

# Religiosity and Ethical Business Behavior: A Study on Differences between Catholic and Protestant Students

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## **ABSTRACT**

Research has sought to better understand the antecedents of ethical decision-making, especially in businesses. Yet, researchers found no clear relationship between religion or religiosity and ethics. This study contributes to research on religiosity and ethics by examining the impact of religiosity on business ethics among university students. Using a sample of Protestant and Catholic students, we investigate how individual religiosity shapes perceptions of three unethical behaviors: misuse, exchange of favors, and deceit. Findings show that individual religiosity matters in how different scenarios of unethical conduct are perceived. We identify similarities and differences between Protestant and Catholic individuals depending on ethical behavior.

**Keywords:** Business ethics, religion, religiosity.

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## Religiosity and Ethical Business Behavior:

### A Study on Differences between Catholic and Protestant Students

#### Abstract

Research has sought to better understand the antecedents of ethical decision-making, especially in businesses. Yet, researchers found no clear relationship between religion or religiosity and ethics. This study contributes to research on religiosity and ethics by examining the impact of religiosity on business ethics among university students. Using a sample of Protestant and Catholic students, we investigate how individual religiosity shapes perceptions of three unethical behaviors: misuse, exchange of favors, and deceit. Findings show that individual religiosity matters in how different scenarios of unethical conduct are perceived. We identify similarities and differences between Protestant and Catholic individuals depending on ethical behavior.

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## Religiosité et Ethique des Affaires :

### Une étude sur les différences entre étudiants catholiques et protestants

#### Résumé

La recherche a tenté à mieux comprendre les antécédents de la prise de décision éthique, particulièrement chez les entreprises. Cependant, les chercheurs n'ont pas trouvé de lien clair entre religion ou religiosité et l'éthique. Cette étude contribue aux recherches sur la religiosité et l'éthique en examinant l'impact de la religiosité sur l'éthique des affaires chez des étudiants universitaires. Utilisant un échantillon d'étudiants protestants et catholiques, nous examinons comment la religiosité influence les perceptions de trois comportements non éthiques : l'abus, l'échange de faveurs et la tromperie. Nous montrons que la religiosité individuelle influence la perception des différents scénarios de conduite contraire à l'éthique. Nous identifions des similitudes et des différences entre les individus protestants et catholiques selon leur comportement éthique.

**Mots clés :** Éthique des affaires, religion, religiosité

## Religiosidad y comportamiento ético en los Negocios :

### Un estudio sobre las diferencias entre estudiantes católicos y protestantes

#### Resumen

La investigación trata de entender los antecedentes de la toma de decisiones éticas, particularmente en el ámbito empresarial, sin hallar una relación clara entre la religión o religiosidad y la ética. Por consiguiente, este estudio contribuye examinando el impacto de la religiosidad en la ética empresarial. A partir de una muestra de estudiantes universitarios protestantes y católicos, investigamos sobre la influencia de la religiosidad individual en las percepciones de tres conductas antiéticas: el abuso, el do ut des y el engaño. Los resultados muestran que la religiosidad individual influye en la percepción de estos escenarios. Identificamos similitudes y diferencias entre protestantes y católicos según su comportamiento ético.

**Palabras clave:** Ética empresarial, religión, religiosidad.

## Introduction

Honesty, transparency, and fairness in one's interactions may sum up the understanding of ethical behavior in the context of business (Crossan et al., 2013). However, even if the quest for honesty and fairness may be shared by most persons within an organization, the underlying values of ethical behavior and their interpretation(s) are dependent on the individual (Driscoll et al., 2019; Pirson et al., 2017). Behavior in the business context is largely influenced by personal values (Wang & Hackett, 2016) which are often shaped by religious beliefs. Religion provides a framework of meaning and values which in turn influence individual behaviors (Astrachan, et al., 2020). Some studies have examined the role of spirituality and religiosity in shaping ethical decision-making and perceptions of ethical conduct (Beekun & Westerman, 2012; Bloodgood et al., 2008; Conroy & Emerson, 2004; Giacalone & Jurkiewicz, 2003; Lowery & Beadles, 2009; McGee & Benk, 2019; Vitell et al., 2005; Vitell et al., 2006). However, the relationship between religiosity and ethics may not be straightforward as studies have shown both direct and indirect effects (Fotaki et al., 2020), and no clear answers were provided concerning exactly how religiosity translates into ethical judgment (Alshehri et al., 2021). This gap is explored in our study. We seek to offer elements of response on how religiosity, rather than simple religious affiliation, is linked to ethical perceptions and behavior. In the following sections, we investigate the link between individual religiosity (beliefs, practice) and different aspects of business ethics among Catholic and Protestant students. Understanding business students' perceptions regarding ethical conduct is valuable because most will find employment within organizations and likely contribute to shaping the ethical climate in their places of work.

## Literature and hypothesis development

### Individual aspects of business ethics

Crane and Matten (2004, p. 8) define business ethics as "the study of business situations, activities, and decisions where issues of right and wrong are addressed." Business ethics has become a popular topic in the Western business world and research reflects this infatuation. Research on business ethics has been enhanced during the last decades (Ferrell et al., 2021; Ferrell, Harrison, Ferrell & Hair, 2019; Gundolf & Filser, 2013; Trevino & Nelson, 2021), and the Journal of Business Ethics recently commemorated its 40th anniversary, looking back on 4 decades of business ethics research (Babalola et al., 2022). Research on business ethics has been extremely diverse focusing i.e. on contextual and/or situational factors, as well as on more personal or individual aspects (Bartlett, 2003; Lowery et al, 2014).

Concerning these latter, Conrad (1993) suggests, that ethics lie in the realm of the personal value systems. In this sense, much research attention has been directed at better understanding the antecedents of individual attitudes, beliefs, and behaviors when ethics are concerned (Vallaster, Kraus, Mergió Lindhal & Nielsen, 2019). And, researchers have investigated as many topics as i.e. the effects of gender, education (Wang & Calvano, 2015), experience (McCullough & Faught 2005; Eweje & Brunton 2010) and age (Yamamura & Stedhamand, 2011), as well as locus of control (Chiu, 2003; Lowery et al., 2014), the dark triad (Machiavellianism, psychopathy, and narcissism) (Harrison, et al., 2018) and other personality traits (Kalshoven et al., 2011), moral identity (Kalshoven et al., 2011; McFerran, et al., 2010), cultural and national values (Bageac, et al., 2011; Beekun & Westerman, 2012; Issa & Pick, 2010; Luckerath-Rovers & De Bos, 2011; Phau & Kea, 2007), value orientation (i.e. relativism, utilitarianism, deontology, egoism, and idealism) (Callanan et al., 2010; Fernando and Chowdhury, 2010; Marques and Azevedo-Pereira, 2009), cognitive moral development (Chang and Yen, 2007), emotions and mood (Curtis, 2006), organizational commitment (Cullinan et al., 2008; Zhuang et al. 2005), awareness (Premeaux, 2004), peer and managerial influence

(Beekun & Westerman, 2012; Jones & Kavanagh, 1996), situation orientation (Carlson, et al., 2002), distributive justice (Umphress et al., 2009), or organizational characteristics (Key, 2002; Lowery et al., 2014) as well as spirituality and religion (Abela, 2014; Beekun & Westerman, 2012; Giacalone & Jurkiewicz, 2003; Lowery & Beadles, 2009; McGee & Benk, 2019; Vitell et al., 2005; Vitell et al., 2006).

This latter will be discussed in the next section.

### Religion and Business Ethics

Morally binding values such as those vehiculated by religion deeply impact organizational decision-making and ethical behavior (Astrachan et al., 2020). In this sense, several literature reviews (Ford & Richardson, 1994; Loe et al., 2000; Obregon et al., 2021; O'Fallon & Butterfield, 2005; Vitell, 2009) found empirical studies in top-tier journals measuring the effects of religion on ethical behavior. Many of these studies reported a significant effect of religion on ethical behavior, generally suggesting that religion has a positive relationship with ethical decision-making. Van Buren, Syed, and Mir (2019) also identified an impact of religion on ethical behavior and ethical decision-making in organizations. Parboteeah, Hoegl, and Cullen (2008) studied the link between religion and justification of unethical behavior such as cheating on taxes or using public transport without paying and their findings support the values-setting and normative effect of religions. Rashid and Ibrahim (2008) looked at the effects of culture and religion in Malaysia and showed that these influenced perceptions of business ethics. The authors underlined that there were significant differences among Malay, Chinese, and Indian respondents, suggesting a differential impact across religions. Gallego-Alvarez et al. (2020) examined a panel data sample of over 11,956 firm-year observations from 18 countries. Their results underline that a higher percentage of religious adherents in a country usually involves the implementation of more ethical practices. These findings were obtained for Christian, Muslim, Jewish, and Hindu respondents in countries with a predominant religion. In 2020, the *Journal of Business Ethics* dedicated a special issue to "Values, Spirituality, and Religion: Family Business and the Roots of Sustainable Ethical Behavior." Ten papers investigated the relationship between religion/spirituality and family firm ethical behavior (Astrachan et al., 2020) including various geographical, cultural, and religious contexts, using a multitude of qualitative and quantitative methodologies. However, even if they found a link between religion and ethics, the contributions to this special issue do not offer a clear image of the degree and the extent of this relation.

Most researchers agree that religion may be linked to individual business ethics (Minton, Kahle & Kim, 2015). Some recent work has also examined the role of religion in decision-making among entrepreneurs, suggesting that religious individuals are more likely to pursue entrepreneurship (Di Pietro & Masciarelli, 2021; Giacomini et al., 2023; Neubert & Dougherty, 2018) and that religious beliefs are likely to shape decision making as well as ethical behavior among entrepreneurs (Judge & Douglas, 2013; Khurana et al., 2021; Kumar, Sahoo, Lim & Dana, 2022; Dejardin et al., 2023; Pio, 2010; Rietveld & Van Burg, 2014; Siwale, Gurau, Aluko, Dana & Ojo, 2023; Sorenson & Milbrandt, 2023). In family firms, religious beliefs can also shape organizational culture and core values (Barbera, Shi, Agarwal & Edwards, 2020; Dieleman & Konig, 2020; Tabor, Madison, Marler & Kellermanns, 2020). Indeed, religion is often conceived as a "particular cultural system which constitutes and justifies the social and moral order of a given society and constitutes the... worldview of its members" (Cruz, Seo & Buchanan-Olivier, 2018, p. 317). However, the question of how much or how far the impact of religion on individual business ethics goes is still not resolved. This may be related to the fact that over-simplified measures such as religious affiliation are too simple to explain one's ethical behavior (Parboteeah et al., 2008; Vitell, 2009; Alshehri et al., 2021). One's religiosity, as the degree of active engagement or practice in religious rituals or activities (Giacomini et al., 2022), may also be of relevance. The more religious an individual is, the more likely he or she is to adhere to core religious values, beliefs, and behaviors promoted by religion, meaning that the degree to which one

adheres to religious values or beliefs may matter as well. This point has so far been neglected by the literature (Alshehri et al., 2021) as religion is often taken as a binary variable (belonging to a religion or not) more than a variable of intensity (religiosity).

To fill this gap, we extend in this paper the discussion to examine individual religiosity, beyond simple religious affiliation or dominant religion in a particular country by examining the role of both individual religiosity and religious affiliation on specific dimensions of human ethical behavior.

### Religiosity and Ethics

While religious affiliation has been shown to matter in terms of ethical behavior (Conroy & Emerson, 2004; O'Fallon & Butterfield, 2005), it can be expected that one's religiosity would matter as well (Bloodgood et al., 2008) if not more so. The more religious an individual, the more important core religious values, beliefs, and behaviors promoted by his or her faith are going to be (Giacomin et al., 2022). Many people may self-identify as members of one religion or another, however, not all individuals practice their religion, and/or adhere to core religious values with the same intensity. Audretsch et al. (2013) recognize this by stressing that how religious individuals are (i.e., their religiosity) can matter greatly in shaping decision-making. Similarly, Fathallah et al. (2020) underline the importance of accounting for variations in religiosity levels when conducting research involving religion. Parboteeah, Hoegl, and Cullen (2008) found that attendance of religious services and praying (associated with higher levels of religiosity) were negatively related to justifications of ethically suspect behaviors. They also observed that the cognitive (i.e., the degree to which people adhere to religious beliefs) and the affective component of religiosity (i.e., the emotional attachment to religious objects, institutions, or persons) were negatively linked to the justification of unethical behavior implying that individuals were less likely to justify unethical behavior (Parboteeah et al., 2008). Bloodgood, Turnlay, and Mudrak (2008) note that highly religious students were unlikely to cheat whether they had taken a business ethics course or not. On the other hand, non-religious students revealed less cheating behavior once they had taken a business ethics course. Additional insights have been brought by Conroy and Emerson (2004) in a survey that found that religiosity was a statistically significant predictor reducing the "acceptability" of ethically charged scenarios. The authors note that younger individuals are more likely to accept unethical behavior and that the completion of ethics classes at university had no significant effect as a predictor. However, both Salmoirago-Blotcher et al. (2016) and Walker et al. (2012) suggest investigating further the link between religious attitudes and ethics.

Both religious affiliation (belonging to a religious denomination), being attached to a specific religious tradition, and individual religiosity (intensity of belief and practice) can have an impact on perceptions of (un)ethical behavior. In this work, we decided to include both dimensions of religion. For individuals, the former (affiliation) typically denotes the coalitional dimension of religion. The latter (belief, like belief in God, and individual practice, like personal prayer) denotes the devotional dimension of religion. The two, religious affiliation and individual religiosity, may have similar or different outcomes in individual functioning and behavior (Saroglou, 2014)

### Protestant and Catholic Business Ethics

Core values in Christianity rooted in the Ten Commandments, identify universal moral principles that have implications for the business world (Abbas & Manton, 1998). While Catholicism and Protestantism are both streams within Christianity and researchers often group Catholic and Protestant respondents into one category, the two religious streams have a few notable differences (Nunziata & Rocco, 2016) that apply to our context. Indeed, recent work recommends examining the two groups separately rather than grouping Protestants and Catholics into one group, as they have somewhat different beliefs and thus may present different behaviors (Giacomin et al., 2022).



The Protestant Reformation changed beliefs about pursuing wealth from being not only for personal advantage but also an individual responsibility (Weber, 2012/1905), giving legitimacy to pursuing individual prosperity (Di Pietro & Masciarelli, 2021). This impacted individual perceptions regarding the world of business and its role in society. Vinod (2012) explains that the Protestant work ethic includes a high degree of trade morality, free competition, and the pursuit of wealth without guilt. The Catholic work ethic, on the other hand, does not appreciate wealth accumulation as an objective (Zelekha et al., 2014), but sees the common good as the priority of businesses, which leads to moral obligations for owners/managers towards their workers and society at large (Dunn, 2014; Naughton & Cornwall, 2006; O'Connor, 2004).

A second difference lies in the Protestant introduction of the idea of a faith based on one's direct affiliation with God, as opposed to Catholicism, in which the Church mediates this connection. This leads Protestants to be more intrinsically oriented toward religion, whereas Catholics tend to be more extrinsically oriented toward religion (Quiamzade et al., 2017) which can have implications for what behaviors are considered as (un)ethical. Given that Protestant values see individuals as directly accountable to God for their behaviors (Jones et al., 2010), they are more likely to be intrinsically motivated to behave ethically. Quiamzade et al., (2017) assert that Protestants tend to internalize social norms and adhere to them on a more personal basis (intrinsic religiousness) whereas Catholics' behavioral regulation is grounded in "an external source of control (the monitoring of an authority)" (Quiamzade et al., 2017, p. 379). Thus Protestants, given their higher level of intrinsic religiousness, are more likely to consider questionable behaviors as unethical. This is because "corruption corresponds to a private behavior that is difficult to be controlled by authorities" (Quiamzade et al., 2017, p. 368). Carl, Gupta, and Javidan (2004) add that "Catholicism in its adherence to a clear hierarchical structure and with its strong emphasis on family and related loyalty may have shaped people's proclivity to more easily accept the status quo and accept conditions for corruption in society." Predominantly Protestant countries imply high moral standards, showing the highest mean disapproval of fraudulent behaviors compared to non-Protestant Christian (Catholic and Orthodox) countries (Norris & Inglehart, 2004). While we propose that higher levels of individual religiosity will be positively related to perceiving ethically questionable conduct as unethical, we expect to identify differences between Protestant and Catholic individuals, as discussed above. We summarize the differences between Protestant and Catholic perspectives in Table 1.

A major difficulty for researchers is the lack of a generally accepted measure of business ethics (Perryer & Scott-Ladd, 2014). Some researchers focus on scenarios (e.g., Dawson, 1997; Hunt, 1997) that predetermine the reality to be evaluated. Others focus on specific dimensions or links of business ethics i.e., the economic dimension (Berings & Adrianssens, 2012), organizational effectiveness (Singhapakdi et al., 1995), the conflicts between loyalty to the group and organization (Jackson & Artola, 1997), etc. Numerous scales find their original source in a 17-item scale proposed by Newstrom and Ruch (1975) (Perryer & Scott-Ladd, 2014). However, this scale relied on the managerial activities of the 1970s. Some researchers (i.e., Lemmergaard & Lauridsen, 2008) have concentrated on the group organization level, rather than on an individual level. Given that, and because of the purpose of this study, we chose to test the individual perceptions of ethical behavior along a continuum and as a multidimensional construct. To do this, we used a three-component measure of business ethics attitude developed by Perryer and Scott-Ladd (2014). This model distinguishes between "different types of unethical behavior across a continuum, with some behaviors considered as less unethical than others" (Perryer & Scott-Ladd, 2014, p. 129). "Misuse" of company resources is evaluated as being less unethical than the giving and receiving of "favors", and "deceit," (dishonest behavior that is intended to make somebody believe something that is not true) is considered to be the most unethical. Furthermore, within each of these three factors (misuse, deceit, and favors), increasing unacceptable behavior is also evaluated. Given that, we formulated the following hypothesis:

**H1a** Higher levels of religiosity will be positively related to perceptions of misuse as unethical.



Higher levels of religiosity among Protestants **H1b** and Catholics **H1c** will be positively related to perceptions of misuse as unethical. We expect this relationship to be more pronounced for Protestants.

**H2a** Higher levels of religiosity will be positively related to perceptions of exchanging favors as unethical.

Higher levels of religiosity among Protestants **H2b** and Catholics **H2c** will be positively related to perceptions of exchanging favors as unethical. We expect this relationship to be more pronounced for Protestants.

**H3a** Higher levels of religiosity will be positively related to perceptions of deceit as unethical.

Higher levels of religiosity among Protestants **H3b** and Catholics **H3c** will be positively related to perceptions of deceit as unethical. We expect this relationship to be more pronounced for Protestants.

## Methodology

### Sample

University students from Belgium, France, and the U.S. received electronic questionnaires (using Qualtrics) and were invited to participate via electronic mail. Data collection took place in 2018. A total of 547 students responded to our questionnaire, and 263 individuals were taken out due to missing values resulting in a final sample of 284 students (151 Belgians, 54 French, and 79 Americans). Of the respondents, 65.7% were female and 83.5% were under 25 years of age. Concerning the level of study of respondents, 57.1% are enrolled at the bachelor's level and 42.9% at master's level. 41.1% are 79.9% are studying management or economics. Concerning their religious affiliation, 75.4% are Catholics and 26.6% are Protestants.

### Survey Instrument

Our questionnaire was administered in French (for the students in France and Belgium), and in English for the U.S.-based students. The questionnaires in French were back translated into the language of origin to ensure no loss of meaning. We measured religious affiliation on a nominal scale, and we measured the level of religiosity and perception of ethical behavior using Likert scales. Our survey instrument employed constructs from prior studies on religiosity and ethical decision-making. The individual scales are discussed below.

### Variables

**Religious Affiliation** was assessed by asking respondents to select among the following choices: (1) Catholic or (2) Protestant. For our analysis, we used individual religious affiliation to create our two sub-samples (Catholic and Protestant).

**Individual Religiosity** was constructed based on the personal religiosity index of Saroglou et al. (2020). Three items assessed the individual religiosity construct: (1) "Do you consider God to be important in your life?" (2) "Do you consider religion to be important in your life?" and (3) "How often do you pray?" For the items "Do you consider God to be important in your life?" and "Do you consider religion to be important in your life?" the Likert scale was from "1" being "Not at All" to "7" being "Really Important". For the item "How often do you pray?" the Likert scale was from "1" being "Never" to "7" being "Almost every day".

**Ethical Behavior** was assessed by using ethical behavior scales developed and validated by Perryer and Scott-Ladd (2014). Twelve items assessed the Ethical Behavior construct: (1) “Accepting gifts/favors in exchange for preferential treatment is” (2) “Making innocent colleague bear the responsibility for an error is” (3) “Giving gifts/favors in exchange for preferential treatment is” (4) “Claiming credit for somebody else’s work is” (5) “Not reporting breaches of organizational rules by others is” (6) “Disclosing confidential information is” (7) “Claiming to be ill to obtain a day’s holiday is” (8) “Stealing equipment and supplies from one’s organization is” (9) “Managing a personal business during your working hours is” (10) “Concealing a personal error is” (11) “Giving yourself extra free time (to have lunch or a break, to go home early) is” and (12) “Using your organization’s services for personal reasons is”. For each item, a five points Likert scale was used from “1” being “Totally Unethical” to “5” being “Totally Ethical”.

### Data Analysis

As proposed in our research hypotheses, we examined the effect of the level of religiosity on the three unethical behaviors “Misuse”, “Favors” and “Deceit” for the whole sample and then both for Protestant (H1b, H2b, and H3b) and Catholic respondents (H1c, H2c, and H3c). To test our hypotheses, we used the partial least squares (PLS) approach to the structural equation modeling technique SmartPLS 4. PLS procedure seeks to explain the structure or pattern among a set of latent constructs measured by one or more indicators (Do Paço et al., 2011). The PLS approach has a measurement model and a structural model. The measurement model aims to determine the relation between the observed items and the latent variables whereas the structural model determines the relations between the different latent variables (Barclay et al., 1995). To do so, and as the first step, the PLS procedure determines the reliability and validity of the measurement and, in the second step, the structural model is assessed by evaluating the explanatory power and the significance of the path coefficients (Chin, 1998). PLS is particularly appropriate for exploratory research because it makes minimal demands with respect to measurement scales and sample size (Hair et al., 2017). As our study wants to predict the effect of religiosity level on Ethical Behavior PLS approach is more appropriate. We present the results of the PLS analysis in the following section.

## Results

### Measurement Validity and Reliability

To test the reliability and validity (See Table 2) of our latent variables (Individual Religiosity and Ethical Behavior), we performed<sup>1</sup> a principal component analysis (PCA) and used the statistic from the PLS measurement model for each sub-sample (Catholic and Protestant). For Individual Religiosity, the PCA results show that one factor with an eigenvalue larger than one emerged. This single factor corresponds to the personal religiosity index of Saroglou et al. (2020). Concerning the Ethical Behavior variable, the PCA results<sup>2</sup> show that three factors with an eigenvalue larger than one emerged. We identify these three factors as Misuse, Favor, and Deceit unethical behavior which correspond to the three unethical behavior of Perryer and Scott-Ladd (2014).

The reliability of these variables was assessed using Fornell and Larcker’s (1981) composite reliability and Cronbach alpha. The composite reliability and Cronbach alpha values for the variables are above 0.7 (See Table 2), demonstrating acceptable reliability (Nunnally, 1978). The convergent validity is evaluated by analyzing the value of the average variance extracted (AVE) statistic. The AVE for the variables is higher than 0.5 (See Table 2), again demonstrating adequate convergent validity (Chin, 1998).

<sup>1</sup> We used SPSS 27 for the PCA analysis.

<sup>2</sup> The Varimax procedure was used to interpret the PCA results and component interpretations.

Finally, to check the discriminant validity of the construct's scale, we applied the Heterotrait–Monotrait (HTMT) SmpartPLS test (Henseler et al., 2015) to detect a potential lack of discriminant validity. The HTMT is the correlation of indicators across constructs measuring different phenomena, relative to the correlations of indicators within the same construct. As the HTMT estimates the correlation between two constructs, the discriminant validity can be established when the two constructs have an HTMT criterion value inferior to 0.85 (more conservative approach) or inferior to 0.90 (more liberal approach). We find that the HTMT's values range from 0.053 to 0.252 (See Table 3). These results confirm the discriminant validity of our constructs.

Overall, the results presented in Tables 2 and 3, indicate that the reliability and the discriminant validity for the Religiosity level, Misuse, Favor, and Deceit constructs are satisfactory.

### Structural model results

Our research aims to test the direct effect of the religiosity level on unethical behavior (Misuse, Favor, and Deceit) for the whole sample and then for the Catholic and Protestant groups. Table 4 reports the structural model<sup>3</sup> coefficients and the p-value related to our hypotheses H1a through H3c.

Our results show that a higher religiosity level, shapes perceptions of misuse as unethical, supporting H1a. When the Protestant and Catholic respondents were examined separately, we found that higher levels of religiosity were positively related to perceptions of misuse as unethical among Protestants (supporting H1b) as well as Catholics (supporting H1c). Our second set of hypotheses considered respondents "perceptions regarding exchanging favors." We did not find religiosity level to shape perceptions of exchanging favors as unethical, failing to support H2a. When the religious groups were examined separately, we found that higher religiosity among protestants was positively related to perceptions of exchanging favors as unethical, supporting H2b. This was not the case for the Catholic sample, which failed to support H2c. Finally, we examine whether religiosity is positively related to perceptions of deceit as unethical. We did not find support for the fact that higher religiosity is more likely to lead individuals to perceive deceit as unethical, failing to support H3a. This was also the case for the Protestant sample, failing to support H3b as well as for the Catholic sample, failing to support H3c. Thus, it would seem that whether one is religious or not, behaviors involving deceit are uniformly considered unethical.

## Discussion

Our findings indicate that higher religiosity, among Catholics and Protestants alike, was likely to lead individuals to consider misuse as unethical. Misuse, as it was assessed in our study, is in clear violation of basic Christian morals. Pretending to be sick to take a day off, using company resources or services for personal purposes, or stealing time are all related to theft, either of time or company resources. Protestants and Catholics with higher degrees of religiosity both consider such behaviors unethical.

However, when it came to the exchange of favors, we did not find such uniformity across the groups. When the exchanging favors dimension was examined, we identified a difference between the Catholic and Protestant respondents. While higher levels of religiosity were positively related to perceptions of exchanging favors as unethical among Protestants, this was not the case for Catholics. This might be explained by the fact that "Protestants tend to internalize social norms and adhere to them on a more personal basis (intrinsic religiousness)" (Quiamzade et al., 2017, p. 366). In contrast, Catholics' behavioral

<sup>3</sup> Before evaluating the structural model for hypotheses H1a to H3c, we first check the Common Method Bias (CMV) by examining the variance inflation factor (VIF) values (Kock, 2015). We found that all VIF values were below the threshold of 3.3 which indicate that the collinearity is not an issue.

regulation is grounded in “an external source of control (the monitoring of an authority)” (Quiamzade et al., 2017, p. 379). Saroglou (2019) explains that “Catholicism [...] in its adherence to a clear hierarchical structure and with its strong emphasis on family and related loyalty may have shaped people’s proclivity to more easily accept the status quo and accept conditions for corruption in society” (p. 772). Thus, protestants, given their higher level of intrinsic religiousness, are more likely to consider the exchange of favors as unethical.

Finally, our results indicate that individual levels of religiosity did not impact whether one considers deceit to be unethical or not. Namely, all individuals, those who ranked high as well as those who ranked low on religiosity, considered deceit to be unethical. The items associated with deceit were predominantly interpersonal, for example, blaming an innocent colleague for one’s mistakes or stealing credit for another’s work. Given that individual level of religiosity did not impact whether one considers deceit to be unethical or not, can have some implications for educators and employers. As deceit is considered unethical regardless of degree of religiosity, this aspect must not be as rigorously taught. This means that educators and employers can place additional attention on addressing other behaviors that could fall in the “grey” area when it comes to ethical conduct like misuse and exchange of favors.

Religiosity mattered when misuse and exchanging favors were concerned, suggesting that less religious individuals may consider such behaviors as more acceptable than more religious individuals do. This means that when universities prepare students or when employers provide ethics training to employees, these behaviors must be acknowledged and clearly framed as unethical.

We contribute to the literature in several ways. First, we distinguish religion and religiosity. By doing this, we clearly show that personal practice and religious involvement influence behavior rather than only religious belonging. Then, we differentiate three types of unethical behavior in the business context and demonstrate how Protestants and Catholics differ in their perceptions of (un) ethical behavior. Finally, we show the contrasts and parallels between the two religions and between religious and less religious actors of these religions.

### Limitations

Our study has a few limitations. First is our use of a sample from different nations that offer different environments in terms of secularisation levels. This may have impacted our findings. Our results should be verified in other nations beyond the ones covered in our sample.

Second, in most countries, younger people are less likely than those over 40 years of age to say that religion is central to their lives (Pew Research Centre, 2008). Having relied on a sample of relatively young individuals (79.9% are under 25 years old) may therefore have impacted our findings to the extent that a sample of older individuals may have yielded stronger relationships.

Third, the fact that our sample consists of university-educated individuals may also limit generalisability given the potential relationship between education and ethical considerations (Bageac et al., 2011). Indeed, according to Grady et al. (2008), ethics education has a significant positive influence on moral confidence, moral action, and the use of ethics resources among nurses and social workers. Also, Lau (2010) showed that ethics education improved students’ ethical awareness and moral reasoning. Mayhew and Murphy (2009) also found evidence that students who underwent ethics training were significantly less likely to misreport for more money compared to their counterparts who did not receive ethics training.

## Recommendations and Future Research Avenues

We identified a difference between Catholic and Protestant respondents in whether different behaviors in an organization are considered (un)ethical. In terms of behaviors associated with the exchange of favors, higher levels of religiosity were positively related to perceptions of exchanging favors as unethical among Protestants, but not among Catholics. This difference might be driven by individual moral reasoning in which honesty sometimes collides with loyalty (Shao et al., 2024). Business ethics driven by loyalty can lead people to turn a blind eye to unethical practices because they place higher value on loyalty to a colleague or a friend, for example (Hildreth & Anderson, 2018; Shao et al., 2024). Saroglou (2019) explains that Catholicism has a “strong emphasis on family and related loyalty” (p. 772). This may explain why Catholic respondents did not perceive such behaviors as unethical but Protestant respondents did. Future research may seek to distinguish between perceptions of ethical dilemmas from a loyalty perspective versus a responsibility perspective (in the latter, individuals see themselves as being accountable for their actions and try to act in the best interest of their organization, regardless of the consequences) to assess whether religions differ in how people perceive (un)ethical behaviors associated with exchange of favors.

Such ethical judgments might also be culturally driven, especially along the universalism-particularism dimension (Trompenaars & Hampden-Turner, 1998). In universalist societies, social interactions are determined by abstract principles such as the rule of law or religion. In particularist societies, on the other hand, rules are only a “rough guide”, and decisions are often made based on the people involved and their relationships (Trompenaars & Hampden-Turner, 1998). For example, in societies ranking high on universalism, people may judge whether a behavior is ethical or not by focusing on their responsibility to be ethical regardless of the situation or individuals involved. On the other hand, in cultures that rank higher on particularism, judgments of the ethicality of a behavior may be more strongly framed by the loyalty perspective and the relationship between the individuals involved.

In terms of practical implications, our study’s findings may be beneficial to educators who aim to prepare students, especially in business schools, for ethical conduct in their future managerial careers, be it in large organizations, or small entrepreneurial ventures. Similarly, employers providing ethics training to employees and managers might conclude our findings regarding what to emphasize in ethics training. Our results suggest that deceit is more easily identified as unethical, regardless of level of religiosity. Thus, ethics education and training should place additional emphasis on behaviors associated with misuse and exchanging favors.

## References

- Abbas, A. and Manton, G. (1998). Foundation of business ethics in contemporary religious thought: The ten commandments perspective. *International Journal of Social Economics*, 25(10), 1552-1564. <https://doi.org/10.1108/03068299810214089>
- Abela, A.V. (2014). Appealing to the imagination: Effective and ethical marketing of religion. *Journal of Business Research*, 67, 50–58. <https://doi.org/10.1016/j.jbusres.2013.03.011>
- Alshehri, F., Fotaki, M. and Kauser, S. (2021). The effects of spirituality and religiosity on the ethical judgment in organizations. *Journal of Business Ethics*, 174, 567–593. <https://doi.org/10.1007/s10551-020-04614-1>
- Astrachan, J. H., Astrachan, C. B., Campopiano, G. and Bau, M. (2020). Values, spirituality, and religion: Family business and the roots of sustainable ethical behavior. *Journal of Business Ethics*, 163, 637–645. <https://doi.org/10.1007/s10551-019-04392-5>

- Audretsch, D. B., Bonte, W. and Tamvada J. P. (2013). Religion, social class, and entrepreneurial choice. *Journal of Business Venturing*, 28, 774–789. <https://doi.org/10.1016/j.jbusvent.2013.06.002>
- Babalola, M. T., Bal, M, Cho, C. H., Garcia-Lorenzo, L., Guedhami, O., Liang, H., Shailer, G. and van Gils, S. (2022), Bringing Excitement to Empirical Business Ethics Research: Thoughts on the Future of Business Ethics, *Journal of Business Ethics*, 180, 903–916. <https://doi.org/10.1007/s10551-022-05242-7>
- Bageac, D., Furrer, O. and Reynaud, E. (2011). Management students' attitudes toward business ethics: A comparison between France and Romania. *Journal of Business Ethics*, 98, 391–406. <https://doi.org/10.1007/s10551-010-0555-5>
- Barbera, F., Shi, H. X., Agarwal, A. and Edwards, M. (2020). The family that prays together stays together: Toward a process model of religious value transmission in family firms. *Journal of Business Ethics*, 163, 661–673. <https://doi.org/10.1007/s10551-019-04382-7>
- Beekun, R. I. and Westerman, J. W. (2012). Spirituality and national culture as antecedents to ethical decision-making: A comparison between the United States and Norway. *Journal of Business Ethics*, 110, 33–44. <https://doi.org/10.1007/s10551-011-1145-x>
- Berings, D. and Adriaenssens, S. (2012). Role of business ethics, personality, work values and gender in vocational interests from adolescents. *Journal of Business Ethics*, 106, 325–335. <https://doi.org/10.1007/s10551-011-0999-2>
- Bloodgood, J. M., Turnley, W. H. and Mudrack, P. (2008). The influence of ethics instruction, religiosity, and intelligence on cheating behavior. *Journal of Business Ethics*, 82, 557–571. <https://doi.org/10.1007/s10551-007-9576-0>
- Callanan, G. A., Rotenberry, P. F., Perri, D. F., and Oehlers, P. (2010). Contextual factors as moderators of the effect of employee ethical ideology on ethical decision-making. *International Journal of Management*, 27(1), 52–75.
- Carl, D., Gupta, V. and Javidan, M. (2004). Power distance. In R.J. Jouse, P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta (Eds.) *Culture Leadership and Organizations: The GLOBE Study of 62 Societies* (pp. 513-5863). Thousand Oaks, CA: Sage.
- Carlson, D. S., Kacmar, K. M. and Wadsworth, L. L. (2002). The impact of moral intensity dimensions on ethical decision-making: Assessing the relevance of orientation. *Journal of Managerial Issues*, 14, 15–30.
- Chang, C. J., and Yen, S. (2007). The effects of moral development and adverse selection conditions on managers' project continuance decisions: A study in the Pacific-Rim region. *Journal of Business Ethics*, 76, 347–360. <https://doi.org/10.1007/s10551-006-9286-z>
- Chin, W. W. (1998) The partial least squares approach to structural equation modelling. In: Marcoulides GA (ed) *Modern Methods for Business Research*. Mahwah, NJ: Lawrence Erlbaum.
- Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43, 65–74. <https://doi.org/10.1023/A:1022911215204>
- Conrad, C. (ed.) (1993). *The Ethical Nexus*. Ablex, New Jersey.
- Conroy S. J. and Emerson T. L. (2004). Business ethics and religion: Religiosity as a predictor of ethical awareness among students. *Journal of Business Ethics*, 50, 383–396. <https://doi.org/10.1023/B:BUSI.0000025040.41263.09>
- Crane, A. and Matten, D. (2004). Questioning the domain of the business ethics curriculum. *Journal of Business Ethics*, 54, 357-369. <https://doi.org/10.1007/s10551-004-1825-x>



- Cruz, A. G. B., Seo, Y. and Buchanan-Olivier, M. (2018). Religion as a field of transcultural practices in multicultural marketplaces. *Journal of Business Research*, 91, 317–325. <https://doi.org/10.1016/j.jbusres.2017.07.022>
- Cullinan, C., Bline, D., Farrar, R., and Lowe, D. (2008). Organization-harm vs. organization-gain ethical issues: An exploratory examination of the effects of organizational commitment. *Journal of Business Ethics*, 80, 225–235. <https://doi.org/10.1007/s10551-007-9414-4>
- Curtis, M. B. (2006). Are audit-related ethical decisions dependent upon mood? *Journal of Business Ethics*, 68, 191–209. <https://doi.org/10.1007/s10551-006-9066-9>
- Dawson, L. M. (1997). Ethical differences between men and women in the sales profession. *Journal of Business Ethics*, 16(11), 1143–1152. <https://doi.org/10.1023/A:1005721916646>
- Dieleman, M. and Konig, J. (2020). Articulating values through identity work: Advancing family business ethics research. *Journal of Business Ethics*, 163, 675–687. <https://doi.org/10.1007/s10551-019-04380-9>
- Di Pietro, F. and Masciarelli, F. (2021). The effect of local religiosity on financing cross-regional entrepreneurial projects via crowdfunding. *Journal of Business Ethics*, <https://doi.org/10.1007/s10551-021-04805-4>
- do Paço, A. M. F., Ferreira, J. M., Raposo, M., Rodrigues, R. G. and Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship*, 9(1), 20–38. <https://doi.org/10.1007/s10843-010-0071-9>
- Driscoll, C., Mclsaac, E.M. and Wiebe, E. (2019). The material nature of spirituality in the small business workplace: From transcendent ethical values to immanent ethical actions. *Journal of Management, Spirituality & Religion*, 16(2), 155–177. <https://doi.org/10.1080/14766086.2019.1570474>
- Dunn, J. J. (2014). Noble vocations. *America*, 210(10), 13–16.
- Eweje, G., and Brunton, M. (2010). Ethical perceptions of business students in a New Zealand university: Do gender, age and work experience matter? *Business Ethics: A European Review*, 19(1), 95–111. <https://doi.org/10.1111/j.1467-8608.2009.01581.x>
- Fathallah, R., Sidani, Y. and Khalil, S. (2020). How religion shapes family business ethical behaviors: An institutional logics perspective. *Journal of Business Ethics*, 163, 647–659. <https://doi.org/10.1007/s10551-019-04383-6>
- Fernando, M., and Chowdhury, R. M. M. I. (2010). The relationship between spiritual well-being and ethical orientations in decision making: An empirical study with business executives in Australia. *Journal of Business Ethics*, 95, 211–225. <https://doi.org/10.1007/s10551-009-0355-y>
- Ferrell, O. C., Fraedrich, J. and Ferrell L. (2021), *Business Ethics: Ethical Decision Making and Cases*, 13<sup>th</sup> edition, Cengage, UK.
- Ferrell, O. C., Harrison, D. E., Ferrell, L. and Hair, J. F. (2019). Business ethics corporate social responsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, 95, 491–501. <https://doi.org/10.1016/j.jbusres.2018.07.039>
- Ford, R. C. and Richardson, W. D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, 13, 205–221. <https://doi.org/10.1007/BF02074820>
- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(3), 39–50. <https://doi.org/10.1177/002224378101800104>



- Fotaki, M., Altman, Y., and Koning, J. (2020). Spirituality, symbolism and storytelling in twenty-first-century organizations: Understanding and addressing the crisis of imagination. *Organization Studies*, 41(1), 7–30. <https://doi.org/10.1177/0170840619875782>
- Gallego-Alvarez, I., Rodríguez-Domínguez, L. and Vallejo, J. M. (2020). An analysis of business ethics in the cultural contexts of different religions. *Business Ethics, the Environment & Responsibility*, 29(3), 570–586. <https://doi.org/10.1111/beer.12277>
- Giacalone, R.A. and Jurkiewicz, C.L. (2003). Right from wrong: The influence of spirituality on perceptions of unethical business activities. *Journal of Business Ethics*, 46, 85–97. <https://doi.org/10.1023/A:1024767511458>
- Giacomin, O., Janssen, F., Shinnar, R. S., Gundolf, K. and Shiri, N. (2022). Individual religious affiliation, religiosity, and entrepreneurial intentions among students in four countries. *International Small Business Journal*, 41(3). <https://doi.org/10.1177/02662426221097910>
- Grady, C., Danis, M., Soeken, K. L., O'Donnell, P., Taylor, C., Farrar, A. and Ulrich, C. M. (2008). Does ethics education influence the moral action of practicing nurses and social workers? *The American Journal of Bioethics*, 8(4), <https://doi.org/10.1080/15265160802166017>
- Gundolf, K. and Filser, M. (2013) Management research and religion: a citation analysis. *Journal of Business Ethics*, 112(1), 177–185. <https://doi.org/10.1007/s10551-012-1240-7>
- Hair, J., Hult, G., Ringle, C., and Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Los Angeles: Sage.
- Harrison, A., Summers, J. and Mennecke, B. (2018). The effects of the dark triad on unethical behavior. *Journal of Business Ethics*, 153, 53–77. <https://doi.org/10.1007/s10551-016-3368-3>
- Henseler, J., Ringle, C. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hildreth J. A. D. and Anderson, C. (2018). Does loyalty trump honesty? Moral judgements of loyalty-driven deceit. *Journal of Experimental Social Psychology*, 79, 87–84. <https://doi.org/10.1016/j.jesp.2018.06.001>
- Hwang (Eds.). *The Handbook of Culture and Psychology* (pp. 724–785). Oxford University Press.
- Issa, T. and Pick, D. (2010). Ethical mindsets: An Australian study. *Journal of Business Ethics*, 96, 613–629. <https://doi.org/10.1007/s10551-010-0487-0>
- Jackson, T. and Artola, M. C. (1997). Ethical beliefs and management behavior: a cross cultural comparison. *Journal of Business Ethics*, 16(11), 1163–1173. <https://doi.org/10.1023/A:1005734825408>
- Judge, W. Q. and Douglas, T. J. (2013). Entrepreneurship as a leap of faith. *Journal of Management, Spirituality and Religion* 10(1): 37–65. <https://doi.org/10.1080/14766086.2012.758047>
- Kalshoven, K., Den Hartog, D. N. and De Hoogh, A. (2011). Ethical leader behavior and big five factors of personality. *Journal of Business Ethics*, 100, 349–366. <https://doi.org/10.1007/s10551-010-0685-9>
- Key, S. (2002). Perceived managerial discretion: An analysis of individual ethical intentions, *Journal of Managerial Issues*, 14, 218–233.
- Khurana, I., Singh Ghura, A. and Dutta, D. K. (2021) The influence of religion in the human orientation of entrepreneurs. *Journal of Small Business Management*, 59(3), 417–442. <https://doi.org/10.1080/00472778.2021.1890097>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>

- Kumar, S., Sahoo, S., Lim, W. M. and Dana, L. P. (2022). Religion as a social shaping force in entrepreneurship and business: Insights from a technology-empowered systematic literature review. *Technological Forecasting and Social Change*, 175, <https://doi.org/10.1016/j.techfore.2021.121393>
- Lau, C. L. L. (2010) A step forward : Ethics education matters! *Journal of Business Ethics*, 92, 565–584. <https://doi.org/10.1007/s10551-009-0173-2>
- Lemmergaard, J. and Lauridsen, J. (2008). The ethical climate of Danish firms: A discussion and enhancement of the ethical climate model. *Journal of Business Ethics*, 80(4), 653–675. <https://doi.org/10.1007/s10551-007-9461-x>
- Loe, T. W., Ferrell, L. and Mansfield, P. (2000). A review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics*, 25, 185–204. <https://doi.org/10.1023/A:1006083612239>
- Lowery, C. M. and Beadles, N. A. (2009). Differences between work related ethics and non-work ethics, and the effects of religiosity. *Journal of Managerial Issues*, 11, 421–435.
- Lowery, C. M., Duesing, R. J. and Beadles, N. A. (2014). A research note on the relationships among spirituality, contextual variables, and perceptions of ethics in the workplace. *Journal of Management Issues*, XXVI(4), 408–423.
- Luckerath-Rovers, M. and De Bos, A. (2011). Code of conduct for non-executive and supervisory directors. *Journal of Business Ethics*, 100, 465-481. <https://doi.org/10.1007/s10551-010-0691-y>
- Marques, P. A., and Azevedo-Pereira, J. (2009). Ethical ideology and ethical judgments in the Portuguese accounting profession. *Journal of Business Ethics*, 86, 227–242. <https://doi.org/10.1007/s10551-008-9845-6>
- Mayhew, B. W. and Murphy, P. R. (2009). The impact of ethics education on reporting behavior. *Journal of Business Ethics*, 86, 397–416. <https://doi.org/10.1007/s10551-008-9854-5>
- McCullough, P. M., and Faught, S. (2005). Rational moralists and moral rationalists value-based management: Model, criterion and validation. *Journal of Business Ethics*, 60, 195–205. <https://doi.org/10.1007/s10551-004-8317-x>
- McGee, R. W. and Benk, S. (2019). Christian attitudes toward ethics of tax evasion: a case study, *Journal of Financial Crime*, 26(1), 74–94. <https://doi.org/10.1108/JFC-11-2017-0104>
- McFerran, B., Aquino, K. and Duffy, M. (2010). How personality and moral identity relate to individuals' ethical ideology. *Business Ethics Quarterly*, 2 (1), 35-56. <https://doi.org/10.5840/beq20102014>
- Minton, E. A., Kahle, L. R. and Kim, C. H. (2015). Religion and motives for sustainable behaviors: A cross-cultural comparison and contrast. *Journal of Business Research*, 68, 1937–1944. <https://doi.org/10.1016/j.jbusres.2015.01.003>
- Naughton, M. J. and Cornwall, J. R. (2006). The virtue of courage in entrepreneurship: Engaging the catholic social tradition and the life-cycle of the business. *Business Ethics Quarterly*, 16(1), 69-93. <https://doi.org/10.5840/beq20061614>
- Newstrom, J. W. and Ruch W. A. (1975). The ethics of management and the management of ethics. *MSU Business Topics*, Winter, 29–37.
- Neubert, M. J. and Dougherty, K. D. (2018) Innovative work and worship contexts and their associations with regulatory focus mindset and nascent hybrid entrepreneurship. In T Ewest (Ed.) *Faith and Work: Christian Perspectives, Research and Insights into the Movement* Houston Baptist University Press.
- Norris, P. and Inglehart, R. (2004). *Sacred and Secular: Religion and Politics Worldwide*. New York: Cambridge University Press.

- Nunziata, L. and Rocco, L. (2016). A tale of minorities: Evidence on religious ethics and entrepreneurship. *Journal of Economic Growth*, 21, 189–224. <https://doi.org/10.1007/s10887-015-9123-2>
- Obregon, S. L., Lopes, L. F. D., and Kaczam, F. (2022). Religiosity, Spirituality and Work: A Systematic Literature Review and Research Directions. *Journal of Business Ethics*, 179, 573–595. <https://doi.org/10.1007/s10551-021-04856-7>
- O'Connor, D. (2004). By their fruits you shall know them. *U.S. Catholic* 69(5): 12–17.
- O'Fallon, M. and Butterfield, K. (2005). A review of the empirical ethical decision-making literature: 1996–2003. *Journal of Business Ethics*, 59, 375–413. <https://doi.org/10.1007/s10551-005-2929-7>
- Parboteeah, P. K., Hoegl, M. and Cullen, J. B. (2008). Ethics and religion: An empirical test of a multidimensional model. *Journal of Business Ethics*, 80, 387–398. <https://doi.org/10.1007/s10551-007-9439-8>
- Perryer, C., Scott-Ladd, B. (2014). Deceit, Misuse and Favours: Understanding and Measuring Attitudes to Ethics. *Journal of Business Ethics*, 121, 123–134. <https://doi.org/10.1007/s10551-012-1593-y>
- Pew Research Center (2008). *The Pew Global Attitudes Project*. Available at: www.pewresearch.org/global/2008/09/17/chapter-2-religiosity/ (accessed 20 October 2022).
- Phau, I. and Kea, G. (2007). Attitudes of university students toward business ethics: A cross-national investigation of Australia, Singapore and Hong Kong. *Journal of Business Ethics*, 72(1), 61–75. <https://doi.org/10.1007/s10551-006-9156-8>
- Pio, E. (2010) Religious merchants? Entrepreneurship in India. In: Dana LP (Ed.) *Entrepreneurship and Religion*. Cheltenham, UK: Edward Elgar pp.27–42.
- Pirson, M., Martin, K. and Parmar, B. (2017). Formation of stakeholder trust in business and the role of personal values. *Journal of Business Ethics*, 145, 1–20. <https://doi.org/10.1007/s10551-015-2839-2>
- Premeaux, S. F. (2004). The link between management behavior and ethical philosophy in the wake of the Enron convictions. *Journal of Business Ethics*, 85, 13–25. <https://doi.org/10.1007/s10551-008-9745-9>
- Quiamzade, A., Sommet, N., Burgos Laborde, J., L'huillier, J. P., and Guiso, L. (2017). I will put my law in their minds: Social control and cheating behavior among Catholics and Protestants. *Journal of the Scientific Study of Religion*, 56(2), 365–382. <https://doi.org/10.1111/jssr.12337>
- Rietveld, C. and van Burg, E. (2014) Religious beliefs and entrepreneurship among Dutch Protestants. *International Journal of Entrepreneurship and Small Business*, 23(3), 279–301. <https://doi.org/10.1504/IJESB.2014.065515>
- Salmoirago-Blotcher, E., Fitchett, G., Leung, K., Volturo, G., Boudreaux, E., Crawford, S., Ockene, I. and Curlin, F. (2016). An exploration of the role of religion/spirituality in the promotion of physicians' wellbeing in emergency medicine. *Preventive Medicine Reports*, 3, 189–195. <https://doi.org/10.1016/j.pmedr.2016.01.009>
- Saroglou, V. (2014). Introduction: Studying religion in personality and social psychology. In V. Saroglou (Ed.), *Religion, personality, and social behavior* (pp. 1–28). New York, NY: Psychology Press.
- Saroglou, V. (2019). Religion and related morality across cultures. In D. Matsumoto, H. C. Saroglou, V., Clobert, M., Cohen, A. B., Johnson, K. A., Ladd, K. L., Van Pachterbeke, M., Adamovova, L., Blogowska, J., Brandt, P.-Y., Çukur, C. S., Hwang, K.-K., Miglietta, A., Motti-Stefanidi, F., Muñoz-García, A., Murken, S., Roussiau, N. and Tapia Valladares, J. (Eds.) *Believing, bonding, behaving, and belonging: The cognitive, emotional, moral, and social dimensions of religiousness across cultures. Journal of Cross-Cultural Psychology*, 51(7–8), 551–575. <https://doi.org/10.1177/0022022120946488>

- Shao, S., Ribeiro, A.M., Fouladirad, S., Shrestha, C. M., Lee, K. and Cameron, C. A. (2024). Adolescents' moral reasoning when honesty and loyalty collide. *Social Development*, 33(1), 1–16. <https://doi.org/10.1111/sode.12700>
- Siwale, J., Gurau, C., Aluko, O., Dana, J. P. and Ojo, S. (2023). Toward understanding the dynamics of the relationship between religion, entrepreneurship and social change: Empirical findings from technology-savvy African immigrants in UK. *Technological Forecasting and Social Change*, 186. <https://doi.org/10.1016/j.techfore.2022.122153>
- Singhapakdi, A., Kraft, K. L., Vitell, S. J. and Rallapalli, K. C. (1995). The perceived importance of ethics and social responsibility on organisational effectiveness: A survey of marketers. *Journal of the Academy of Marketing Science*, 23(1), 49–56. <https://doi.org/10.1007/BF02894611>
- Sorenson, R. L. and Milbrandt, J. M. (2023). Family social capital in family business: A faith-based values theory. *Journal of Business Ethics*, 184, 701–724. <https://doi.org/10.1007/s10551-022-05110-4>
- Tabor, W., Madison, K., Marler, L. E. and Kellermanns, F. W. (2020). The effects of spiritual leadership on family firms: A conservation of resources perspective. *Journal of Business Ethics*, 163, 729–743. <https://doi.org/10.1007/s10551-019-04379-2>
- Trevino, L. and Nelson, K. (2021), *Managing Business Ethics*, 8<sup>th</sup> edition, Wiley, NJ, USA.
- Trompenaars, F and Hampden-Turner, C. (1998). *Riding the Waves of Culture: Understanding Cultural Diversity in Global Business*. New York: McGraw Hill.
- Umphress, E. E., Ren, L. R., Bingham, J. B. and Gogus, C.. (2009). The influence of distributive justice on lying for and stealing from a supervisor. *Journal of Business Ethics*, 86, 507–518. <https://doi.org/10.1007/s10551-008-9861-6>
- Vallaster, C., Kraus, S., Mergió Lindhal, J. M. and Nielsen, A. (2019). Ethics and entrepreneurship: A bibliometric study and literature review. *Journal of Business Research*, 99, 226–237. <https://doi.org/10.1016/j.jbusres.2019.02.050>
- Van Buren, H. J., Syed, J. and Mir, R. (2019). Religion as a macro social force affecting business: Concepts, questions, and future research. *Business & Society*, 59(5), 799-822. <https://doi.org/10.1177/000765031984509>
- Vinod, H.D. (2012). *The Oxford Handbook of Hindu Economics and Business*. Oxford, UK: Oxford University Press.
- Vitell, S. (2009). The role of religiosity in business and consumer ethics: A review of the literature. *Journal of Business Ethics*, 90, 155–167. <https://doi.org/10.1007/s10551-010-0382-8>
- Vitell S., Paolillo, J. G. P. and Singh, J. (2006). The Role of Money and Religiosity in determining consumers' ethical beliefs. *Journal of Business Ethics*, 64, 117–124. <https://doi.org/10.1007/s10551-005-1901-x>
- Vitell S., Paolillo, J. G. P. and Singh, J. (2005). Religiosity and consumer ethics. *Journal of Business Ethics*, 57, 175-181. <https://doi.org/10.1007/s10551-004-4603-x>
- Walker, A. G., Smither, J. W. and DeBode, J. (2012). The effects of religiosity on ethical judgments. *Journal of Business Ethics*, 106(4), 437–452. <https://doi.org/10.1007/s10551-011-1009-4>
- Wang, L. C. and Calvano, L. (2015). Is business ethics education effective? An analysis of gender, personal ethical perspectives, and moral judgment. *Journal of Business Ethics*, 126, 591–602. <https://doi.org/10.1007/s10551-013-1973-y>
- Weber, M. (2012/1905) *The Protestant Ethic and the Spirit of Capitalism*. Los Angeles, CA: Roxbury.

- Wang, G. and Hackett, R. D. (2016). Conceptualization and measurement of virtuous leadership: Doing well by doing good. *Journal of Business Ethics*, 137, 321–345. <https://doi.org/10.1007/s10551-015-2560-1>
- Yamamura, J. H. and Stedham, Y. (2011). Business ethics in Japan: Taking a closer look at the role of age. *Journal of International Business Research*, 10(3), 153–170.
- Zelekha, Y., Avnimelech, G. and Sharabi, E. (2014). Religious institutions and entrepreneurship, *Small Business Economics*, 42, 747–767. <https://doi.org/10.1007/s11187-013-9496-6>
- Zhuang, J., Thomas, S., and Miller, D. L. (2005). Examining culture's effect on whistle-blowing and peer reporting. *Business & Society*, 44, 462–486. <https://doi.org/10.1177/0007650305281848>

**Table 1: Core Concept Comparison: Protestant and Catholic Principles**

	Protestant	Catholic
Pursuit of Wealth	Pursuing wealth is desirable not only for personal advantage but also for an individual's responsibility.	Pursuing wealth is not appreciated unless it is primarily for the common good. Moral obligations for owners/managers towards their workers and society at large.
Work Ethic	Free competition and the pursuit of wealth without guilt.	Wealth accumulation is not an appreciated objective
Affiliation with God	Direct affiliation with God, led Protestants to be more intrinsically oriented toward religion.	Church mediates connection with God, leading Catholics to be more extrinsically oriented toward religion
Behavioral Regulation	Individuals are directly accountable to God for their behaviors.	Behavioral regulation occurs through the monitoring of an authority (the Church).
Ethical Orientation	Intrinsic motivation to behave ethically with a tendency to internalize social norms and adhere to them.	Adherence to a clear hierarchical structure with emphasis on family and related loyalty. May have shaped people's proclivity to accept conditions for corruption in society.



**Table 2**  
Exploratory Factor Analysis (Varimax), Reliability, and Average Variance Extracted (AVE)

Factor Analysis Indicators	All Sample			Catholic Sample			Protestant Sample					
	Religiosity	Misuse	Favor	Deceit	Religiosity	Misuse	Favor	Deceit	Religiosity	Misuse	Favor	Deceit
Do you consider God to be important in your life?	<b>.958</b>	.014	.006	.013	<b>.961</b>	.016	.015	.027	<b>.881</b>	.002	.066	.029
Do you consider religion to be important in your life	<b>.935</b>	.035	.009	.006	<b>.940</b>	.016	.031	.027	<b>.842</b>	.006	.064	.132
How often do you pray?	<b>.890</b>	.139	.032	.027	<b>.895</b>	.156	.014	.039	<b>.788</b>	.081	.107	.069
Accepting gifts/favors in exchange for preferential treatment is	.010	.192	<b>.897</b>	.173	.067	.153	<b>.888</b>	.164	.154	.376	<b>.902</b>	.111
Making an innocent colleague bear the responsibility for an error is	.042	.032	.163	<b>.762</b>	.047	.007	.191	<b>.659</b>	.070	.199	.431	<b>.558</b>
Giving gifts/favors in exchange for preferential treatment is	.062	.221	<b>.885</b>	.174	.034	.180	<b>.902</b>	.127	.210	.394	<b>.859</b>	.081
Not reporting breaches of organizational rules by others is	.040	.072	.315	<b>.686</b>	.002	.013	.288	<b>.642</b>	.105	.152	.242	<b>.596</b>
Claiming credit for somebody else's work is	.190	<b>.532</b>	.055	.329	.044	<b>.503</b>	.052	.361	.406	<b>.556</b>	.132	.491
Disclosing confidential information is	.133	.385	.064	<b>.587</b>	.011	.253	.182	<b>.580</b>	.015	.253	.083	<b>.751</b>
Claiming to be ill to obtain a day's holiday is	.069	<b>.609</b>	.172	.081	.054	<b>.573</b>	.045	.269	.162	<b>.820</b>	.111	.063
Stealing equipment and supplies from one's organization is	.001	<b>.601</b>	.183	.231	.046	<b>.656</b>	.089	.367	.017	<b>.679</b>	.152	.247
Managing a personal business during your working hours is	.209	<b>.799</b>	.088	.006	.125	<b>.813</b>	.003	.099	.265	<b>.911</b>	.207	.329
Concealing a personal error is	.063	<b>.625</b>	.077	.137	.080	<b>.681</b>	.186	.061	.206	<b>.738</b>	.010	.386
Giving yourself extra free time (to have lunch or a break, to go home early) is	.074	<b>.779</b>	.123	.045	.089	<b>.790</b>	.066	.052	.089	<b>.772</b>	.183	.054
Using your organization's services for personal reasons is	.079	<b>.762</b>	.209	.077	.097	<b>.729</b>	.200	.138	.165	<b>.880</b>	.269	.292
<b>Composite Reliability</b>		All Sample			Catholic Sample					Protestant Sample		
Religiosity		0.927			0.95					0.873		
Misuse		0.872			0.865					0.829		
Favor		0.942			0.886					0.947		
Deceit		0.959			0.969					0.975		
<b>Cronbach's Alpha</b>		0.882			0.923					0.788		
Religiosity		0.834			0.826					0.826		
Misuse		0.895			0.893					0.888		
Favor		0.937			0.953					0.963		
Deceit		0.809			0.863					0.699		
Religiosity		0.698			0.683					0.622		
Misuse		0.891			0.798					0.899		
Favor		0.886			0.913					0.928		
Deceit												

For All Sample: \*KMO = 0.763\* and Bartlett's test \*p < 0.001\* ; For Catholic Sample: \*KMO = 0.739\* and Bartlett's test \*p < 0.001\* ; For Protestant Sample: \*KMO = 0.707\* and Bartlett's test \*p < 0.001\* ; Note: The Boldface values represent the principal items for each component



**Table 3**  
Discriminant Validity HTMT (construct correlations in bracket)

<b>All Sample</b>			
	<b>Favor</b>	<b>Misuse</b>	<b>Deceit</b>
Favor	(1)		
Misuse	0.470 (0.413)	(1)	
Deceit	0.046 (0.039)	0.148 (0.128)	(1)
Religiosity	0.045 (-0.044)	0.276 (-0.265)	0.148 (0.144)
<b>Catholic Sample</b>			
Favor	(1)		
Misuse	0.410 (0.302)	(1)	
Deceit	0.053 (0.063)	0.137 (0.116)	(1)
Religiosity	0.050 (0.077)	0.230 (-0.237)	0.157 (0.158)
<b>Protestant Sample</b>			
Favor	(1)		
Misuse	0.376 (0.274)	(1)	
Deceit	0.097 (0.079)	0.119 (0.062)	(1)
Religiosity	0.241 (-0.185)	0.252 (-0.308)	0.229 (0.198)

**Table 4**  
Structural model results

<b>Direct Effect</b>	<b>Whole Sample</b>	<b>Catholic Sample</b>	<b>Protestant Sample</b>
Religiosity -> Favor	-0,044	0,078	-0,199**
Religiosity -> Misuse	-0,265***	-0,235***	-0,309*
Religiosity -> Deceit	0,051	0,081	0,062

For the whole Sample, Catholic Sample, and Protestant Sample, each cell reports the path coefficients. 5000 bootstrap samples. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01 (one-tailed).