

Investigatory Study into the relationship

between Religiosity, Spirituality,

Prosocial Behaviour and Honesty

Dominique Smith

Submitted in partial fulfilment of the requirements of the Bachelor of Arts Degree

(Psychology Specialization) at DBS School of Arts, Dublin.

Supervisor: Dr. John Hyland

Head of Department: Dr. Sinead Eccles

March 2013

Department of Psychology

DBS School of Arts

## Table of Contents

Acknowledgements .....	4
Abstract .....	5
1. Introduction to Literature Review .....	6
1.1 Understanding the main approaches .....	6
1.1.1 Religiosity .....	6
1.1.2 Spirituality .....	9
1.1.3 Prosocial Behaviour .....	11
1.1.4 Honesty .....	13
1.2 Linking the main concepts .....	14
1.2.1 Religiosity and Spirituality .....	14
1.2.2 Religiosity, Spirituality and Prosocial Behaviour .....	15
1.2.3 Religiosity, Spirituality and Honesty .....	17
1.2.4 Honesty and Prosocial Behaviour .....	18
1.3 Current Research .....	19
1.4 Formulation of the Hypotheses .....	20
2. Methodology .....	21
2.1 Participants .....	21
2.2 Design .....	21
2.3 Materials .....	22

2.3.1	Religiosity Measure .....	22
2.3.2	Daily Spirituality Experience Scale .....	22
2.3.3	Prosocial Personality Battery .....	23
2.3.4	Integrity/Honesty/Authenticity Scale .....	24
2.4	Procedure .....	24
3.	Results .....	25
3.1	Descriptive Statistics .....	25
3.1.1	Descriptive Statistics for Gender and Age .....	25
3.1.2	Descriptive Statistics for Psychological Measures .....	26
3.2	Inferential Statistics .....	27
3.2.1	Hypothesis One .....	27
3.2.2	Hypothesis Two .....	28
3.2.3	Hypothesis Three .....	29
3.3	Further Analysis .....	30
3.3.1	Gender .....	30
3.3.2	Religiosity .....	31
3.3.3	Age .....	33
4.	Discussion .....	35
4.1	Findings and Previous Research .....	36
4.2	Further Analysis .....	41

4.3	Limitations and Strengths .....	42
4.4	Implications and Future Research .....	43
4.5	Conclusion .....	44
	References .....	45
	Appendix A : Questionnaire Booklet .....	54

## **Acknowledgements**

I would like to thank my supervisor Dr. John Hyland for the invaluable advice, help and support that he offered to me during this process. The advice and help was very much appreciated. I really could not have asked for a better supervisor.

I would also like to thank my friends and family, especially my mum for the support through the thesis process.

I would like to thank the participants who took part in this research and made the research project possible.

## **Abstract**

Previous literature has shown a significant relationship between Religiosity, Spirituality and Prosocial Behaviour. However, little research has been conducted with Honesty. In the present investigation, the aim was to assess this relationship between Religiosity, Spirituality, Prosocial Behaviour and Honesty. Differences in gender and age were also noted. One hundred and one DBS psychology students participated and completed a questionnaire booklet assessing the variables. Results revealed a strong significant negative association between Religiosity and Spirituality, indicating a relationship whereby participants are low in Religiosity but high in Spirituality scores. There was no significant relationship observed between Religiosity, Spirituality and Prosocial Behaviour or Religiosity, Spirituality and Honesty. Significant gender differences were found in Religiosity scores and differences in age were observed in Honesty scores. Limitations, future research and conclusions will be discussed.

## **1. Introduction to the literature review**

Religiosity and Spirituality have often been associated with beliefs, attributes, feelings, behaviours, relationships and experiences (Zinnbauer & Pargment, 2005). The 2011 Census statistics have shown that religion is rapidly changing (Central Statistics Office Report, 2012). In 2011, 84.2% of the Irish population were Roman Catholic, the lowest record of Catholicism in Ireland. In 1961, 94.9% of the population were Catholic, with this being the highest on record (Central Statistics Office Report, 2012). Most significantly is the increase in the non-Catholic population, driven up by numbers of no religion. The total number of those with no religion increased more than fourfold between 1991-2011. These statistics are of particular importance in the current study to investigate the relationship of religiosity, spirituality, prosocial behaviour and honesty. Much research has been conducted relating religiosity, spirituality and prosocial behaviour (Batson, Schoenrade & Ventis, 1993; Saroglou & Garland, 2004; Zinnbauer & Pargament, 2005); however there has been little research in the area of honesty. The present study was designed to forward research in this area by measuring religiosity and spirituality in a thorough manner and investigating their relationship with prosocial behaviour and honesty.

### ***1.1 Understanding the main approaches: Religiosity, Spirituality, Prosocial Behaviour and Honesty***

#### *1.1.1 Religiosity*

Religiosity is a term difficult to define (Hackney & Sanders, 2003). This is due to the broad nature of the concept; therefore it is defined by a variety of aspects. There is a real difficulty in defining religiosity in the area of scientific discovery (Paraschiva & Nicoleta, 2011). Many define this area as both beliefs and practices that relate to an organised religious affiliation, or a divine power (e.g., Pargament, 1997; Shafranske & Malony, 1990). Religiosity may also

stimulate an understanding of one's relationship and responsibility to others in a community (Koenig, McCullough & Larson, 2001). Loewenthal (2000), however, has defined religiosity as "the study of religious behaviour, thought and feeling" (p. 13). The diversity in definitions only further shows that religiosity is a complex area and can be viewed so differently by many. What is clear is that religiosity relates to a variety of religious activities, dedication and beliefs such as prayer and church attendance. Recent literature has pointed out that early research focused heavily on a unidimensional concept of religious attendance (e.g. Bergan & McConatha, 2000). These researchers indicated that dependence on religious attendance alone as a measure could lead to incorrect conclusions. For example, an immobile person could be deemed as not being very religious if they could not attend church services, however this may not be the case if they regularly took part in other religious practices and beliefs. Thus other dimensions of religiosity must be taken into account, such as private devotions and belief systems (Ellison, 1991; Kristensen, Pedersen & Williams, 2001). Further research of religiosity has emphasised the multidirectional focus of religiosity; such as behavioural, social, cognitive, subjective and cultural dimensions (e.g., Ellison, 1991; Ellison, Gay and Glass, 1989). Inglis (1998) has also emphasised the decline of the influence of the Catholic Church in Ireland, particularly in many fields of Irish social life. It can be said that we live in a rapidly changing culture whereby it is no longer necessary to adhere to strict Catholic rituals. Religious Ireland has changed with modern times. The current study aims to research the multi-directionality of religiosity, in relation to Spirituality, Prosocial Behaviour and Honesty and in particular investigate the claims of change in Religiosity in Ireland.

Religiosity has been researched with connections to other psychological areas, such as; health (McCullough & Laurenceau, 2005), stress (Clements & Ermakova, 2012), and subjective well-being (Witter, William, Morris & Marilyn, 1985). Religiosity has been

researched extensively in relation to health. McCullough and Laurenceau (2005) used previously collected data from the Terman Life-Cycle Study of Children with High Ability. Gifted boys and girls with an IQ over 135 were tested, with an average year of birth of 1940. Religiosity was assessed in 1941 and was used to predict self-related health from 1940-1999. Results from the data controlled for health behaviours, social involvement and personality factors. Women that were highly religious in 1940 had higher mean self-rated health throughout the lifespan and slower rates of decline in self-rated health over time compared to women who were less religious. However, results for men showed no association between religiosity and self-rated health. Religiosity has also been linked with self-esteem. The changes in levels and degrees of religiosity were tested in a Northwestern University in the United States (Stoppa & Leftkowitz, 2010). Four hundred and thirty four college students participated of which 52% were female, and 48% were male. These students had a diverse range of ethnic backgrounds, such as African, Latino and European American heritage. This study took place over the first 3 semesters of university. Significant decreases in religious service and activity attendance were reported. However, the importance of religious beliefs tended to remain stable. Gender differences were also observed as women showed a greater emphasis on the importance of religion compared with men. Recent research has shown the impact of religiosity on a wide range of issues. The current study aims to find any associations between religiosity and the remaining variables of spirituality, pro-social behaviour and honesty. Previous literature has joined Religiosity and Spirituality together in many studies, the current study intends to separate this bond, to show that they are different constructs and may possibly have their own relationship.

### *1.1.2 Spirituality*

The distinction between spirituality and religiosity in literature is a difficult one. The terms are often used interchangeably. Definitions of both indicate that they are separate constructs.

Koenig, McCullough and Larson (2001) offer an interesting definition of spirituality:

Spirituality is the personal quest for understanding answers to ultimate questions about life, about meaning, and about relationship to the sacred or transcendent, which may (or may not) lead to or arise from the development of religious rituals and the formation of community (p. 18).

Numerous scholars contest that religiosity and spirituality represent different constructs and the distinctness needs to be recognised (Piedmont, 2004). Spirituality is an experience that is meant to create meaning in one's life (Cook, 2000). This means that spirituality relates to an inner experience, and may or may not lead or stem from religious affiliation. Piedmont (2005) maintained that spirituality is a reflection of a person's effort to create a sense of meaning and purpose to their life. Research in this area has led to the development of four dimensions of spirituality (Haug, 1998). These dimensions influence the functionality of a human being. These are; the cognitive one, which interprets life's happenings through spirituality, accepts the past, appreciates the present and looks toward the future. Next is the behaviourist one; the religious rituals and practices the individual sees in themselves, the others and the community. Third is the affective one; whereby spirituality brings hope, love, care and security. The final dimension proposed by Haugh is the developmental one; whereby the individual lives with spirituality in their life and integrate the lessons and experiences of life.

Spirituality has been linked with many other research topics; depression (Doolittle & Farrell, 2004) and life satisfaction (Zullig, Ward & Horn, 2006). Zullig et al., (2006) investigated the mediating role of perceived health between perceived spirituality and life satisfaction. Results from 522 students found that self-reported perceived spirituality and satisfaction with life is mediated by self-perceived health among college students. Students that describe themselves as spiritual are more likely to report greater self-perceived health, which influences life satisfaction. Doolittle and Farrell (2004) found a correlation between depression and spirituality. Ninety nine adults in a primary care clinic considered themselves spiritual while 76 adults considered themselves depressed. Higher overall spirituality scores correlated with fewer depressive symptoms. Belief in a higher power, having a relationship with a higher power and belief in prayer showed significant differences between depressed and nondepressed individuals. It was suggested that finding ways to encourage beliefs may benefit depressive symptoms. Kashdan and Nezlek (2012) found a relationship between spirituality and self-esteem. Eighty seven participants provided reports of their daily spirituality using The Daily Spiritual Experience Scale (Underwood, 2006). Daily spirituality was positively related to meaning in life, positive affect and self-esteem. The link from daily spirituality to self-esteem and positive affect was mediated by meaning in life. Within person relationships between daily spirituality and meaning in life and self-esteem were stronger for people higher in trait spirituality. Results have shown new insights into spirituality and how spirituality operates as an alternating experience in daily life. Previous literature has shown that spirituality is linked with depression, life satisfaction and self-esteem. The current study involves the use of The Daily Spiritual Experience Scale. Therefore any results will be interesting in a comparison with the study of depression and spirituality. The current study aims to further investigate the role of spirituality and its connection with religiosity, prosocial behaviour and honesty.

### *1.1.3 Prosocial Behaviour*

Prosocial behaviours are behaviours that are commonly beneficial to society. Baron, Branscombe and Byrne (2005) defined pro-social behaviour as “Helpful action that benefits other people without necessarily providing any direct benefits to the person performing the act and may involve a risk for the person that helps”(p. 379). The area was a relatively under researched area until the 1960’s and 1970’s. There was a dramatic increase in research which mainly focused on bystander assistance and spontaneous helping (Dovidio, Piliavin, Schroeder & Penner, 2006). Interest was kindled after Kitty Genovese was murdered in 1964 in the street outside her apartment. There were 38 bystanders but no one assisted in helping her. Latane and Darley (1970) researched this event and researched the connection with prosocial behaviour and bystander apathy. The researchers developed a five step process that an individual must go through before deciding to help someone in need. A bystander in a situation, whereby a victim needs help, is in an unenviable position (Latané & Darley, 1970). The bystander must; notice the event, interpret the event as an emergency, consider the responsibility to act, know an appropriate form of action and act on that decision to help. There is also added risk to the bystander, such as injury, shame and embarrassment, which also adds to the decision to help (Cacioppo, Losch & Petty, 1986). Scholars have suggested that the motives for prosocial behaviours are linked to the need to belong (Bowlby, 1969; Baumeister & Leary, 1995). This suggests that prosocial behaviours benefit others but also strengthen the sense of community. These behaviours also strengthen social bonds, due to the desire to have others need, appreciate and value us. People satisfy this desire to be valued and admired by their social group (Fiske, 1992).

There is an abundance of research concerning prosocial behaviour. It has been associated with many topics such as; value-affirmation (Bushman, de Castro, Reijntjes & Thomaes, 2012) childhood memories (Francesca & Sreedhari, 2012) and influence of social class (Piff, Kraus, Côté, Cheng and Keltner, 2010). Recent literature suggests that prosocial behaviour is linked to emotional empathy (Levenson, Goodkind, Gyurak, & Sze, 2011). Seventy one young adults, aged 20-30, 72 middle aged adults, aged 40-50 and 70 older adults, aged 60-80 were participants in an experiment. Participants completed a questionnaire packet composed of personality and emotional experience questionnaire prior to the visit. Physiological sensors were attached to the participants and they completed an emotional experience questionnaire. Participants viewed two films portraying individuals in need and then had the opportunity to contribute to two related charities. Results showed that emotional empathy increased with age, pro-social behaviour increased with age and aspects of emotional empathy partially accounted for age related increases in prosocial behaviour. Previous research has shown that playing violent video games has various negative effects on social behaviour. It causes increases in aggressive behaviour and a decrease in prosocial behaviour. However, Greitemeyer and Osswald (2010) tested whether prosocial video games had a positive relationship with prosocial behaviour. Four experiments were completed and it was found that they are positively related to increase prosocial behaviour. Participants that played the prosocial video game were more likely to; help the experimenter pick up spilled pencils, were more willing to assist in further experiments and help a harassed experimenter. Therefore, there was an increase in unrequested and requested helping as well as low cost and high cost helping. Prosocial behaviour has been researched extensively in a variety of areas including Religiosity and Spirituality. Indeed, previous literature has found a significant relationship between them. However, Prosocial behaviour warrants further research into the area of Honesty. Therefore, this is a major aim of the current study.

#### *1.1.4 Honesty*

Honesty is a human characteristic that reflects an investigation for truthfulness, rather than deceit, in thought and action (Thorkidsen & Hanus, 2009). Honesty can be a character trait that influences whether individuals respond genuinely or behave sincerely in particular situations. It can also be a state that is elicited by the demands of different experiences; individuals will respond sincerely when they have learned that truthfulness is always beneficial (Thorkidsen & Hanus, 2009). Recent research has shown that honesty results from the absence of temptation (Greene & Paxton, 2009). This is known as the Grace hypothesis, implying that there is no need to resist temptation when the opportunity for dishonest gain is present. Therefore, the Grace hypothesis presumes that honest individuals will show no further control related activity when they choose to resist dishonest behaviour. Participants underwent an fMRI scan to examine neural activity when confronted with the opportunity for dishonest gain. Participants gained money by correctly predicting the outcomes of computerised coin flips. In some trials participants recorded the predictions in advance of the coin flip. In others, participants were compensated based on self-reported accuracy. This allowed them to gain money dishonestly, by lying about the accuracy of the predictions. Results from the scan supported the Grace hypothesis. Bickman (1971) investigated the impact of social status on honesty. Two hundred and six people who used specified phone booths in Grand Central Station and Kennedy Airport in New York City were a part of the research. Eighty Five percent of participants were white and 46% were male. Social status of participants was recorded and 43% were low status and the remainder were high status. Three male and three female individuals acted as the stimulus person, and their social class was determined by the clothes they wore. The stimulus person entered the phone booth and placed a dime on the shelf and consequently left. The stimulus person observed the subject after they

entered the phone booth, and noted if they took or used the dime. After 2 minutes the stimulus person approached him, tapped on the door and said they had left a dime in the phone booth and asked if they had found it. The stimulus person recorded whether the dime was returned or not. Results of the study showed that a person's honesty was dependent upon the person with whom they were interacting. When the subjects thought they were interacting with a high status person, they returned the dime more than twice as often as when they perceived the stimulus person to be of low status.

## ***1.2 Linking the concepts***

### *1.2.1 Linking the concepts: Religiosity and Spirituality*

Previous research has shown a link between Religiosity and Spirituality (Zinnbauer et al., 1997). Still an ongoing psychological issue, Religiosity and Spirituality are seen as independent constructs that have the capacity to overlap one another within an individual. Zinnbauer et al., (1997) aimed to delineate Religiosity and Spirituality with a heterogeneous sample assessing individual self-described Religiousness and Spirituality. Participants had to describe their own Religiosity and Spirituality. Three conclusions were made from this study. The first was that participants described Religiousness and Spirituality as somewhat different concepts. Participants' definitions of Religiousness included institutional beliefs and practices, such as church attendance and commitment to a specific belief system, and personal beliefs. Whereas Spirituality was most often defined in terms of personal and individual experience, such as belief or a relationship with God or a higher power. Another interesting conclusion was that Religiousness and Spirituality were not seen to be fully independent. There was a significant correlation between self-ratings of Religiousness and Spirituality. Seventy four percent of participants identified themselves as Spiritual and religious, while 19% were Spiritual but not religious. Finally, there were differences in

Religiousness and Spirituality and the variability in definitions for these terms. Participants did not view Religiousness and Spirituality as synonymous; however they were also not viewed as mutually exclusive. This only highlights the relationship between Religiosity and Spirituality that they are separate constructs but are linked in many respects. Nelson, Jacobson, Weinberger, Bhaskaran, Rosenfeld, Breitbart and Roth (2009) aimed to clarify the relationship between Religiosity and Spirituality. The study tested the role of spirituality, religiosity and depression in prostate cancer patients. Results showed a strong association between religiosity and spirituality among the sample of men with prostate cancer. Religiosity demonstrated a stronger association with the faith aspect of spirituality compared with the meaning and peace component. Thus, religiosity and spirituality had a significant relationship for the cancer patients. Much previous research has dealt with Religiosity and Spirituality as singular concepts and has combined their individual meaning. Thus research assessing these separate constructs is sparse. This is a major reason for conducting the present research, to further understand the relationship between Religiosity and Spirituality.

### *1.2.2 Linking the concepts: Religiosity, Spirituality and Prosocial Behaviour*

Literature has shown that there is an association between religiosity, spirituality and prosocial behaviour (Saroglou & Garland, 2004). Self-report measures of different aspects of prosocial behaviour, such as helping behaviour, volunteering, agreeable personality, and forgiveness, provide evidence of this. Religious people report being prosocial across the range of ways that prosociality is expressed (Batson, Schoenrade & Ventis, 1993; McCullough & Worthington, 1999; Saroglou & Galand, 2004). Spirituality, therefore, can also be linked to prosocial behaviour as it includes a search for a meaning of life, acceptance of transcendence and a sense of connectedness (Saroglou, 2006). Furthermore, as spirituality is defined as being different from religiosity, as it is not limited to a specific religious tradition, then it is assumed that there will be an extension of the link to prosocial behaviour (Zinnbauer and

Pargament, 2005). A number of studies have suggested that religiosity has a causal connection to an assortment of prosocial behaviours, such as greater moral behaviour, helpfulness and self control (Galen, 2012). Saroglou, Pichon, Trompette, Verschuere and Dernelle (2005) carried out 4 experiments to investigate this link. Results showed that the perception of prosociality was not a mere self-delusion of religious people. Projective measures were used, keeping the true goal of the research secret from participants; research revealed that religious people tend not to respond aggressively when challenged with everyday hassles. Research also showed that females are likely to help a hypothetical family member in need but not necessarily a nonfamily member. Research exposed the fact that religious people perceive themselves as behaving prosocially but it was confirmed by various kinds of peers also. Similarly with religiosity, the importance of spirituality in life was affiliated with helping those close to the individual and to high scores of prosociality. Research investigating the impact of religion priming on subsequent reactions was carried out by Pichon, Boccato and Saroglou (2006). In study 1, religion-associated and control words were used as subliminal primes. The number of charity leaflets taken by the participant after the priming was counted. In study 2, after priming had occurred, a lexical decision task was completed to assess prosocial related items. Results showed that priming positive religion activates behavioural schemas and concepts related to prosociality. Positive religious priming resulted in an increase of prosociality in both studies. However neutral or negative religious priming showed no increase in prosocial behaviour. This indicates that only positive religion evokes pro-social images (Pichon, Boccato & Saroglou, 2006). Shariff and Norenzayan (2007) carried out 2 studies aimed at resolving experimentally whether religion increases prosocial behaviour in the anonymous dictator game. The first study concerned implicitly primed God concepts among students and examined how this affected their generosity in the dictator game. The second study replicated the first study but the sample was a larger

community sample. It was found that God concepts increased prosocial behaviour. This was the case even when it was anonymous behaviour and directed at strangers. Ahmed (2009) also investigated religiosity and pro-social behaviour using the dictator experiment and public goods experiment. One hundred and two participants from India took part, with 42 students training to be imams, Indian clergy, and 60 students from the local college. Religious participants contributed significantly higher amounts in public goods game and donated significantly higher amounts in the dictator game than other participants. However it is important to note that there may be another explanation for these findings. It can be assumed that very religious individuals about to enter the clergy would be somewhat more pro-social, as they will be entering a profession that generally focuses on selflessly helping others.

### *1.2.3 Linking the concepts: religiosity, spirituality and honesty*

Research in the area of religiosity, spirituality and honesty is very limiting. Few articles have been found relating to this topic. Shotland and Berger (1970) found that an act of honesty was related to the hope for an acquirement of a religious end state, such as salvation. One hundred and thirty one female line workers in Midwest, USA, took part in the research. Questionnaires were distributed to the workers, however only 39% of the workers returned the scoring pencil attached with the questionnaire. The majority of workers were of strict religious denominations. Pencil returners ranked honest and salvation significantly higher on questionnaire than non-returners. Results of this experiment has led to the conclusion that the two values of honest and salvation are predictors of honesty as measured by the act of returning the pencil handed out with the questionnaire. Honesty has also been linked with the value one places on the self, family, work and religion (Hyde & Weathington, 2006). There were 153 participants and in the study people who value religion had higher honesty in the

workplace than others did. The interaction of the values of religion was also significantly, positively correlated with honesty. Randolph-Seng and Nielson (2007) found that behaviour is influenced by religious representations. Participants were influenced to be honest by religious scrambled sentences that were used in the experiment. Perrin (2000) used a 7-item religiosity survey to test honesty and religiosity. One hundred and fifty undergrads at a Western US University took part. Unbeknownst to the participants, they then took part in an experiment. A teaching assistant in the class purposely graded a quiz incorrectly, giving every student one extra point. The quizzes were returned and students were informed of the possible mistake. Students then had to grade their own quiz and were asked to be honest about whether they had received an extra point. They then had to indicate if they were owed a point, owe a point or whether the marking was correct. Thirty two percent of students were honest about receiving the extra point, 52% said the quiz was graded correctly and 16% claimed they were owed a point. Results showed that those who scored high on religiosity behaved more honestly than others. However, research in this area is sparse and further examination of these variables needs to be completed.

#### *1.2.4 Linking the concepts: Honesty and Prosocial Behaviour*

Honesty and Prosocial Behaviour are two variables that could go hand in hand. Prosocial behaviour is any helpful action that benefits other people without necessarily providing direct benefit to the individual performing the act. Honesty is a human characteristic that influences whether an individual responds genuinely or behaves sincerely in situations. Thus, it could be said that honesty is a characteristic of Prosocial Behaviour. However, there is little research regarding the relationship between the two. Van Lange and Kulhman (1994) tested whether the manipulation of a partner's honesty and intelligence influenced the individual's own prosocial behaviour in a social dilemma. Responses to 3 decomposed games determined the subject's social value orientation. This involved making choices between specific

combinations of outcomes for oneself and a hypothetical other. A social dilemma was then introduced. This study found that pro-social subjects assigned greater weight to honesty information and a prosocials' choice behaviour was more strongly influenced by information about honesty than anything else. This study has shown that there is a link between honesty and prosocial behaviour. The aim of the present study is to investigate this link further.

### ***1.3 The Current Research***

The current study aims to look at the relationship between religiosity, spirituality, prosocial behaviour and honesty. The main rationale for conducting this research has stemmed from the minimal number of studies and research relating to this area. This is particularly in relation to honesty. This is a particularly under-researched area and the association needs to be known. Indeed there is no known research, encompassing all four variables in the study. A further issue of previous literature has seen the formation of Spirituality and Religiosity into one construct. A major aim of the current research is to delineate the two and appropriately assess any possible association between them. This is interesting as the relationship has not yet been explored in much detail.

The areas under investigation will be assessed using a questionnaire booklet under a Mixed Quasi-Experimental Correlational Design.

Thus the aim of this study is investigate the relationship of these variables and to find if there are any differences between the gender and age of participants. This research should provide great insight particularly into the area of religiosity, spirituality, prosocial behaviour and honesty. This will also be important in assessing the relationship, using Irish University Students as participants.

#### ***1.4 Formulation of the Hypothesis***

The above research has led to the formulation of these hypotheses.

##### Hypothesis One

It is hypothesised that there will be a relationship between religiosity, spirituality and prosocial behaviour.

##### Hypothesis Two

It is hypothesised that there will be a relationship between religiosity, spirituality and honesty.

##### Hypothesis Three

It is hypothesised that there will be a relationship between religiosity, spirituality, prosocial behaviour, and honesty.

## **2. Method**

### ***2.1 Participants***

There were 101 participants in this study. There were 74 females (N=74, 73.3%) and 27 males (N=27, 26.7%). Participant ages ranged from 18 to 51. There were 3 missing age variables. The mean age of respondents was 27.69 and the Standard Deviation of age is 8.72. The population from which the sample was derived is college students in Ireland. The respondents were made up of a convenience sample of Dublin Business School Undergraduate and Higher Diploma Students. The students that participated were recruited in various psychology classes in first and second year in Undergraduate and Higher Diploma classes. Participants volunteered to take part. There were no incentives or pay offered to participants for completing the questionnaire booklet. All participants were asked to complete the survey only if they were over the age of 18 years.

### ***2.2 Design***

This was a Mixed Quasi-Experimental Correlational Design. The Quasi-Experimental component is Gender. Religiosity, Spirituality, Prosocial Behaviour and Honesty make up the Correlational aspect of the study. In the Quasi-Experimental aspect, Gender is the Independent variable and Religiosity, Spirituality, Prosocial Behaviour and Honesty are considered the Dependent Variables. Religiosity and Spirituality are the Predictor Variables in the Correlational condition, while Prosocial Behaviour and Honesty are the Criterion Variables. Age was also measured in order to provide an overview of participants in the descriptive statistics in the results section.

## **2.3 Materials**

Materials were self-administered, paper-and-pencil questionnaires. The Religiosity Measure (Rohrbaugh & Jessor, 1975) assessed how religious each participant felt they were and The Daily Spiritual Experience Scale (Underwood, 2006) is used to investigate ordinary spirituality experience. The Prosocial Personality Battery (Penner, 2002) is used to measure prosocial personality orientation and Integrity/Honesty/Authenticity Scale (Goldberg, Johnson, Eber, Hogan, Ashton, Cloniger & Gough, 2006) assesses the degree of honesty/integrity a person believes they have.

### *2.3.1 Religiosity Measure*

The Religiosity Measure (Rohrbaugh & Jessor, 1975) was developed to evaluate the impact of religion in a participant's daily life. It is also used to examine the extent of individual participation in ritual practices. The scale has no particular religious affiliation, therefore is applicable to any religion. The measure is based upon the four dimensions of religiosity; ritual, consequential, ideological and experimental. This is an 8 item multiple choice, self-administered questionnaire. Items include questions such as; "When you have a serious personal problem how often do you take religious advice or teaching into consideration?" Participants answered the questions by circling the appropriate response that accurately relate to them. Each item is scored from 0 (indicating least religiosity) to a score of 4 (indicating greatest religiosity). This is with the exception of question 1; "How often have you attended religious services during the past year?" allowing respondents to answer this themselves. Maximum score for each of the 4 subscales is 8, with a total score of 32. This questionnaire is easy to administer and is short to answer. Cronbach's coefficient alphas were over .90, indicating that there is a high internal consistency for the measure (Rohbaugh & Jessor, 1975).

### *2.3.2 Daily Spiritual Experience Scale*

This 16-item self-report scale (Underwood, 2006) is used to assess ordinary spiritual experiences in daily life. The instrument includes constructs such as awe, gratitude, mercy, sense of connection with the divine/transcendent, compassionate love and desire for closeness to God. The measure includes awareness of inspiration and transcendent sense of self. Items included are; “I experience a connection to all life” and “I ask for God’s help in the midst of daily activities”. The first 15 items of the questionnaire can be rated from 1 → 6, requiring the respondent to indicate which answer applies best. 1 indicates many times a day, to 6 which means never or almost never. Question 16 is rated from 1 → 4, 1 indicates not at all while 4 means as close as possible. Respondents had to answer, “In general, how close do you feel to God?” Cronbach’s Coefficient Alpha for the 16-item scale has been consistently high at .89 or above, indicating reliability of the scale (Underwood & Teresi, 2002).

### *2.3.3 Prosocial Personality Battery*

The Prosocial Personality Battery (Penner, 2002) is used to assess prosocial personality orientation. This is the lasting dispositional tendency for an individual to think about the rights and well-being of others, to feel empathy and worry for others and to behave in a manner that benefits others. This is a 30-item self report measure that consists of four scales: social responsibility scale, empathy scale, moral reasoning scale and self-reported altruism scale. These scales represent two factors: Other-Oriented Empathy; the tendency to feel empathy and concern for others. The second is Helpfulness; the tendency, based on past experiences, to perform helpful acts. Items in the scale include; “I am often quite touched by things that I see happen” and “My decisions are usually based on concern for the welfare of others”. Participants respond to the items using five point likert scales. Cronbach’s Coefficient Alpha for the individual scales range from .64 to .77 (Penner, 2002).

### *2.3.4 Integrity/Honesty/Authenticity Scale*

Integrity/Honesty/Authenticity Scale (Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger & Gough, 2006) is used to determine how honest the participant believes that they are. The measure is intended to assess how the respondent describes themselves now and not as they wish to be in the future. The scale consists of 9 items that require respondents to answer with a 5-point likert scale. Items include “I am trusted to keep secrets” and “I believe honesty is the basis for truth”. Participants are instructed to use the rating scale to describe how accurately each statement describes them. Cronbach’s Coefficient Alpha for this scale is .72 (Goldberg et al., 2006).

## **2.4 Procedure**

The questionnaire booklet was composed from the previously mentioned questionnaires. The questionnaire was provided to the participants (see Appendix 1). This included a cover sheet which explained the rationale for the research. The cover sheet also informed participant of the right to participant in the study and that there was absolute anonymity. Due to the nature of some of the questions, participants were reminded that if they did not feel comfortable with completing the questionnaire, then they could withdraw at any time. If participants wished to take part, then they were required to tick a box to agree to participate and only if they were over the age of 18. The questionnaire booklet also included a demographics section, to provide gender and age of the participants. The final page of the booklet thanked the participants for taking part and provided them with support contacts if needed. This included the researchers contact details if participants had any questions about the study. Participants were then asked by the researcher if they had any questions regarding the study and what had taken place.

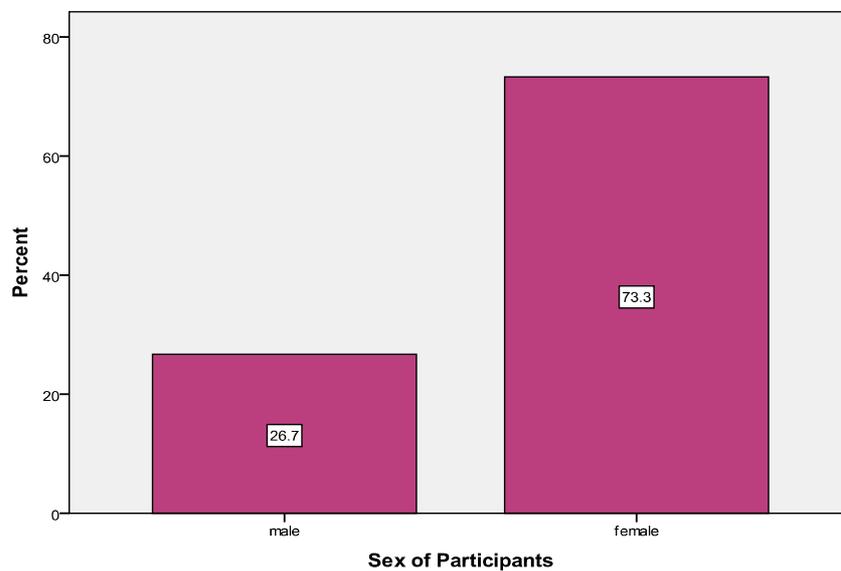
### 3. Results

#### 3.1 Descriptive Statistics

##### 3.1.1 Descriptive statistics for demographic Variables Gender and Age

Figure 1 – Provides a bar chart highlighting the percentages of sex of participants.

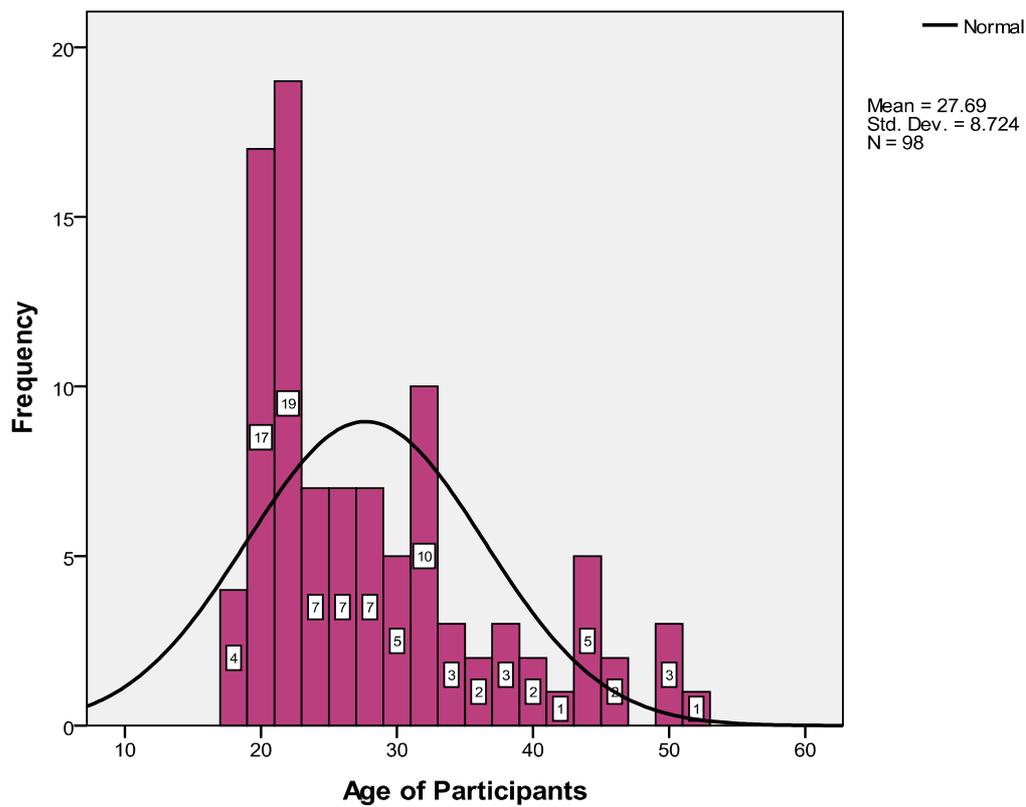
Of 101 participants, 26.7% were men and 73.3% were female.



**Bar chart showing Gender Percentages**

*Figure 1 - Gender*

Figure 2 shows the distribution of ages of the participants. Of 98 participants that provided their age, the mean age was 27.69. The ages of participants ranged from 18 to 51. The standard deviation of age was 8.72. The histogram shows a slight positive skew.



**Histogram Showing the Age of Participants**

*Figure 2 – Age Distribution*

### *3.1.2 Descriptive statistics of Psychological Measures*

Table 1 shows the means and standard deviations of the psychological measures.

*Table 1 – Psychological Measures and Descriptive Statistics*

Variable	Mean	Standard Deviation
Religiosity	15.07	15.5
Daily Spirituality Experience Scale	67.82	17.54
Factor 1:Other-Oriented Empathy	80.14	9.1

Factor 2: Helpfulness	26.91	5.01
Integrity/Honesty/ Authenticity	31.04	3.56

Note: Factor 1 and Factor 2 comprise the Prosocial Personality Battery.

### ***3.2 Inferential Statistics for Hypotheses***

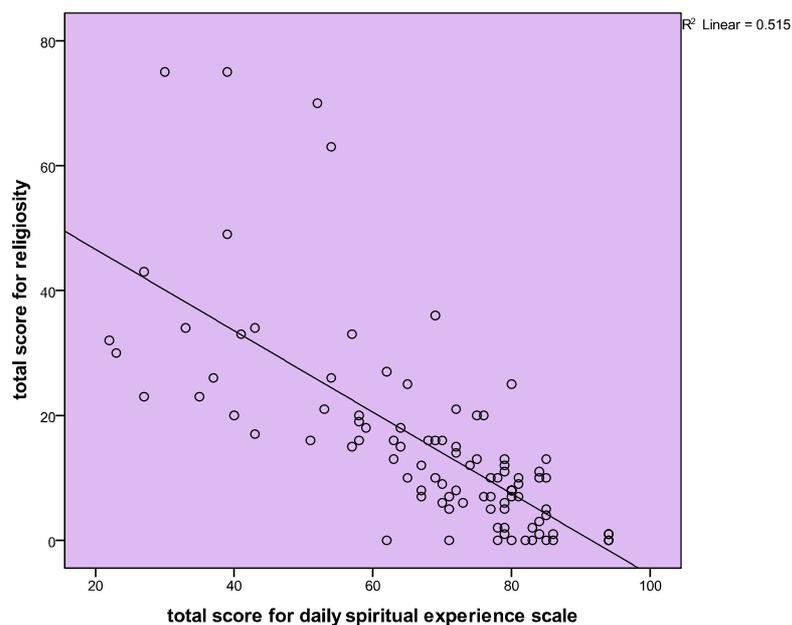
#### *3.2.1 Hypothesis One*

A Kendall's Tau b correlation was used to test the hypothesis that there will be a relationship between religiosity, spirituality and prosocial behaviour. It was found that there was a strong negative significant relationship between religiosity and spirituality ( $\tau b(96) = -.59, p < .01$ ). In this case the null hypothesis can be partially rejected.

A Kendall's Tau b correlation found that there was no significant association between Religiosity and Other-Oriented Empathy (factor 1) ( $\tau b(98) = -.02, p = .782$ ) and no significant association between Religiosity and Helpfulness (factor 2) ( $\tau b(98) = .007, p = .919$ ). Therefore in this case the null hypothesis can be partially accepted.

A Kendall's Tau b correlation found that there was no significant association between Spirituality and Other-Oriented Empathy ( $\tau b(97) = -.045, p = .522$ ) or between Spirituality and Helpfulness ( $\tau b(97) = -.02, p = .778$ ). Therefore the null can be partially accepted.

A Kendall's Tau b correlation found that there was a strong positive significant relationship between Other-Oriented Empathy and Helpfulness (Factor 1 and Factor 2) ( $\tau b(100) = .275, p < .01$ ). Therefore in this case the null is partially rejected.



### **Scatterplot showing Religiosity and Spirituality Relationship**

*Figure 3 – Religiosity and Spirituality*

Figure 3 shows the relationship of the two variables. This scatterplot shows a negative relationship between religiosity and spirituality, indicating the impact of one variable on the other. There is also clustering around the line showing higher scores for spirituality than religiosity.

#### *3.2.2 Hypothesis Two*

A Kendall's Tau b correlation tested the hypothesis that there would be a relationship between religiosity, spirituality and honesty. It was found that there was no significant association between Religiosity and Honesty ( $\tau_b(96) = -.072, p = .323$ ). In this case the null hypothesis can be partially accepted.

A Kendall's Tau b correlation found that there was no significant association between Spirituality and Honesty ( $\tau b(95) = .046, p = .532$ ). In this case the null hypothesis can be partially accepted.

As previous reported, Kendall's tau b correlation found that there was a statistically significant strong negative association between Religiosity and Spirituality ( $\tau b(96) = -.59, p < .01$ ). In this case the null hypothesis can be partially rejected.

### 3.2.3 Hypothesis Three

A Kendall's Tau b correlation was used to test the hypothesis that there will be a relationship between religiosity, spirituality, prosocial behaviour and honesty. It was found that there was no significant association between Other-Oriented Empathy and Honesty ( $\tau b(97) = -.003, p = .970$ ). There was also no significant association between Helpfulness and Honesty ( $\tau b(97) = -.014, p = .850$ ). Therefore the null can be partially accepted.

Table 2 shows the correlations between variables and the previously reported results.

*Table 2: Correlation Table*

	Religiosity	Spirituality	Honesty	Other-Oriented Empathy	Helpfulness
Religiosity					
Spirituality	.000**				
Honesty	.323	.532			
Other-Oriented Empathy (Factor1)	.782	.522	.970		
Helpfulness (Factor2)	.919	.778	.850	.000**	

\*\*p significant at .01 level

Table 2 highlights the correlations and significance between variables. From the table it can be seen that Religiosity and Spirituality have a significant association ( $p < .01$ ). Other-Oriented Empathy and Helpfulness also have a significant relationship ( $p < .01$ ) highlighting the consistency of the prosocial behaviour measure.

### **3.3 Further Analysis**

#### *3.3.1 Gender*

A Mann-Whitney U was used to test gender differences in Religiosity scores. Males had a mean rank of 36.73, while females had a mean rank of 54.73. The Mann Whitney revealed that males and females were statistically significant regarding religiosity ( $z = -2.75$ ,  $p = .006$ ).

A Mann-Whitney U also tested the differences in gender in Honesty scores. Males had a mean rank of 57.5, while females had a mean rank of 46.6. The Mann Whitney U revealed that differences in males and females were approaching significance ( $z = -1.68$ ,  $p = .092$ ).

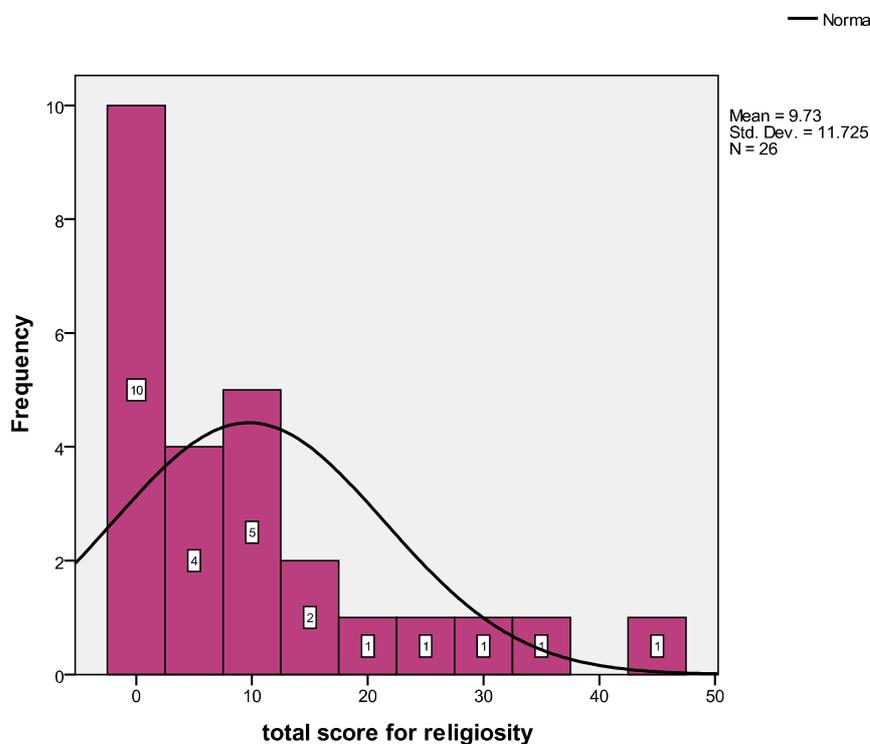
A Mann-Whitney U also tested Spirituality and gender. Males had a mean rank of 55.96, and females had a mean rank of 47.17. The Mann Whitney revealed that there was no significant difference in gender ( $z = -1.35$ ,  $p = .176$ ).

A Mann-Whitney U tested gender and prosocial behaviour. In Other-Oriented Empathy, males had a rank of 49.87 and females had a mean rank of 50.73. This revealed no significant difference in gender ( $z = -.132$ ,  $p = .895$ ). In Helpfulness, males had a mean rank of 47.78 and females had a rank of 51.51. The Mann Whitney revealed that there were no significant difference in gender ( $z = -.572$ ,  $p = .567$ ).

### 3.3.2 Religiosity

Scores for religiosity were notably higher for females than there were for males. While there were only 26 males included in the research in comparison of 73 females, the median score for Religiosity were distinctly higher for females than they were for males. Indicating that in this sample, females were more Religious overall.

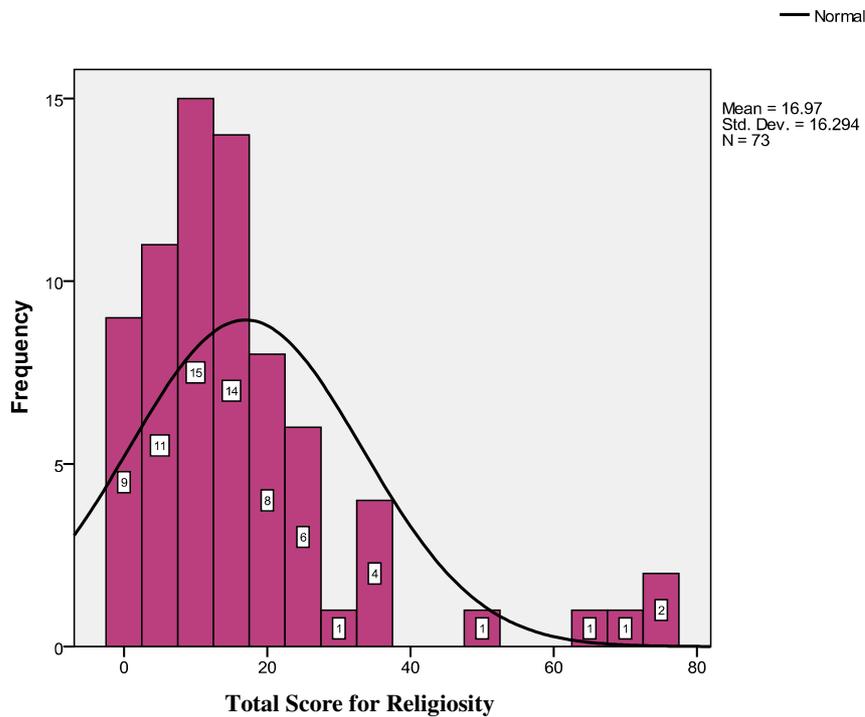
Figure 4 shows male scores. The figure indicates that most male participants are low in religiosity. The mean score was 9.73 while standard deviation was 11.725.



#### **Histogram showing Male Scores for Religiosity**

*Figure 4 – Male Religiosity Scores*

Figure 5 shows female religiosity scores. The mean score was 16.97 while standard deviation was 16.294. These scores are distinctly higher than those of the male participants.



### Histogram showing Female Religiosity Scores

*Figure 5 – Female Religiosity Scores*

Further analysis has also shown that Religiosity scores are very positively skewed (2.078) while Spirituality scores are negatively skewed (-.977). This indicates that people are not very religious but are spiritual.

### 3.3.3 Age

Table 3: Correlation Table

	Age	Religiosity	Spirituality	Other-Oriented Empathy	Helpfulness	Honesty
Age						
Religiosity	.472					
Spirituality	.823	.000**				
Other-Oriented Empathy	.207	.811	.617			
Helpfulness	.169	.690	.935	.000**		
Honesty	.042*	.355	.325	.652	.367	

\*p significant at .05 level

\*\*p significant at .01 level

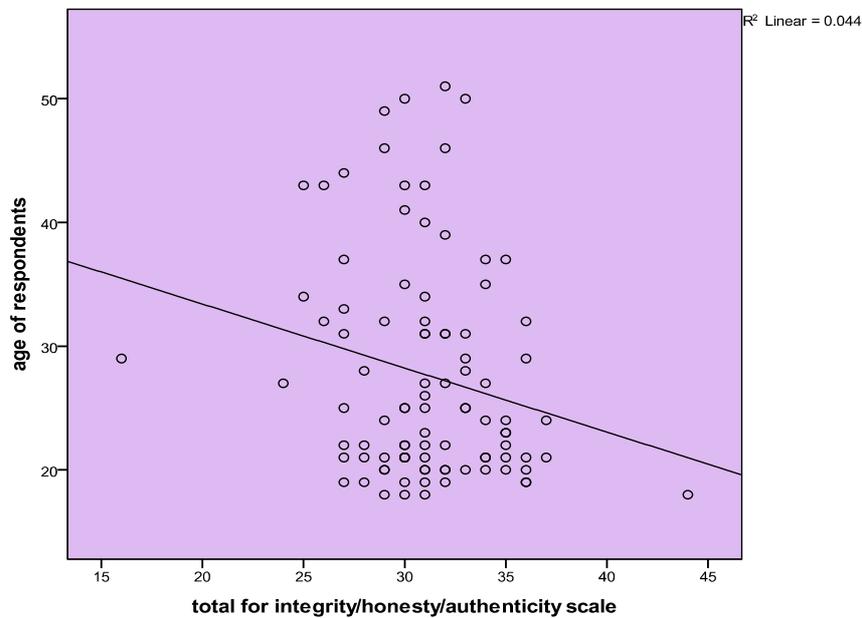
Table 3 shows the correlation of variables with age. The only significant result was the relationship with honesty and age ( $p=.042$ ).

A series of Pearson correlations coefficients were conducted to further analyse the relationships of age with associated variables of Religiosity, Spirituality, Prosocial Behaviour and Honesty. A weak, negative significant relationship was found between Honesty and Age ( $r(95) = -.210, p=.042$ ). Therefore in this case the null is rejected.

A non significant relationship was found between religiosity and age ( $r(96) = -.082, p=.427$ ). There was no significant correlation found between spirituality and age ( $r(95) = -.023, p=.823$ ). It was also found that a non significant correlation occurred between Other-oriented

empathy and age ( $r(97) = .123$ ,  $p = .207$ ) or Helpfulness and age ( $r(97) = .141$ ,  $p = .169$ ).

Therefore the null can be accepted.



### **Scatterplot showing Age and Honesty Relationship**

*Figure 6 – Age and Honesty*

Figure 6 shows the weak negative association between the age of respondents and honesty score. The scatterplot shows that an increase in honesty scores is related to lower ages.

## 4. Discussion

The aim of this research was to investigate the relationship between Religiosity, Spirituality, Prosocial Behaviour and Honesty. The main idea surrounding this research was that religiosity and spirituality have been linked with positive behaviour and values, such as in Prosocial Behaviour. In previous years much research has been conducted on these concepts. The majority of studies have found an association between Religiosity, Spirituality and Prosocial Behaviour. However research in the area of Religiosity, Spirituality and Honesty has been limiting. There have been little published studies relating to this area of research. However, research that was found linked the areas of Religiosity, Spirituality and Honesty. The rationale for this study stems from the minimal amount of research relating to this area. From the current study, it was hypothesised that there would be a relationship between Religiosity, Spirituality and Prosocial Behaviour. Findings suggest that there is a negative, but significant relationship between Religiosity and Spirituality. However there was no association found between Religiosity and Prosocial Behaviour or Spirituality and Prosocial Behaviour. Therefore the null is partially rejected. These results are not concurrent with previous literature. It was also hypothesised that that there would be an association between Religiosity, Spirituality and Honesty. There is a significant association between Religiosity and Spirituality. However there was no significant association between Religiosity and Honesty or Spirituality and Honesty observed. Therefore the null is partially rejected. These are not consistent with previous research in this area. It was hypothesised that there would be a relationship between Religiosity, Spirituality, Prosocial Behaviour and Honesty but findings suggest that there is no significant difference between Prosocial Behaviour and Honesty. Previously reported results indicate no significant difference between the other variables, except between Religiosity and Spirituality. These mixed results lead to the conclusion that

the null is partially rejected. Results from this study are not generally consistent with previous literature, and will be discussed further.

#### ***4.1 Findings and Previous Research***

Results from the present study were mixed regarding the hypotheses.

Results confirm that there was a significant difference between Religiosity and Spirituality. A Kendall's Tau b revealed that there was a strong, but negative relationship between them. Mean scores for Religiosity were 15.07(SD=15.5) out of a possible 32. Therefore scores for Religiosity were slightly low. However, mean scores for Spirituality were 67.82 (SD=17.54) out of a possible 94. Thus were of a much higher average overall. A scatterplot showed the negative relationship, indicating the impact of Religiosity on Spirituality. These results show that higher scores of Spirituality are related to lower scores of Religiosity. This indicates that participants are possibly more spiritual than religious. From this it can be inferred that individuals are possibly rejecting mainstream, organized religions and following a more spiritual route. This is consistent with previous research that Religiosity and Spirituality are separate concepts with different purposes. Zinnbauer et al., (1997) tested participant understanding of Religiosity and Spirituality. Results found that religiosity and spirituality are considered separate concepts by the participants, however are not fully independent. Previous research has also shown that there is a significant difference between Religiosity and Spirituality. Nelson et al., (2009) found a significant relationship between religiosity and spirituality within prostate cancer patients. Indeed, there was a stronger association between religiosity and the faith aspect of spirituality, than the meaning and peace component. However, this study involved only male participation and all participants had prostate cancer. In the current study, participants consisted of females and males, with a much higher percentage of respondents being female. This is interesting as both the previous, and the

current study found significant differences between Religiosity and Spirituality when using a completely different sample. Results from the current study indicate a significant difference in Religiosity and Spirituality of participants, showing the separate constructs of Religiosity and Spirituality. Furthermore, results revealed an interesting, unexpected result that the relationship between Religiosity and Spirituality is a negative association. Further analysis has also shown that Religiosity scores are very positively skewed (2.078) while Spirituality scores are negatively skewed (-.977). This indicates that people are not very religious but are spiritual. Much previous research has combined Religiosity and Spirituality into the same construct, therefore not allowing for distinction in these aspects. Indicating that modern changes are being observed in Religiosity and individuals are moving towards Spirituality and the importance of universalistic values, behaviours and ethics. This current research has shown that there is a move away from Religiosity and specific, mainstream religions and towards the more accessible Spirituality. Indeed, Inglis (1998) has said that Ireland is a rapidly changing culture whereby the Catholic Church no longer has the same hold upon the people's social life. Results from the current study partially support the hypothesis.

Results from the current study confirm that there was no significant difference between Religiosity and Prosocial Behaviour or Spirituality and Prosocial behaviour. A Kendall's Tau b found no significant association between Religiosity and Other-Oriented Empathy or with Helpfulness. A Kendall's Tau b also found no significant association between Spirituality and Other-Oriented Empathy or with Helpfulness. This is inconsistent with previous research. Much work in this area has suggested that religiosity and spirituality have a causal connection with a variety of prosocial behaviours, such as helpfulness, greater moral behaviour and self control (Galen, 2012). Saroglou et al., (2005) found that the perception of prosociality is not just a delusion of religious people. Four experiments were carried out using projective measures and keeping the true goal of the research secret from participants.

It was found that religious people tend not to respond aggressively when challenged with everyday hassles. Research also showed that females are likely to help a hypothetical family member when in need but not necessarily a nonfamily member. Research also confirmed that religious people perceive themselves to be pro-social but this was also confirmed by peers and siblings too. Spirituality was also found to have an association with helpfulness, which included helping known and unknown people. This is important when comparing with the current study. A possible difference between the previous study and the current study was the use of measures. The current study involved all self-report measures, whereas the study by Saroglou et al., (2005) used a variety of techniques. Peer ratings, Sibling ratings, Self-Report Measures were all used and the use of hypothetical situations were employed. Furthermore, the researchers used pictures of frustrating daily life situations to acquire a response from the participants. The peer and sibling ratings are used to challenge the suspicion of dishonesty or self-delusion in religious people. Although the current study did not find any significant difference between Religiosity and Prosocial behaviour or Spirituality and Prosocial behaviour, the results from the current study may be important in better understanding the importance of using a variety of measures when testing for Prosocial Behaviour. The link between Prosocial Behaviour and Religiosity was also tested using the Dictator Game. The study involved primed God concepts with students, as well as a larger community sample and examined how this affected their generosity in the game (Shariff & Norenzayan, 2007). It was found that God concepts increased prosocial behaviour. This was the case even when it was anonymous behaviour and directed at strangers. The current study found no significant results between Religiosity, Spirituality and Prosocial Behaviour. The conclusion that could be made is that the measure of Prosocial Behaviour needs to involve a physical, behavioural act, such as the Dictator Game to be more realistic to the participant. Self-report methods seem to allow for self-delusion and dishonesty, whereby games, experiments and behaviour

may not. Results do not support the hypothesis that there will be a significant difference between Religiosity, Spirituality and Prosocial Behaviour.

Results from the current study found that there was a strong positive significant relationship between Other-Oriented Empathy and Helpfulness ( $p < .01$ ). These two factors make up the Prosocial Personality Battery; therefore show the consistency and reliability of the measure.

A Kendall's Tau b was used to assess the association between Religiosity, Spirituality and Honesty. There was no significant association observed between Religiosity and Honesty or Spirituality and Honesty. These results are inconsistent with previous literature that suggests that Religiosity and Spirituality are related to levels of honesty. Previous research has found that the act of honesty is related to the hope for the acquirement of a religious end state, such as salvation (Shotland & Berger, 1970). In this study, questionnaires were distributed to 131 female line workers, however only 39% returned the scoring pencil attached to the questionnaire. The majority of workers were of strict religious denominations. Pencil returners ranked honest and salvation significantly higher on questionnaire than non-returners. This has led to the conclusion that the values of honest and salvation are predictors of honesty; this was measured by the act of returning the pencil. Results from this experiment, while significant, differ to the current study. A possible explanation of why the significant results didn't extend to the current research is that the majority of participants were of strict religious denominations. This is not the case in the current research, the mean for religiosity was 15.07(SD=15.5), this was a low score which was out of a possible 32. Perhaps participant religiosity scores influenced the significance of honesty scores. Indeed, the previous study also tested honesty of participants without their knowledge. The current study used a self-report measure which is obvious to the participant of the area of research. Perrin (2000) tested the area with a 7-item religiosity survey, which then involved an experiment that the participants were unaware of. A test was purposely graded incorrectly,

giving every student 1 extra point. Quizzes were returned and participants were informed of the mistake. Students then had to grade their own test and were asked to be honest about whether they had received an extra point. 32% of students were honest about receiving the extra point, 52% said the quiz was graded correctly and 16% claimed they were owed a point. Results showed that those who scored high on religiosity behaved more honestly than others. This study found a significant association between Religiosity and Honesty. However, unfortunately the current research is not related to this. These two previous studies have shown that a “hidden” measure of honesty is possibly more reliable at measuring this construct, instead of just a self-report questionnaire. These tests of honesty, unknown to the participant, provide a much more honest response from the participant. This is something that needs to be considered further. Results do not support the hypothesis that there will be a significant relationship between Religiosity, Spirituality and Honesty.

Results from a Kendall’s Tau b indicated that there was no significant relationship between honesty and prosocial behaviour. It was assumed that there would be a significant relationship. There has been very little research into these two areas, but previous research has shown a significant difference between Honesty and Prosocial Behaviour. Van Lange and Kuhlman (1994) found a significant relationship between prosocial individuals and honest information. Participants took part in a decomposed game and a social dilemma, which revealed the significant relationship between these variables. The results from the current study were not consistent with this previous literature. This could be due to the difference in measure, being experimental and not self-report. The sample, from which the current study was comprised of, may also have influenced the significance of Honesty and Prosocial Behaviour. The sample consisted of all psychology students, and they may have been more in tune with the aim of the research. However, results did not support the hypothesis that there would be a relationship between Religiosity, Spirituality, Prosocial Behaviour and Honesty.

## 4.2 Further Analysis

Further analysis was carried out on the results of this study. Significant gender differences were observed in Religiosity scores. Scores for religiosity were notably higher for females (mean rank =36.73) than for males (mean rank=54.73). A Mann Whitney U revealed a significant difference in scores ( $p=.006$ ). The gender split was extremely high in females over males, with 73 female participants and only 26 male participants. However the median score for Religiosity was distinctly higher for females than males, indicating that within the sample, females were more religious. This analysis, while not predicted, is important for future research, in understanding why there was such a significant difference in gender religiosity scores. Analysis also revealed that gender differences were approaching significance with Honesty scores ( $p=.092$ ). A larger sample, with a more equally gender proportioned sample would be needed to fully analysis this relationship. Therefore, this is a reason for further study. No other significant gender results were observed with Spirituality or Prosocial Behaviour.

Analysis was also carried out the demographic variable age. A weak, negative significant association was found between honesty scores and age. This indicates that an increase in honesty scores is related to lower ages of participants. There were no significant differences in age within Religiosity, Spirituality or Prosocial Behaviour. This further analysis is important in understanding any demographic differences that can be observed between the variables.

### 4.3 Limitations and Strengths

There were several limitations to the study. Firstly, all the measures used were self-report. Therefore perceptions of participants Pro-social Behaviour and Honesty were tested and not their actual values and behaviours. There were very little significant associations observed between the variables, and these self-report measures may be affecting the results. While self-report measures are widely used, some scholars have expressed concern over the use. For example, using self-report measures in studies of Religiosity and Prosocial Behaviour may result in social desirability bias (Batson, Schoenrade & Ventis, 1993). The Honesty measure also only tested participant perception. Most of previous literature uses a self-report measure and an experiment to truly test an individual's honesty. Therefore the use of self-report measures coupled with an experiment would possibly reveal more significant results in future studies.

Another limitation with the present study was the sample. All students that participated attended DBS College and were all studying psychology. Therefore, it may not be generalisable to a larger population. Students may have been able to infer the aim of the study and give answers that are socially desirable. Even if this was not the case, it would be difficult to justify the results found in this study and say that it can be applied to the rest of Ireland. On replication, a larger, more diverse sample of participants in different colleges in Ireland may provide a more accurate result.

There was also a large gender imbalance in the sample. Twenty six point seven percent were male and 73.3% were female. There is no evidence to say that this impacted the results, however, future research with a more balanced gender make up may provide different associations.

There were strengths to this research. Firstly, significant results were found between Spirituality and Religiosity and in gender scores. This will allow for the application of further research to a more general sample of the population. This is important in understanding the changes in belief systems in Ireland.

Many results were inconsistent with previous literature. However, this brings about a positive insight into the use of self-report measures. The research has suggested that the questionnaires used, were possibly not suited to measure prosocial behaviour and honesty. As these require perceived answers by participants, the positive attributes of using experiments has been revealed. This has allowed a better understanding of the use of different measures in psychological research.

#### ***4.4 Implications and Future Research***

Despite these limitations, there are many important implications for future research. The significant association between Religiosity and Spirituality seems to highlight the cultural change in students in Ireland. Further research with a larger sample from the general population could indicate if religious Ireland is changing. This could be applicable to the teaching of Religion in schools and in Churches, to allow a broader understanding of Spirituality as a form of faith. Obviously, spirituality is not a new area of Religion, but this research could help to better understand what people in Ireland look for in belief. As Inglis (1998) has stated, the Catholic Church no longer have such a control over social lives. A further research direction could be to test Religiosity scores from participants presently and compare those scores to ones in previous years. This may help to better understand the changing nature of beliefs.

Although there was no significant association found between Religiosity, Spirituality and Honesty, the application of a different Honesty measure on a more alternative sample may

produce different results. The addition of an experiment or peer ratings in the future could help to fight social desirability bias.

#### **4.5 Conclusion**

In conclusion the results of this study show a significant relationship between Religiosity and Spirituality. However there was no relationship found between Religiosity and Prosocial Behaviour or Spirituality and Prosocial behaviour. No association was found between Religiosity and Honesty or Spirituality and Honesty. Furthermore, there was no relationship found between Honesty and Prosocial behaviour. These non significant associations have been inconsistent with previous research. A significant difference was also found between gender and Religiosity, with females having a higher Religiosity score than males. A weak significant association was found between honesty and age. These findings, though mixed in expectations have provided some interesting points for further research.

## References

- 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.
- Batson, C. D., Schoenrade, P., & Ventis, W. L.(1993). *Religion and the individual: A social-psychological perspective*. New York: Oxford University Press.
- Baron, R.A., Bryne, D.R., & Branscombe, N.R. (2005). *Social Psychology (11<sup>th</sup> ed.)*. Boston: Allyn & Bacon.
- Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Bergan, A., & McConatha, J. T. (2000). Religiosity and life satisfaction. *Activities, Adaptation and Aging*, 24(3), 23-34.
- Bickman, L.(1971). The effect of social status on the honesty of others. *The Journal of Social Psychology*, 85, 87-92.

Bowlby, J. (1969). *Attachment and loss. Vol.1: Attachment*. New York: Basic Books

Bruggeman, E.L., & Hart, K.J. (1996). Cheating, lying and moral reasoning by religious and secular high school students. *Journal of Educational Research*, 89(6), 340-344.

Bushman, B.J., de Castro, B.O., Reijnyjes, A., & Thomaes, S. (2012). Arousing “Gentle Passions” in Young Adolescents: Sustained Experimental Effects of Value Affirmations on Prosocial Feelings and Behaviours. *Developmental Psychology*, 48(1), 103-110. Doi: 10.1037/a0025677

Cacioppo, J.T., Losch, M.E., & Petty, R.E. (1986). Attributions of Responsibility for Helping and Doing Harm: Evidence for Confusion of Responsibility. *Journal of Personality and Social Psychology*, 50(1), 100-105.

Central Statistics Office Report (2012). *Profile 7: Religion, Ethnicity and Travellers*. Available from <http://www.cso.ie/en/media/csoie/census/documents/census2011profile7/Profile%207%20Education%20Ethnicity%20and%20Irish%20Traveller%20entire%20doc.pdf>

Clements, A. D., & Ermakova, A. V. (2012). Surrender to God and stress: A possible link between religiosity and health. *Psychology Of Religion And Spirituality*, 4(2), 93-107. doi:10.1037/a0025109

Doolittle, B.R., & Farrell, M. (2004). The association between Spirituality and Depression in an urban clinic. *Primary Care Companion to the Journal of Clinical Psychiatry*, 6(3), 114-118.

Dovidio, J, Pilliavin, J.A, Schroeder, D.A. and Penner, L.A. (2006). *The Social Psychology of Prosocial Behaviour*. London: Routledge

- Ellison, C. (1991). Religious involvement and subjective well-being. *Journal of Health and Social Behavior*, 32(1), 80-99.
- Ellison, C., Gay, D., & Glass, T. (1989). Does religious commitment contribute to individual life satisfaction? *Social Forces*, 68(1), 100-123.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students (Vol. 1)*. San Francisco: Jossey-Bass.
- Fiske, A.P. (1992). The cultural relativity of selfish individualism: Anthropological evidence that humans are inherently sociable. In M.S. Clarke (Ed.), *Prosocial Behaviour: Review of Personality and Social Psychology*, 12, 176-214. Newbury Park: Sage.
- Francesca, G., & Sreedhari, D. (2012). Memory lane and morality: How childhood memories promote prosocial behaviour. *Journal of Personality and Social Psychology*, 102(4), 743-753. Doi: 10.1037/a0026565
- Francis, L.J., Pearson, P.R., & Kay, W.K. (1988). Religiosity & Lie Scores : A question of interpretation. *Social Behavior and Personality*, 16(1), 91-95.
- Galen, L.W. (2012). Does religious belief promote prosociality? A Critical Examination. *Psychological Bulletin*, 138(5), 876-906. Doi: 10.1037/a0016997

Goldberg, L.R., Johnson, J.A., Eber, H.W., Hogan, R., Ashton, M.C., Cloninger, C.R., & Gough, H.C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84-96.

Greene, J.D., & Paxton, J.M. (2009). Patterns of neural activity associated with honest and dishonest moral decisions. *PNAS*, 106(30), 12506-12511. Doi: 10.1073/pnas0900152106

Greitemeyer, T., & Osswald, S. (2010). Effects of Prosocial Video Games on Prosocial Behaviour. *Journal of Personality and Social Psychology*, 98(2), 211-221. Doi: 10.1037/a0016997

Hackney, C.H. and Sanders, G.S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for the Scientific Study of Religion*, 42(1) 43-55.

Haug, I.E. (1998). Including a spiritual dimension in family therapy: Ethical consideration. *Contemporary Family Therapy*, 20(2), 181-194.

Hyde, R.E., & Weathington, B.L. (2006). The congruence of personal values and work attitudes. *Genetic, Social & General Psychology Monographs*, 132(2), 151-190  
doi:10.3200/MONO.132.2.151-192

- Inglis, T. (1998). *Moral Monopoly: The Rise and Fall of the Catholic Church in Modern Ireland*. Retrieved from [http://www.anovasofie.net/vl/countries/ireland/docs/01/irl\\_01\\_01\\_moral.pdf](http://www.anovasofie.net/vl/countries/ireland/docs/01/irl_01_01_moral.pdf)
- Kashdan, T.B., & Nezlek, J.B. (2012). Whether, When And How is Spirituality related to Well Being? Moving Beyond Single Occasion Questionnaire to Understanding Daily Process. *Personality and Social Psychology Bulletin*, 38(11), 1523-1535. Doi: 10.1177/014616725454549
- Koenig, H.G., McCullough, M., & Larson, D.B. (2001). *Handbook of religion and health*. Oxford: Oxford University Press.
- Kristensen, K., Pedersen, D., & Williams, R. (2001). Profiling religious maturity: The relationship of religious attitude components to religious orientations. *Journal for the Scientific Study of Religion*, 12(1), 75-86.
- Latane, B., & Darley, J. (1970). *The Unresponsive Bystander: Why doesn't He Help?* New York: Appleton
- Levenson, R.W., Goodkind, M.S., Gyurak, A., & Sze, J.A. (2012). Greater Emotional Empathy and Prosocial Behaviour in Late Life. *Emotion*, 12(5), 1129-1140. Doi: 10.1037/a0025011.
- McCullough, M.E., & Laurenceau, J.P. (2005). Religiousness and the trajectory of self-rated health across adulthood. *Personality and Social Psychology Bulletin*, 31(4), 560–573.

- McCullough, M. E., & Worthington, E. L. (1999). Religion and the forgiving personality. *Journal of Personality, 67*(6), 1141–1164.
- Nelson, C.J., Jacobson, C.M., Weinberger, M.I., Bhaskaran, V., Rosenfeld, B., Breitbart, W., & Roth, A. (2009). The role of spirituality in the relationship between Religiosity and Depression in prostate cancer patients. *Annual Behaviour Medicine, 38*(2), 105-114.  
Doi: 10.1007/s12160-009-9139-y
- Pargament, K. (1997). *The psychology of religious coping*. New York: Guilford.
- Paraschiva, P., & Nicoleta, M. (2011). Ways of approaching religiosity in psychological research. *The Journal of International Social Research, 4*(18), 352-362.
- Penner, L.A. (2002). The Causes of Sustained Volunteerism: An International Perspective. *Journal of Social Issues, 58*(3), 447-468.
- Perrin, R.D. (2000). Religiosity and Honesty: Continuing the search for the consequential dimension. *Review of Religious Research, 41*(4), 534-544.
- Pichon, I., Boccato, G. & Saroglou, V. (2007). Nonconscious influences of religion on prosociality: A priming study. *European Journal of Social Psychology, 37*(5), 1032-1045. Doi: 10.1002/ejsp.416
- Piedmont, R. L. (2004). Spiritual transcendence as a predictor of psychosocial outcome

from an outpatient substance abuse program. *Psychology of Addictive Behaviours*, 18(3), 213-222.

Piff, P. K., Kraus, M. W., Côté, S., Cheng, B., & Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal Of Personality And Social Psychology*, 99(5), 771-784. Doi:10.1037/a0020092

Randolph – Seng, B. & Nielsen, M.E. (2007). Honesty: One effect of primed religious representations. *The international journal for the psychology of religion*, 17(4), 303-315.

Rohrbaugh, J., & Jessor, R. (1975). Religiosity in youth: A personal control against deviant behavior. *Journal of Personality*, 43, 136-155.

Saroglou, V. (2006). Religion's role in Prosocial Behaviour: Myth or reality? *Psychology of Religion Newsletter: APA Division 36*, 31(2), 1-8.

Saroglou, V., & Galand, P. (2004). Identities, values, and religion: A study among Muslim, other immigrant, and native Belgian young adults after the 9/11 attacks. *Identity: An International Journal of Theory and Research*, 4(2), 97–132.

Saroglou, V., Pichon, I., Trompette, L., Verschueren, M., & Dernell, R. (2005). Prosocial Behaviour and Religion: New Evidence based on Projective Measures and Peer Ratings. *Journal for the Scientific Study of Religion*, 44(3), 323-348.

Doi: 10.1111/j.1468-5906.2005.00289.x

- Shariff, A.F., & Norenzayan, A. (2007). God is watching you: Priming God concepts Increases Prosocial Behaviour in an anonymous Economic Game. *Psychological Science*, 18(9), 803-809.
- Shafranske, E. and Malony, H. (1990). Clinical psychologists' religious and spiritual orientations and their practice of psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 27(1), 72–78.
- Schotland, R., & Berger, W.G. (1976). Behavioural Validation of Several Values from the Rokeach Value Scale as an Index of Honesty. *Journal of Applied Psychology*, 54(5), 433-435. Doi: 10.1037/h0029863
- Stoppa, T.M., & Leftowitz, E.S. (2010). Longitudinal Changes in Religiosity Among Emerging Adult College Students. *Journal of Research Adolescence*, 20(1), 23-38.
- Thorkildsen, T.A., & Hanus, K.M. (2009). Honesty. In Lopez, S.L (Eds.), *The Encyclopaedia of Positive Psychology*. Doi: 10.1111/b.9781405161251.2009x
- Underwood, L.G. (2006). Ordinary Spiritual Experience: Qualitative Research, Interpretive Guidelines, and Population Distribution for the Daily Spiritual Experience Scale. *Archive for the Psychology of Religion/Archiv für Religionspsychologie*, 25(1), 181-218.

- Underwood, L.G., & Teresi, J.A (2002). The Daily Spiritual Experience Scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annual Behaviour Medicine*, 24(1), 22-33.
- Van Lange, P.A.M., & Kuhlman, D.M. (1994). Social Value Orientations and Impressions of Partner's Honesty and Intelligence: A test of the Might versus Morality Effect. *Journal of Personality and Social Psychology*, 67(1), 126-141.  
Doi: 10.1037//0022-3514.67.1.126
- Witter, R.A., William. A. S., Morris, A. O., & Marilyn, J. H. (1985). Religion and Subjective Well-Being in Adulthood: A Quantitative Synthesis. *Review of Religious Research*, 26, 332-42.
- Zinnbauer, B.J., & Pargment, K.I. (2005). Religiousness and Spirituality. In Paloutzian, R.F., & Park, C.L (Eds.), *Handbook of the Psychology of Religion and Spirituality* (pp.21-43). New York: Guildford Press.
- Zinnbauer, B.J., Pargament, K.I., Cole, B., Rye, M.S., Butter, E.M., Belavich, T.G., Hipp, K.M., Scott, A.B., & Kadar, J.L.(1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36(4), 549-564.
- Zullig, J.K., Ward, R.M., & Horn, T. (2006). The Association Between Perceived Spirituality, Religiosity and Life Satisfaction: The Mediating Role of Self-rated Health. *Social Indicators Research*, 79, 255-274. Doi: 10.1007/s11205-005-4127-5

## Appendices

### *Appendix A*

To whom it may concern,

My name is Dominique and I am conducting research in the Department of Psychology as part of my studies. The research is titled: Investigatory study into the relationship between religiosity, spirituality, pro-social behaviour and honesty. This research will be submitted for examination.

For this reason, you are invited to take part in my research. Participation involves completing and returning the attached anonymous questionnaire. In order to participate you must be over the age of 18 to participate. Some questions used may cause some minor negative feelings but these surveys have been widely used in research. If for any reason, you do not feel comfortable with some of these questions you are not obliged to complete the questionnaire. No one is obligated to take part. There are support contacts that you may wish to contact, located on the back page of this booklet. There will be a chance at the end of the study to ask any questions.

Participation is anonymous, thus responses cannot be associated with any one participant. Therefore it will not be possible to withdraw from participation once the questionnaire has been collected.

The questionnaires will be securely stored and all data will be transferred onto the computer and protected by a password.

Please tick this box if you are over the age of 18 and agree to participate in this research.

Should you require any further information regarding this research, please contact

Dominique Smith, [REDACTED] or [REDACTED]

**Thank you for taking part in this study.**

**Please circle which best describes you**

Gender:                    Male   /   Female

Age:                        \_\_\_\_\_ Years Old

**INSTRUCTIONS: Please answer the following questions by circling the appropriate letter**

1. How often have you attended religious services during the past year? \_\_\_\_\_ Times

2. Which of the following best describes your practice of prayer or religious meditation?

- a) Prayer is a regular part of my daily life
- b) I usually pray in times of stress or need but rarely at any other time
- c) I pray only during formal ceremonies
- d) Prayer has little importance in my life
- e) I never pray

3. When you have a serious personal problem how often do you take religious advice or teaching into consideration?

- a) Almost always
- b) Usually
- c) Sometimes
- d) Rarely
- e) Never

4. How much of an influence would you say that religion has on the way that you choose to act and the way that you choose to spend your time each day?

- a) No influence
- b) A small influence
- c) Some influence
- d) A fair amount of influence
- e) A large influence

5. Which of the following statements comes closest to your belief about God?

- a) I am sure that God really exists and that He is active in my life
- b) Although I sometimes question His existence, I do believe in God and believe He knows of me as a person
- c) I don't know if there is a personal God, but I do believe in a higher power of some kind
- d) I don't know if there is a personal God or a higher power of some kind, and I don't know if I will ever know
- e) I don't believe in a personal God or in a higher power

6. Which of the following statements comes closest to your belief about life after death (immortality)?

- a) I believe in a personal life after death, a soul existing as a specific individual
- b) I believe in a soul existing after death as a part of universal spirit
- c) I believe in a life after death of some kind, but I really don't know what it would be like
- d) I don't know whether there is any kind of life after death, and I don't know if I will ever know
- e) I don't believe in any kind of life after death

7. During the past year, how often have you experienced a feeling of religious reverence or devotion?

- a) Almost daily
- b) Frequently
- c) Sometimes
- d) Rarely
- e) Never

8. Do you agree with the following statement: "Religion gives me a great amount of comfort and security in life."

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

The list that follows includes items you may or may not experience. Please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word 'God.' If this word is not a comfortable one for you, please substitute another word that calls to mind the divine or holy for you.

**INSTRUCTIONS: PLEASE CIRCLE THE CORRECT ANSWER IN RELATION TO THE STATEMENT**

**1 = Many Times a Day**

**2= Everyday**

**3= Most Days**

**4= Some Days**

**5= Once in a while**

**6= Never or Almost Never**

I Feel God's Presence	1	2	3	4	5	6
-----------------------	---	---	---	---	---	---

I Experience a connection to all of life	1	2	3	4	5	6
--	---	---	---	---	---	---

During worship, or other times when connecting	1	2	3	4	5	6
--	---	---	---	---	---	---

With God, I feel Joy which lifts me out of my

Daily concerns

I find strength in my religion or spirituality	1	2	3	4	5	6
--	---	---	---	---	---	---

I find comfort in my religion or spirituality	1	2	3	4	5	6
---	---	---	---	---	---	---

I feel deep inner peace or harmony	1	2	3	4	5	6
------------------------------------	---	---	---	---	---	---

I ask for God's help in the midst of daily activities	1	2	3	4	5	6
---	---	---	---	---	---	---

I feel guided by God in the midst of daily activities	1	2	3	4	5	6
---	---	---	---	---	---	---

I feel God's Love for me, directly	1	2	3	4	5	6
------------------------------------	---	---	---	---	---	---

**1 = Many Times a Day**

**2= Everyday**

**3= Most Days**

**4= Some Days**

**5= Once in a while**

**6= Never or Almost Never**

I feel God's love for me, through others                    1        2        3        4        5        6

I am spirituality touched by the beauty of                    1        2        3        4        5        6

Creation

I feel thankful for my blessings                                    1        2        3        4        5        6

I feel selfless caring for others                                    1        2        3        4        5        6

I accept others even when they do things I                    1        2        3        4        5        6

Think is wrong

I desire to be closer to God or in union with                    1        2        3        4        5        6

With the divine

**1= Not at all**

**2= Somewhat Close**

**3= Very close**

**4= As close as possible**

In General, how close do you feel to God?            1        2        3        4

Below are a number of statements that may or may not describe you, your feelings, or your behaviour. Please read each statement carefully. There are no right or wrong responses

**INSTRUCTIONS: PLEASE CIRCLE THE NUMBER THAT BEST DESCRIBES YOUR ANSWER TO THE STATEMENT**

**1= Strongly Disagree**

**2= Disagree**

**3= Uncertain**

**4= Agree**

**5= Strongly Agree**

1. When people are nasty to me, I feel very little responsibility to treat them well.            1        2        3        4        5

2. I would feel less bothered about leaving litter in a dirty park than in a clean one.            1        2        3        4        5

3. No matter what a person has done to us, there            1        2        3        4        5

is no excuse for taking advantage of them.

4. With the pressure for grades and the widespread cheating in school nowadays, the individual who cheats occasionally is not really as much at fault. 1 2 3 4 5

5. It doesn't make much sense to be very concerned about how we act when we are sick and feeling miserable. 1 2 3 4 5

6. If I broke a machine through mishandling, I would feel less guilty if it was already damaged before I used it. 1 2 3 4 5

7. When you have a job to do, it is impossible to look out for everybody's best interest. 1 2 3 4 5

8. I sometimes find it difficult to see things from the "other person's" point of view. 1 2 3 4 5

9. When I see someone being taken advantage of, I feel kind of protective towards them. 1 2 3 4 5

10. I sometimes try to understand my friends better by imagining how things look from their perspective. 1 2 3 4 5

11. Other people's misfortunes do not usually disturb me a great deal. 1 2 3 4 5

12. If I'm sure I'm right about something, I don't 1 2 3 4 5

waste much time listening to other people's arguments.

13. When I see someone being treated unfairly, 1 2 3 4 5

I sometimes don't feel very much pity for them.

14. I am usually pretty effective in dealing with 1 2 3 4 5

emergencies.

15. I am often quite touched by things that I see happen. 1 2 3 4 5

16. I believe that there are two sides to every question 1 2 3 4 5

and try to look at them both.

17. I tend to lose control during emergencies. 1 2 3 4 5

18. When I'm upset at someone, I usually try to 1 2 3 4 5

"put myself in their shoes" for a while.

19. When I see someone who badly needs help 1 2 3 4 5

in an emergency, I go to pieces.

Below are a set of statements, which may or may not describe how you make decisions when you have to choose between two courses of action or alternatives when there is no clear right way or wrong way to act.



25. My decisions are usually based on concern for the welfare of others. 1 2 3 4 5

Below are several different actions in which people sometimes engage. Read each of them and decide how frequently you have carried it out in the past.

**1= Never**

**2= Once**

**3= More than once**

**4= Often**

**5= Very Often**

26. I have helped carry a stranger's belongings (e.g., books, parcels, etc.). 1 2 3 4 5

27. I have allowed someone to go ahead of me in a line (e.g., supermarket, copying machine, etc.) 1 2 3 4 5

28. I have let a neighbour whom I didn't know too well borrow an item of some value (e.g., tools, a dish, etc.). 1 2 3 4 5

29. I have, before being asked, voluntarily looked after a neighbour's pets or children without being paid for it.      1      2      3      4      5

30. I have offered to help a handicapped or elderly stranger across a street.      1      2      3      4      5

On the page below are phrases describing people's behaviours. Please use the rating scale below to describe how accurately each statement describes *you*. Describe yourself as you generally are now, not as you wish to be in the future. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then fill in the box that corresponds to the number on the scale.

**1 =Very Inaccurate**

**2 =Moderately Inaccurate**

**3 =Neither Inaccurate nor Accurate (NEUTRAL)**

**4= Moderately Accurate**

**5= Very Accurate**

1. I am trusted to keep secrets      1      2      3      4      5

2. I keep my promises      1      2      3      4      5

3. I like to exaggerate my troubles      1      2      3      4      5

4. I can be trusted to keep my promises      1      2      3      4      5

5. I lie to get myself out of trouble      1      2      3      4      5

6. I am true to my own values      1      2      3      4      5

7. I am hard to understand	1	2	3	4	5
8. I feel like an imposter	1	2	3	4	5
9. I believe that honesty is the basis for trust	1	2	3	4	5

Thank you for taking part in this research.

Should you need to talk to someone about any issues raised, then these contacts may be of use to you.

Dominique Smith : 1571713@mydbs.ie

Samaritans : 1850 60 90 90

[www.samaritans.org](http://www.samaritans.org)