practices that encourage students to engage divergent perspectives when approaching problems or issues and this can be conducive to moral reasoning growth (Mayhew, Seifert and Pascarella, 2010). Rest identifies the college years as the time when postconventional reasoning is most salient and most crucial for moving individuals beyond conventional moral thinking (Rest, 1980). Likewise, evidence suggests that those of postgraduate level of education are more likely to exhibit postconventional reasoning over those of undergraduate level (Rest, 1986). It is thought that this stage of education contains greater exposure to social issues and requires a development of higher levels of abstract and analytical reasoning (Ji, 2004). This could make

individuals at this level more sensitive to moral issues and more likely to question social norms and rules.

This sample consisted of university students in order to account for educational levels based on previous theory, as well as to correspond with expected age ranges of late adolescence/early adulthood identified as being correlated with post-conventional reasoning (Rest et al, 2000). In the religious sample education level did not emerge as a predictor of P-scores. Future studies should consider using a more diverse sample in order to test whether levels of education impact P-scores. With reference to the current study, it may be interesting to examine the role of education as a potential mediator in the relationship between morality scores and type of religious faith.

Gender was not found to be a significant predictor of moral reasoning in the religious sample of this study. Gilligan proposed that women base moral decisions on different types of reasoning than men (1982). It was concluded that women rarely reached postconventional levels of moral reasoning and most often remained at the conventional stages, those of helping and pleasing (Gilligan, 1982). She theorised a 'morality of care', one considered as a separate moral orientation. The makeup of the sample was rather homogenous with over 66% of participants being female which may have resulted in a gender bias. In order to explore Gilligan's asserti-

ons, future studies should ensure an equally balanced sample.

The findings indicated that gender and education scores may have been approaching significance as predictors for moral reasoning. However, it is unclear as to whether these findings were indicative of an actual difference in moral reasoning between these groups, or if it was skewed by a sampling error. Future replications of this study should incorporate a larger number of participants that includes a more heterogeneous sample in terms of gender, as well as level and discipline of education, in order to avoid confounding the results. Furthermore, achieving a more diverse sample may have provided insight into differences in moral reasoning amongst different religions.

#### **Limitations and Future Studies.**

The current study contained a number of limitations that should be considered when interpreting the results:

The small sample size may have diminished the robustness of the results. Due to time constraints the religious sample ( $N = 50$ ) was too small for the regression analysis. As such, these results must be taken with caution.

The area of study may affect student's moral development (Moon, 1986). As such, the participant's discipline of study may have accounted for certain moral reasoning processes. Similarly, psycholo-

gy students have been reported to obtain higher morality scores than other students (Cesur, 1997; Bernardi et al, 2004). Given that a portion of the sample was psychology students completing in exchange for research credits, this may have had an effect on P-scores.

Social desirability may have influenced participant's responses to an extent. Measures of religiosity have been found to be particularly sensitive to response bias, with participants found to over-report their actual participation in religious services and other activities (Presser and Stinson, 1996). Likewise, studies involving moral dilemmas have been found to be particularly sensitive to social desirability (Reynolds and Ceranic, 2007). However, the online and anonymous nature of this study may have controlled for this effect.

The online setting of the study provided an efficient method of survey dissemination and analysis. However, this approach renders controlling for distraction and attention impossible. Participants were able to leave and return to the survey as often as they wished which may have influenced responses. Future replications may benefit from an exploratory setting in order to maintain concentration and attention.

Future studies may wish to focus on the quest element in relation to moral reasoning. The quest dimension in this study scored higher in morality than other eleme-

nts of religiosity, but the non-religious sample scored higher than the religious overall. Comparing an all-quest sample to a non-religious sample may provide insight into whether those of religious faith who question their doctrine might score differently from those without faith. Furthermore, an additional suggestion for future investigation is an analysis of the effects of different types of religiosity on different levels of moral reasoning, such as whether there exist greater effects of extrinsic/intrinsic religiosity on conventional reasoning, etc.

The literature on moral reasoning appears to highlight that moral education can be shaped in many ways such as through formal education, religious beliefs, and familial and social interactions. This is something to consider when investigating ways to encourage moral development. Research has found that schools who have some form of moral education separate from religious education resulted in students with higher P-scores than in schools where moral consideration was gained from religious classes alone (Vainio, 2011). Future research could consider the merits of secular moral education in schools that also provide religious instruction.

### **Conclusion**

Overall the results of this study suggest that it may be a construct of religiosity, but not religiosity itself, that influences

moral reasoning. The type of religiosity displayed by an individual might be the greatest indicator of the level of moral reasoning they are most likely to utilise. Understanding moral development is important as it is a process shaped by numerous factors such as society, education and personal life experiences. Early stages are imposed and shaped by social norms. It is later in life when different frameworks emerge that will govern decisions of a moral nature. However, it is important to note that the theory dealt with in this study is merely one approach. A frequent criticism of the Kohlbergian construct is its appointment of postconventional reasoning as being the pinnacle of moral development and as such being developmentally superior. Other approaches, such as that taken by Moral Foundations Theory, should be considered and further applied to research in this domain.

With an increasingly secular and questioning society the role of religion is of interest in identifying changes in moral reasoning. In light of these findings, one could further question the role of religious faith in moral development. It may be a case that a particular style of religious belief can influence moral reasoning. Future study should examine the role of the quest element of religion in particular, as it could be considered to promote moral development. In turn, further research could investigate the factors that result in differences in moral reasoning in religious subtypes and in the non-religious. Overall the find-



ings of this study suggest that it is necessary to explore the idiosyncrasies of religious faith, rather than looking at religion as a complete structure in itself. It may not be a case of the amount of faith one possesses with an all or none approach, but rather a question of type.

### References

- Allport, G. W. (1954). *The Nature of Prejudice*. Cambridge, MA: Perseus Books.
- Baril, G. L., & Wright, J. C. (2012). Different types of moral cognition: Moral stages versus moral foundations. *Personality and Individual Differences*, 53(4), 468-473.
- Batson, C.D. & Schoenrade, P. (1991). Measuring religion as quest. 1) Validity concerns. *Journal for the Scientific Study of Religion*, 30, 416-429.
- Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the Individual*. New York: Oxford University Press.
- Bernardi, R. A., Metzger, R. L., Bruno, R. G. S., Hoogkamp, M. A. W., Reyes, L. E., & Barnaby, G. H. (2004). Examining the decision process of students' cheating behavior: An empirical study. *Journal of Business Ethics*, 50, 397-414.
- Cesur, S. (1997). The relationship between cognitive and moral development. *Yayınlanmamış yüksek lisans tezi*, Bogaziçi Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Colby, A. & Kohlberg, L. (1987). *The Measurement of Moral Judgment Vol. 2: Standard Issue Scoring Manual*. Cambridge University Press.
- Crain, W.C. (1985). *Theories of Development*. Prentice-Hall.
- Dawson, T.L. (2002). New tools, new insights: Kohlberg's moral judgement stages revisited. *International Journal of Behavioral Development*, 26 (2), 154-166.
- Cushman, F., Young, L., & Greene, J. D. (2010). Our multi-system moral psychology: Towards a consensus view. *The Oxford handbook of moral psychology*, 47-71.
- Deka, N., & Broota, K.D. (1988). Relation between level of religiosity and principled moral judgment among four religious communities in India. *Journal of Personality and Clinical Studies*, 4, 151-156.
- Duriez, B. (2004). A research note on the relation between religiosity and racism: The importance of the way in which religious contents are being processed. *The International Journal for the Psychology of Religion*, 14, 175-189.
- Duriez, B. & Soenens, B. (2006). Religiosity, moral attitudes and moral competence: A critical investigation of the religiosity-morality relation. *International Journal of Behavioral Development*, 31, 75 - 82.

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- Ernsberger, D. J., & Manaster, G. J. (1981). Moral development, intrinsic/extrinsic religious orientation and denominational teaching. *Genetic Psychology Monograph*, 104, 23-41.
- Gilligan, C. (1982). In a different voice. Cambridge, MA, Harvard University Press.
- Glover, R. J. (1997). Relationships in moral reasoning and religion among members of conservative, moderate, and liberal religious groups. *The Journal Of Social Psychology*, 137(2), 247-255.
- Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individuals into moral communities. *Personality and Social Psychology Review*, 14(1), 140-150.
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, 133(4), 55-66.
- Hills, P., Francis, L.J., Argyke, M. & Jackson, C.L. (2004). Primary personality trait correlations of religious practice and orientation. *Personality and Individual Differences*, 36, 61-73.
- Hills, P., Francis, L.J., & Robbins, M. (2004). The development of the Revised Religious Life Inventory (RLI-R) by exploratory and confirmatory factor analysis. Welsh Centre for Religious Education.
- Jaffee, S. & Hyde, J.S. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin*, 126, 703-726.
- Jensen, L. (1997). Different world views, different morals. *Human Development*, 40, 325-344.
- Ji, C. C. (2004). Religious Orientations in Moral Development. *Journal Of Psychology & Christianity*, 23(1), 22-30.
- Ji, C. C., & Suh, K. (2008). Doctrinal faith and religious orientations in right-wing authoritarianism: A pilot study of American and Korean Protestant college students. *Journal Of Psychology And Christianity*, 27(3), 253-265.
- Ji, C. C., Ibrahim, Y., & Kim, S. (2009). Islamic personal religion and moral reasoning in social justice and equality: The evidence from Indonesian college students. *International Journal For The Psychology Of Religion*, 19(4), 259-274.
- Kohlberg, L. (1967). Moral and religious education and the public schools: A developmental view. In T. Sizer, (Ed.). *Religion and Public Education*. Boston: Houghton Mifflin.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-development approach to socialization. In D.A. Goslin (Ed.) *Handbook of Socialization Theory*, 347-480. Chicago: Rand McNally.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, Research, and Social Issues*, 31-53. New York: Holt, Rinehart and Winston.

- Kohlberg, L. (1981). The philosophy of moral development: Moral stages and the idea of justice. San Francisco: Harper & Row.
- Lewis, C.A., Shevlin, M., McGuckin, C., & Navratil, M. (2001). The Santa Clara Strength of Religious Faith Questionnaire: Confirmatory factor analysis. *Pastoral Psychology*, 49, 379-384.
- Mayhew, M.J., Seifert, T.A., & Pascarella, E.T. (2010). A multi-institutional assessment of moral reasoning development among first-year students. *Review of Higher Education*, 33(3), 357-390.
- Moon, Y. (1986). A review of cross-cultural studies on moral judgment development using the Defining Issues Test. *Behavior Science Research*, 20(1-4), 147-177.
- Nisan, M. & Kohlberg, L. (1982). Universality and variation in moral judgment: A longitudinal and cross-sectional study in Turkey. *Child Development*, 53, 865-876.
- Plante, T.G., & Boccaccini, M. (1997). The Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, 45, 375-387.
- Plante, T.G., Vallaey, C., Sherman, A.C., & Wallston, K.A. (2002). The development of a brief version of the Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, 50, 359-368.
- Presser, S., & Stinson, L. (1998). Data collection mode and social desirability bias in self-reported religious attendance." *American Sociological Review* 63, 137-45.
- Rest, J.R. (1979). *Development in Judging Moral Issues*. University of Minnesota Press.
- Rest, J.R. (1980). Moral judgment research and the cognitive-development approach to moral education. *The Personnel and Guidance Journal*, 58 (9), 602-605.
- Rest, J.R. (1986). *Moral development: Advances in research and theory*. New York: Praeger. University of Minnesota.
- Rest, J.R. & Narvaez, D. (Eds.) (1994). *Moral development in the professions: Psychology and applied ethics*. Hillsdale, NJ: Lawrence Erlbaum.
- Rest, J.R., Thoma, S.J., Navaez, D. & Bebeau, M.J. (1997). Alchemy and beyond: Indexing the Defining Issues Test. *Journal of Educational Psychology*, 89, 498-507.
- Rest, J.R., Thoma, S.J., Navaez, D. & Bebeau, M.J. (2000). A neo-Kohlbergian approach to morality research. *Journal of Moral Education*, 29, 381-396.
- Reynolds, S.J., & Ceranic, T.L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology*, 92, 1610 – 1624.

Sapp, G. L., & Gladding, S. T. (1989). Correlates of religious orientation, religiosity, and moral judgment. *Counseling and Values*, 33, 140-145.

Sapp, G. L., & Jones, L. (1986). Religious orientation and moral judgment. *Journal for the Scientific Study of Religion*, 25, 208-214.

Shee, S., Ji, C. C., & Boyatt, E. (2002). Religiosity in Christian educational leadership. *Journal of Research on Christian Education*, 11, 59-86.

Snarey, J.R., Reimer, J., & Kohlberg, L. (1985). Development of social-moral reasoning among Kibbutz adolescents: A longitudinal cross-cultural study. *Developmental Psychology*, 21, 3-17.

Vainio, A. (2011). Religious conviction, morality and social convention among Finnish adolescents. *Journal Of Moral Education*, 40(1), 73-87.

Wahrman, I.S. (1981). The relationship of dogmatism, religious affiliation, and moral judgment development. *The Journal of Psychology*, 108, 151-154.

