



10-11-2022

The Relationship between Spirituality and Greed: Sex Matters

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Recommended Citation

Walker, Alan G. and Mercer, Ian S. (2022) "The Relationship between Spirituality and Greed: Sex Matters," *Journal of Religion and Business Ethics*: Vol. 5, Article 1.

Available at: <https://via.library.depaul.edu/jrbe/vol5/iss1/1>

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INTRODUCTION

There appears to be no apparent end to on-going corporate scandals and malfeasance. For example, Fortune.com recently ran an on-line article entitled, “The 10 Biggest Business Scandals of 2017.”¹ This list included technological giant Apple, which was accused of purposely slowing down older models of iPhones when a new version came out in an attempt to force consumers to spend more on upgrades. Another example included Wells Fargo, who after already losing the trust of consumers in 2016 for creating millions of fake accounts, and in spite of advertising to win customers trust back with promises of reform, nonetheless admitted in 2017 to charging as many as 570,000 consumers for auto insurance that they did not need. As corporate scandals such as these continue to mount on a seemingly daily basis, there appears to be no loss of interest in being better able to explain these breaches of ethical conduct.²

Greed as an Explanation of Corporate Malfeasance

One recent avenue in explaining corporate ethical misbehavior that is beginning to gain some traction is that of greed.³ Although numerous conceptualizations and definitions of greed exist (see Carnevale, Walker and Walker⁴ for a review) we have opted to adhere to the definition posed by Crossley.⁵

¹ Lucinda Shein. “The 10 Biggest Business Scandals of 2017.” Fortune, December 31, (2017), <http://fortune.com/2017/12/31/biggest-corporate-scandals-misconduct-2017-pr/>.

² Katalin T. Hayes, Joanna T. Campbell, and Michael A. Hitt, “When More is not Enough: Executive Greed and its Influence on Shareholder Wealth,” *Journal of Management*, 43 (2017): 555-584; Patrick Mussel and Johannes Hewig, “The Life and Times of Individuals Scoring High and Low on Dispositional Greed,” *Journal of Research in Personality*, 64 (2016): 52-60; Jenifer J. Kish-Gephart, David A. Harrison, and Linda K. Treviño, “Bad Apples, Bad Cases, and Bad Barrels: Meta-analytic Evidence about Sources of Unethical Decisions at Work,” *Journal of Applied Psychology*, 95 (2010): 1-31.

³ Kaitlin T. Hayes, Michael A. Hitt, and Joanna T. Campbell, “The Dark Side of Leadership: Towards a Mid-Range Theory of Hubris and Greed in Entrepreneurial Contexts,” *Journal of Management Studies*, 52 (2015a): 479-505; Kaitlin T. Hayes, Matthew Josefy, and Michael A. Hitt, “Tipping Point: A Managers Self-Interest, Greed, and Altruism,” *Journal of Leadership and Organizational Studies*, 22: (2015b): 265-279; Patrick Mussel, and Johannes Hewig, “The Life and Times of Individuals Scoring High and Low on Dispositional Greed,” *Journal of Research in Personality*, 64 (2016): 52-60.

⁴ Joel B. Carnevale, Alan Walker, Jack H. Walker, Organizational Greed: Behavior, Perception, or Trait? Toward an Integrated Theory. *Academy of Management Annual Meeting Proceedings*. (2016): 308-313.

⁵ Craig D. Crossley, “Emotional and Behavioral Reactions to Social Undermining: A Closer Look at Perceived Offender Motives,” *Organizational Behavior & Human Decision Processes*, 108 (2009): 14-24.

More specifically, Crossley has defined greed as “an instrumental and self-interested desire for wealth or gain, often at the expense of another or out of disregard for others’ well-being.” We find this definition to be especially salient and meaningful in organizational settings given it simultaneously captures the notion of an incessant drive to selfishly gain as much as possible along with the harm that is inevitably done to others (e.g., shareholders, customers, and society at large). Further, we believe this definition accurately captures the apparent behavior of key organizational executives in the Wells Fargo and Apple examples mentioned previously. We also believe the ideas of “selfish gain” and “harm” done to others concurs with the general population’s idea of what corporate greed represents. Finally, we believe this definition is consistent with the meta-analytic conclusions of Kish-Gephart et al.,⁶ involving 136 studies over a 30-year period regarding dispositional aspects of unethical behavior at work. More specifically, Kish-Gephart et al.,⁷ noted that ... “an interesting common theme...is the apparent importance of self-gain, self-preservation, or self-interest.”

Perhaps not surprisingly, scholars are beginning to find meaningful relationships between greed and unethical decisions and behavior, as well as unfavorable organizational outcomes. For example, Mussel & Hewig⁸ provided evidence that a measure of greed was related to making more selfish decisions in a common goods game, keeping more money in a dictator game, and taking higher risks in risk games. Interestingly, they also found greed to be related to a measure of ‘meanness’ of the triarchic psychopathy model. In this model, psychopathy is conceptualized as consisting of three distinct phenotypic elements including disinhibition (impulse control), boldness (social dominance) and meanness (aggressively acquiring resources without regard for others).⁹ concluded that the scholarly study of greed is likely to uncover relationships to many highly relevant real-world outcomes.

In another recent study involving greed in an organizational setting, Haynes et al.¹⁰ found CEO greed to be associated with negative organizational outcomes. In this study, Haynes et al.¹¹ operationalized CEO greed as “extraordinary compensation” as evidenced by three proxies. The first proxy assessed the dollar value of annual compensation not categorized as salary or bonus – that is, high levels of perquisites (perks). The second proxy consisted of the ratio of the CEO’s cash compensation to the cash compensation of the next most highly paid executive

⁶ Jennifer J. Kish-Gephart, David A. Harrison, and Linda K. Trevino, 2010.

⁷ Jennifer J. Kish-Gephart, David A. Harrison, and Linda K. Trevino, 2010, 18.

⁸ Patrick Mussel, and Johannes Hewig, 2016.

⁹ Patrick Mussel, and Johannes Hewig, 2016.

¹⁰ Katalin. T. Hayes, Joanna T. Campbell, and Michael A. Hitt, 2017.

¹¹ Katalin. T. Hayes, Joanna T. Campbell, and Michael A. Hitt, 2017.

in the firm. Finally, the third proxy consisted of CEO “‘overpayment’ – the portion of the CEO’s total pay that exceeded what could be explained by firm size, prior performance, firm risks and other factors.”¹² Results of this study revealed a negative relationship between CEO greed as operationalized above with shareholder return utilizing a sample of over 300 publicly-traded firms across multiple industries. Haynes et al.¹³ also found that managerial discretion moderated the relationship between CEO greed and shareholder wealth such that the higher the managerial discretion in negotiating their own salary, the more negative the relationship between CEO greed and shareholder wealth. Conversely, the relationship between CEO greed and shareholder wealth was also moderated by the presence of a powerful, independent board such that when board power was high, the relationship between CEO greed and shareholder wealth was less negative. Note that these latter findings would appear to relate well with Crossley’s definition of greed. That is, excessive compensation can be viewed as selfishness, especially when the executives had latitude in setting their own salaries and harm is done to others (employees, shareholders, retirees, society at large) when corporate performance is diminished.

In sum, because recent empirical evidence suggests that greed is proving to be a useful variable in explaining corporate ethical breaches, a next logical step is to begin exploring antecedents or predictors of dispositional greed. In this study, we examine one such variable that we believe may serve such a role – a measure of spirituality. More specifically, we sought to examine whether or not a measure of spirituality would explain additional variance in a trait measure of greed above and beyond that variance explained by two well-established variables that previous research has found to be strongly related to unethical behavior in general (sex and being a business major in college) (e.g., Dalton & Ortegren¹⁴; Wang, Malhotra, and Murnighan¹⁵). We believe that such an examination presents a rigorous test of whether or not spirituality may represent an important construct to consider in future research aimed at explaining corporate malfeasance such as that described above.

In pursuing the above objective, we first discuss the role of religiosity in explaining unethical behavior. We then discuss how religiosity and spirituality differ and present arguments for why we have chosen to utilize a measure of

¹² Katalin. T. Hayes, Joanna T. Campbell, and Michael A. Hitt, 2017, 569.

¹³ Katalin. T. Hayes, Joanna T. Campbell, and Michael A. Hitt, 2017.

¹⁴ Derek Dalton, and Marc Ortegren, “Gender Differences in Ethics Research: The Importance of Controlling for the Social Desirability Response Bias,” *Journal of Business Ethics*, 103 (2011): 73-93.

¹⁵ Long Wang, Deepak Malhotra, and J. Keith Murnighan, “Economics Education and Greed,” *Academy of Management Learning & Education*, 10 (2011): 643-660.

spirituality as opposed to a measure of religiosity. We then further hypothesize that our measure of spirituality will have a negative relationship to our trait measure of greed. Next, we discuss two variables that previous research has determined to be strongly related to unethical behavior in general, namely sex and being a college major. We then present our second hypothesis which asserts that our measure of spirituality will explain additional variance in our measure of trait greed above and beyond sex and being a business major. We conclude by conducting a purely exploratory analysis in which we examine the possible interactions of sex, college major, and spirituality with our trait measure of greed.

The Role of Religiosity in Explaining Ethical Behavior

One relatively recent approach taken by organizational scholars in attempts at better understanding these corporate ethics-related and greed-driven scandals has been the potential role that religiosity may play. Religiosity would appear to be a logical avenue to pursue given various religions offer principles, values, norms, and beliefs for making more ethical decisions.¹⁶ Cunningham¹⁷ succinctly summarized the potential role of religion in business ethics, stating that it “provides us with a prophetic grammar for those times when it may well be imperative to resist a course of action with an explicit ‘no’ and, at the same time also supplies the vocabulary to assert the reasons for that ‘no’.”¹⁸

Examining the role of religiosity in explaining unethical organizational behavior appears to be paying meaningful dividends. Indeed, numerous organizational scholars have identified meaningful relationships between religiosity and ethical judgments and decisions. For example, Vitell¹⁹ reviewed the academic literature that examined the relationship between religiosity and ethical judgments and intentions and concluded that while much work is still needed before drawing definitive statements, the studies he reviewed nonetheless demonstrated a clear link between religiosity and ethical judgments and decisions for those who possessed stronger religious beliefs. More recently, Walker, Smither, and DeBode²⁰ provided evidence that those who scored higher on a measure of

¹⁶ K. Praveen Parboteeah, Martin Hoegl, and John B. Cullen, “Ethics and Religion: An Empirical Test of a Multidimensional Model,” *Journal of Business Ethics*, 80 (2008): 387-398.

¹⁷ Lawrence S. Cunningham, “Spirituality and Religion: Some Reflections,” In *Business, Religion, and Spirituality*, ed. Oliver F. Williams (Notre Dame: University of Notre Dame Press, 2003), 180-181.

¹⁸ Lawrence S. Cunningham, 2003, 180.

¹⁹ Scott J. Vitell, “The Role of Religiosity in Business and Consumer Ethics: A Review of the Literature,” *Journal of Business Ethics*, 90 (2009): 155-167.

²⁰ Alan G. Walker, James W. Smither, and Jason D. DeBode, “The Effects of Religiosity on Ethical Judgements,” *Journal of Business Ethics*, 106 (2012): 437-452.

intrinsically motivated religiosity (having a pure, direct motivation toward religion) were less likely to endorse a set of ethically-questionable vignettes. Similarly, Singhapakdi et al.²¹ found that marketing managers scoring higher in intrinsically motivated religiosity were less likely to intend to engage in ethically questionable behavior.

In sum, religiosity appears to be meaningfully related to ethical judgments and intentions. However, to our knowledge, no study has examined the possible direct effect of religiosity on greed. That is, examined whether or not religiosity may serve as an antecedent to greed.

Differentiating Between Spirituality and Religion

Del Rio and White²² have stressed the importance of scholars not conflating the constructs of religiosity and spirituality in their research and have emphasized that precision and clarity in the use of these constructs is fundamental to theoretical development. Del Rio and White²³ have thus defined spirituality as "...one's attitude toward life, toward making sense of life, and toward seeking for relationships with others and ultimately with that which is transcendent. Similarly, Stiffoss-Hanssen²⁴ described spirituality as "a sense that there is something more to life but not subscribing to established religion...". Del Rio and White²⁵ contrast spirituality from religiosity which they view as "...the preservation of certain customs to satisfy some conventionally established practices to secure a path for the soul toward what is transcendent." Similarly, Del Rio and White²⁶ cite the DSM-IV which defined religiosity as "...adherence to beliefs and practices of a recognized organization, whereas spirituality means a relationship between a person and what is transcendent regardless of religious affiliation." Del Rio and White²⁷ further cite research which demonstrates that religiosity and spirituality are separate constructs.

In the present research, we have chosen to examine spirituality, as opposed to religiosity for several reasons. First, spirituality is generally believed to be a

²¹ Anusorn Singhapakdi, Scott J. Vitell, Dong-Jin Lee, Amiee M. Nisius, and Grace B. Yu, "The Influence of Money and Religiosity on Ethical Decision-Making in Marketing," *Journal of Business Ethics*, 114 (2013): 183-191.

²² Carlos M. Del Rio, and Lyle J. White. "Separating spirituality from religiosity: A hylomorphic attitudinal perspective." *Psychology of Religion and Spirituality* 4.2 (2012): 123.

²³ Carlos M. Del Rio, and Lyle J. White, 2012, 124.

²⁴ Hans Stiffoss-Hanssen, "Religion and spirituality: What a European ear hears." *The International Journal for the Psychology of Religion* 9.1 (1999): 25-33, 26

²⁵ Carlos M. Del Rio, and Lyle J. White, 2012, 130.

²⁶ Carlos M. Del Rio, and Lyle J. White, 2012, 130.

²⁷ Carlos M. Del Rio, and Lyle J. White, 2012.

broader bandwidth construct than that of religiosity (Pargament;²⁸ Stifoss-Hanssen²⁹). For example, Zinnbauer et al.³⁰ found that while 78% of 346 individuals representing a wide range of religious backgrounds considered themselves to be 'religious', over 90% rated themselves as 'spiritual'. This may be because spirituality may be perceived to be much less bound to traditional religious ideologies, doctrines, and practices, as noted above, as well as discomfort with traditional views of a Higher Being or God.³¹ Further, Stifoss-Hanssen³² contended that spirituality (as opposed to religiosity) may be expressed by agnostics and even atheists. Thus, we were interested in incorporating a construct that would be more widely distributed and not necessarily limited to specific religious teachings (e.g., Christianity, Judaism, Buddhism, Hinduism, etc.).

Second, and closely related to the above argument, using a measure of religiosity as opposed to spirituality would essentially eliminate a potentially large percentage of our sample. Further, and perhaps more importantly, eliminating agnostics and atheists would therefore attenuate our ability to extrapolate our findings to the larger population who do not consider themselves to be religious, but do perceive themselves to be spiritual. We believe this is an important point for two reasons. First, prior research has provided evidence that while religiosity is generally, but not always, related to making ethical judgements, agnostics and atheists may also be fully and equally capable of making ethical judgements as well. For example, Walker et al.³³ found that those who rated themselves lower across four separate religious measures (who they classified as the 'nones') were equally capable of making ethical judgements as were those who rated themselves higher across these four measures of religiosity. Thus, these 'nones,' who rated themselves as predominately agnostic, who did not possess a salient religious identity, and who rated themselves lower on general levels of religiosity, were equally capable of making ethical judgements as their more religious counterparts. This finding may suggest that it is something other than the doctrine or dogma of religiosity per se

²⁸ Kenneth I. Pargament, "The psychology of religion and spirituality? Yes and no." *The International Journal for the Psychology of Religion* 9.1 (1999): 3-16.

²⁹ Hans Stifoss-Hanssen, 1999.

³⁰ Brian J. Zinnbauer, Kenneth I. Pargament, and Allie B. Scott. "The emerging meanings of religiousness and spirituality: Problems and prospects." *Journal of personality* 67.6 (1999): 889-919.

³¹ Robert A. Emmons, and Cheryl A. Crumpler. "Religion and spirituality? The roles of sanctification and the concept of God." *The International Journal for the Psychology of Religion* 9.1 (1999): 17-24.

³² Hans Stifoss-Hanssen, 1999.

³³ Alan G. Walker, L. Allison Jones-Farmer, Jason D. DeBode, James W. Smither, and Raymond D. Smith. "Using latent profile regression to explore the relationship between religiosity and work-related ethical judgments." *Journal of Religion and Business Ethics* 3, no. 1 (2014): 12.

that was related to making more ethical judgements. We believe this other construct or factor may be well represented by a measure of spirituality as opposed to religiosity.

Thus, to our knowledge, no research has examined the relationship between a measure of spirituality (as opposed to religiosity) and a dispositional measure of greed (a possible antecedent of unethical behavior) – the focal variables of interest in our study. Because religiosity, but not spirituality, has been found to be generally related to ethical outcomes (but not always as cited above), and also because using only measures of religiosity essentially eliminates a large segment of the general population, we were interested to see if spirituality would similarly be related to our dispositional measure of greed. We expected that spirituality, given its emphasis on building and maintaining personal relationships as well as seeking transcendence in general, would be negatively related to our dispositional measure of greed. Thus:

Hypothesis 1. We expect a significant negative relationship between a measure of spirituality and a measure of dispositional greed.

The Relationship Between Sex and Ethical Behavior

Sex has been one of the most frequently studied independent variables within the ethics literature.³⁴ In fact, we conducted a search utilizing the terms “sex” and “ethic” or “gender” and “ethic” utilizing Academic Search Premier and uncovered over 250 studies. The general belief underlying potential sex differences in ethics-related judgements and behavior is based largely on assumed differences in gender socialization. This differentiation in socialization is then presumed to result in males and females thinking differently about and therefore judging ethical issues differently. More specifically, it is thought that females are generally more cognizant of others and their needs and wishes as well as potential harm done to others.³⁵

Although findings have been mixed, researchers have generally found support for these assumptions. That is, when sex differences are present, females, as compared to males, are more likely to exhibit more favorable ethical intentions, judgements, and behaviors.³⁶ A comprehensive meta-analysis conducted by Kish-

³⁴ Derek Dalton, and Marc Ortegren, 2011.

³⁵ Carol Gilligan, “In a Different Voice: Women’s Conceptions of Self and Morality.,” *Harvard Educational Review*, 47 (1977): 481-517; Carol Gilligan, “*In a Different Voice: Psychological Theory and Women’s Development*,” Harvard University Press, Cambridge, MA, (1982).

³⁶ Derek Dalton, and Marc Ortegren, 2011.

Gephart et al.³⁷ utilizing 60 studies with a combined sample size of 21,927 found that women were more likely than men to exhibit more ethical intentions as well as behavior.

The Relationship Between College Major and Ethical Behavior

As is the case with sex, researchers have also had a longstanding interest in possible differences in ethical judgments, decisions, and behaviors between business and non-business majors.³⁸ As is the case with sex, results have been mixed, but scholars have generally found business majors to exhibit less ethical judgments, decisions, and behaviors than non-business majors and to exhibit more greed. For example, Wang, Malhotra, and Murnighan³⁹ found multi-study evidence of a relationship between economic-related courses in an MBA program and greed. In the first study, they provided evidence that economics majors and students who had taken multiple economics courses kept more money in a money allocation task commonly referred to as the Dictator Game. In a second study, they found evidence that economics education was related to more positive attitudes toward greed in general, as well as toward one's own greedy behavior. In a third study, students expressed increased moral acceptance of greed after merely being exposed to a short statement regarding the societal benefits of self-interest - regardless of whether or not they were economics students. Wang et al.⁴⁰ concluded that their three studies provide evidence that economics education may have significant unintended consequences on students' attitudes toward greed. Similarly, Lampe and Engleman-Lampe⁴¹ found that business majors were more likely to cheat than other students and Smyth, Davis, and Kroncke⁴² found that non-business majors were more ethical than business majors in endorsing questionable academic and business situations. Finally, Lane⁴³ found that a majority of a sample 412

³⁷ Jennifer J. Kish-Gephart, David A. Harrison, and Linda K. Trevino, 2010.

³⁸ Grant Aguirre, Michael R. Hyman, Darrell Goudge, Stefen Genchev, Amy Carrell, and Corey Hamilton, "Teaching Ethics to Marketing and Logistics Majors: A Transformative Learning Experiment," *Journal of Education for Business*, 92 (2017): 121-128.

³⁹ Long Wang, Deepak Malhotra, and J. Keith Murnighan, 2011.

⁴⁰ Long Wang, Deepak Malhotra, and J. Keith Murnighan, 2011.

⁴¹ Marc Lamp, and Crystal Engleman-Lampe, "Mindfulness-based Business Ethics Education," *Academy of Educational Leadership*, 16 (2012): 99-111.

⁴² Lynette S. Smyth, James R. Davis, and Charles O. Kroncke, "Students' Perceptions of Business Ethics: Using Cheating as a Surrogate for Business Situations," *Journal of Education for Business*, 84 (2009): 229-238.

⁴³ Jim C. Lane, "Ethics of Business Students: Some Marketing Perspectives," *Journal of Business Ethics*, 14 (7) (1995): 571-581.

undergraduate business students enrolled at a major university in Europe were prepared to act unethically in order to gain either competitive or personal gain.

Will Spirituality Explain Additional Variance in Greed?

Although sex (i.e., being male) and being a business major (as opposed to other majors) have well-established links with unethical outcomes, spirituality does not. Thus, although we hypothesized spirituality to be negatively related to our measure of dispositional greed (hypothesis 1), we sought to more rigorously examine the relationship between spirituality and dispositional greed by examining whether or not a measure of spirituality could explain additional, unique variance in a measure of dispositional greed above and beyond that variance explained by sex and whether or not one was a business major. In other words, we were interested in examining whether or not the relationship between spirituality and greed would be robust enough to explain additional variance in greed above and beyond that variance explained by two variables to have well-established relationships with greed. Given spirituality's emphasizes on benevolence towards others, building and maintaining personal relationships, and seeking transcendence in general, we expect:

Hypothesis 2. A measure of spirituality to explain additional, unique variance in a measure of dispositional greed above and beyond that explained by sex and college major (business vs. non-business major).

Possible Interactions Between Sex, Business Major, and Greed

Smith, DeBode and Walker⁴⁴ noted that sex differences in ethical judgments may indeed exist, but that these differences may be masked because researchers have mostly examined simple bivariate relationships (e.g., correlations) between sex and ethical outcomes. Smith et al.⁴⁵ argued that perhaps a more complex relationship exists between sex and ethical outcomes. Thus, based on this assertion, and also because previous work has not examined sex, spirituality, and being a business major (or not) in combination, we were interested to see if a more complex model involving the interaction of these variables would explain additional variance in our

⁴⁴ Raymond D. Smith, Jason D. DeBode, and Alan G. Walker, "The Influence of Age, Sex, and Theism on Ethical Judgements," *Journal of Management, Spirituality & Religion*, 10 (2013): 67-89.

⁴⁵ Raymond D. Smith, Jason D. DeBode, and Alan G. Walker, 2013.

measure of dispositional greed above that variance explained by the main effects of spirituality, sex, and being a business major. These additional analyses are purely exploratory in nature and thus we do not present any formal hypotheses.

METHOD

Participants

Data was collected from 772 undergraduate students in a large southeastern public university. Three hundred ninety-nine males and 365 females participated. Participants included 610 business school students, 68 from the college of liberal arts, 36 from the college of engineering, and 13 each from the colleges of human sciences and agriculture. Other colleges and schools represented in our sample included the college of science and mathematics, the college of education, and the schools of nursing and pharmacy. The average age of participants was 21.25 years. In terms of ethnicity, 85.4% were Caucasian, 6% African-American, and 2.3% Hispanic/Latino. Less than 2% of participants indicated their ethnicity as Multiracial, Native American, or Alaskan Native.

Design and procedure

We collected our data at four distinct times; one in July, September and November, 2016 and the fourth in January, 2017. All of our variables were collected at each of these administrations. The data were collected using the university's SONA on-line research participation scheduling system. Participants received credits that could be applied to classes offering extra credit for research participation.

MEASURES

Daily Spiritual Experiences Scale

Recently, Kapuscinski & Masters⁴⁶ noted that although interest in the construct and measurement of spirituality has grown exponentially, there still remains much debate among scholars concerning the nature of spirituality and its assessment. Based then, on this rather ambiguous state of spirituality and its measurement, they undertook a critical review of 24 of the most prevalent measures of spirituality utilizing the multiple criteria of: (a) construct conceptualization, (b) item generation and revision, (c) format, (d) sample characteristics, and (e) psychometric properties.

⁴⁶ Afton N. Kapuscinski, and Kevin S. Masters. "The current status of measures of spirituality: A critical review of scale development." *Psychology of Religion and Spirituality* 2, no. 4 (2010): 191.

Kapuscinski and Masters⁴⁷ concluded that four measures of spirituality stood out in relation to the other 20 regarding these criteria and are thus valuable in conducting future research. Two of the measures they recommended are best suited for a medical or psychotherapy research setting and were thus not considered for the current project. The third contained 24 items and thus raised concerns of assessment fatigue when used in combination with our other measures. Thus, it was deemed that the Daily Spiritual Experiences Scale (DSES)⁴⁸ best met our needs for the current study given its developmental rigor, psychometric qualities (reported next) and number of items (i.e., 16).

Kalkstein and Tower⁴⁹ reported coefficient alpha for the DSES to be .96 for a merged sample of community and Jewish participants and concluded that the DSES is a valuable measure useful for conducting future research in spirituality. Kapuscinski and Masters⁵⁰ reported outstanding psychometric qualities for the DSES ($\alpha = .94 - .95$). Currier et al.⁵¹ found a relationship between the DSES and more favorable attitudes toward death and dying. This is a significant finding because one of the most critical times that a sense of spirituality can provide a meaningful and functional coping mechanism is at the end of one's life.

Underwood and Tersi⁵² reported that the DSES was designed to measure experiences of spirituality such as "awe, joy that lifts one out of the mundane, and a sense of deep, inner peace." They contend that the DSES is intended to assess one's perception, in his or her daily life, of transcendent experiences independent of the boundaries of any specific religion. Thus, the DSES is applicable to individuals from most, if not all, world religions and is also relevant to agnostics or even atheists. The DSES contains 15 items that utilize a six-point Likert-type scale (where 1 = "Never, or Almost Never" 2 = "Once in a while," 3 = "Some Days," 4 = "Most Days," 5 = "Every Day," and 6 = "Many Times a Day"). The DSES also contains a 16th item, "In general, how close do you feel to God?" which utilizes a four-point Likert-type scale where 1 = "Not at All," 2 = "Somewhat Close," 3 = "Very Close," and 4 = "As Close as Possible." This last item was not included in

⁴⁷ Kapuscinski, Afton N., and Kevin S. Masters. 2010.

⁴⁸ Lynne G. Underwood, and Jeanne A. Tersi, "The Daily Spiritual Experience Scale: Development, Theoretical Description, Reliability, Exploratory Factor Analysis, and Preliminary Construct Validity Using Health-Related Data," *Annals of Behavioral Medicine*, 24 (2002): 22-33.

⁴⁹ Solomon Kalkstein, and Roni B. Tower, "The Daily Spiritual Experiences Scale and Well-Being: Demographic Comparisons and Scale Validation with Older Jewish Adults and a Diverse Internet Sample," *Journal of Religion and Health*, 48 (2009): 402-417.

⁵⁰ Afton N. Kapuscinski, and Kevin S. Masters. 2010.

⁵¹ Joseph M. Currier, Seong-Hyeon Kim, Charlotte Sandy, and Robert A. Neimeyer, "The Factor Structure of the Daily Spiritual Experiences Scale: Exploring the Role of Theistic and Nontheistic Approaches at the End of Life," *Psychology of Religion and Spirituality*, 4 (2012): 108-122.

⁵² Lynne G. Underwood, and Jeanne A. Tersi, 2002.

the current study. However, confirmatory factor analyses from previous studies have indicated a single underlying dimension across all 16 items. Thus, exclusion of this item could only serve to attenuate any potential relationships with other variables. Example items include “I experience a connection to all of life,” “I find strength in my religion or spirituality,” “I find comfort in my religion or spirituality,” “I feel deep inner peace or harmony,” “I am spiritually touched by the beauty of creation.”

Business Major or Not

One of the variables we collected asked participants to indicate their current major. This was a string variable wherein participants typed in their responses. Each participant’s reported major was then examined in order to determine whether or not their indicated major was one of the nine offered by the College of Business. These included: Accounting, Business Administration, Business Analytics, Finance, Information Systems Management, International Business, Management, Marketing, and Supply Chain Management. Six hundred and ten participants indicated that their current major fell into one of these nine majors. Thus, 610 participants were business-related majors and 162 were not. Of the 162 who indicated they were not business majors, 68 indicated that they were from the college of liberal arts, 36 from the college of engineering, and 13 each from the colleges of human sciences and agriculture. Other colleges and schools represented in our sample included the college of science and mathematics, the college of education, and the schools of nursing and pharmacy. Participants indicated major was coded 1 = “Business School Major,” and 2 = “Not Business School Major.”

Sex

Participants also indicated their sex. Participant sex was coded 1 = “male” and 2 = “female.” Three hundred ninety-nine participants indicated their sex was male and 365 indicated their sex was female.

Dependent Variable

Defining greed as “insatiability,” Krekels and Pandelaere⁵³ sought to develop a measure of greed that is independent of a particular situation in which one may find oneself. Thus, although almost any individual may potentially behave in a greedy

⁵³ Goedele Krekels, and Mario Pandelaere, “Dispositional Greed,” *Personality and Individual Differences*, 74 (2015): 225-230.

manner in the “perfect storm” situation, Krekels and Pandelaere⁵⁴ were interested in capturing individual differences in the propensity to behave in a greedy manner, regardless of the situation, by means of capturing a stable, underlying trait. Thus, Krekels & Pandelaere⁵⁵ were interested in measuring an underlying individual difference variable that could explain why an individual may behave in a greedy manner across a wide variety of situations. Such an approach appears to fit nicely with the definition of greed we have adopted for the current study. Krekels and Pandelaere⁵⁶ thus developed a six-item instrument and provided evidence of convergent and discriminant validity as well as test-retest reliability. Example items include “No matter how much I have of something, I always want more,” “One can never have enough,” and “even when I am fulfilled, I often seek more.” While Krekels & Pandelaere⁵⁷ found the correlation between two administrations (test-retest reliability) to be .83 - .91, we found coefficient alpha in the present study to be acceptable at .78.

RESULTS

Tests of Hypotheses

Table 1 presents the intercorrelations amongst our key variables. As can be seen, sex was significantly related to our measure of greed ($r = -.18, p < .01$) indicating that, in accordance with previous research, females, on average, scored significantly lower on our measure of Greed. Additionally, participants’ major (business major or not) was also significantly related to our measure of Greed ($r = -.13, p < .01$) which is also in accordance with previous research. Finally, the DSES was significantly related to our measure of Greed ($r = -.27, p < .01$) and thus supported hypothesis 1.

⁵⁴ Goedele Krekels, and Mario Pandelaere, 2015.

⁵⁵ Goedele Krekels, and Mario Pandelaere, 2015.

⁵⁶ Goedele Krekels, and Mario Pandelaere, 2015.

⁵⁷ Goedele Krekels, and Mario Pandelaere, 2015.

Table 1. Intercorrelations Among Key Study Variables

	1	2	3	4
1. Greed	(.78)			
2. Business Major	-.13**			
3. Sex	-.18**	.12**		
4. Spirituality	-.27**	.05	.19**	(.96)

** $p < .01$

Values in parentheses along the diagonal are coefficient alphas; Note that Business Major and Sex are single-item, dichotomous variables: 1= business school major and 2 = non-business school major. 1 = male and 2 = female

Hypothesis 2 indicated that the DSES would explain additional, unique variance above and beyond that variance explained by sex and whether or not participants were a business major or not. We consider Hypothesis 2 and our exploratory analyses to be our primary contribution to the literature. This is because although previous research has found sex and being a business major to be related to ethical outcomes, we were interested in more rigorously testing whether or not a measure of spirituality would explain additional, unique variance in a measure of dispositional greed. We tested this hypothesis utilizing hierarchical regression analysis. Our measure of Greed served as our dependent variable. On the first step of the analysis, we entered the sex of our participants (coded female = 2 and male = 1) and whether the participant was a business school major or not (coded 1 = business and 2 = non-business). Because we specifically wanted to test whether or not spirituality would explain additional, unique variance in our measure of greed above and beyond that variance explained by sex and whether the participant was a business school major or not, we entered our measure of spirituality on the second step. Finally, on the third step, we entered the interactions between spirituality and sex and spirituality and whether or not the participant was a business school major. Recall that we made no a priori hypotheses for these interactions. Thus, we examined them in a purely exploratory manner.

Table 2 shows the results from the hierarchical regression analysis. As can be seen in the first step, sex and whether or not a participant was a business major or not were both related to greed ($\beta = -.17, t = -4.7, p < .001$; $\beta = -.10, t = -2.87, p < .01$, respectively). Recall that hypothesis 2 predicted that our measure of spirituality would explain additional, unique variance above and beyond the variance explained by sex and whether or not a participant was a business school

major. As can be seen in step 2 in our hierarchical regression analysis, ($\beta = -.24$, $F = 46.89$, $df = , 1, 760$, $p < .001$) and consistent with hypotheses 2, our measure of spirituality did indeed explain additional variance above that explained by sex and whether or not a participants was a business major.

Table 2. Hierarchical Regression Analysis for Predicting Greed

Variable	<i>B</i>	<i>SE B</i>	<i>R</i> ²	ΔR^2
Step 1			.04	.04***
Sex	-.17***	.05		
Business	-.10**	.06		
Step 2			.10	.06***
Spirituality	-.24***	.02		
Step 3			.11	.01*
Bus X Spirit	.08	.06		
Sex X Spirit	-.50**	.05		

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

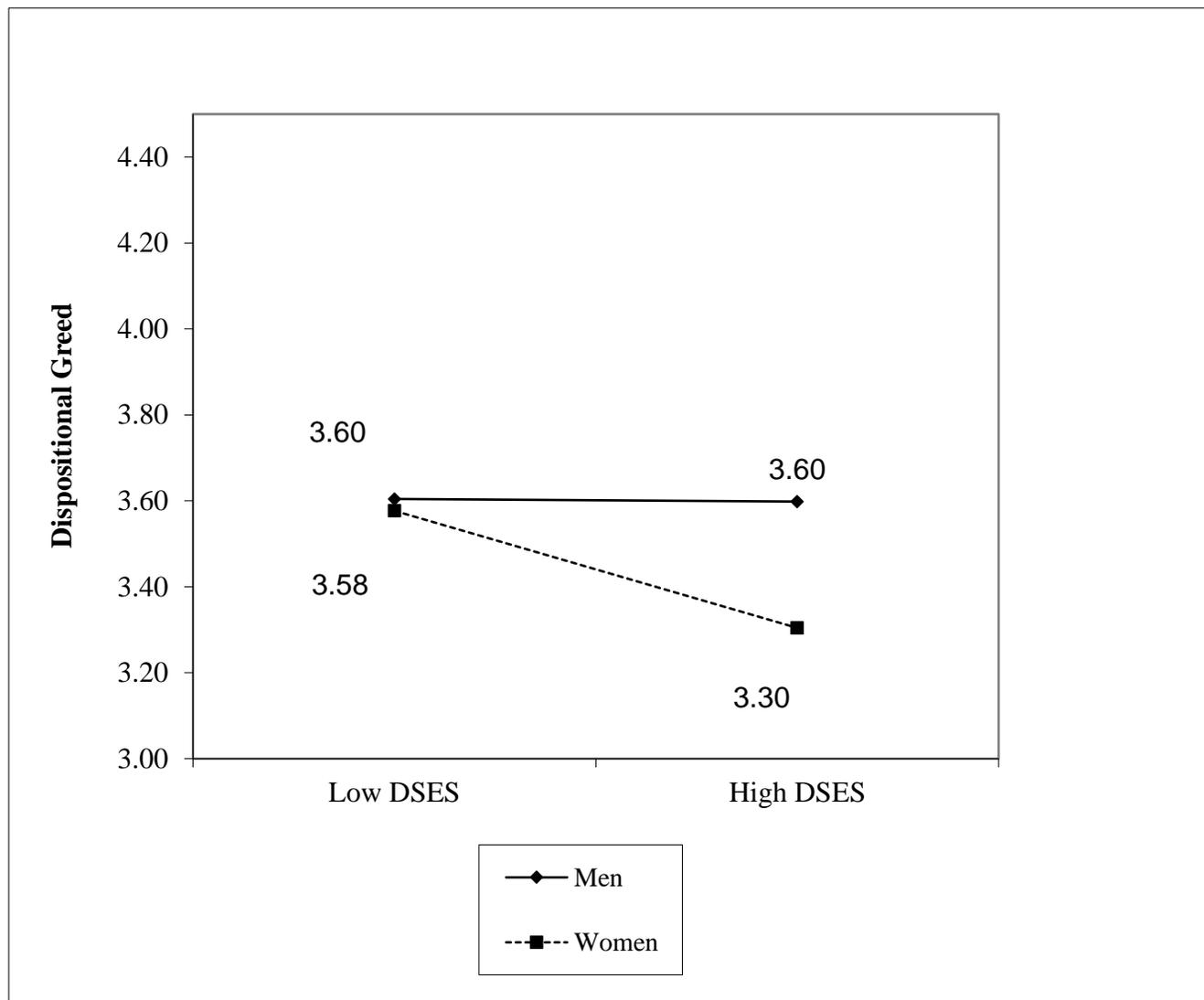
Post-Hoc Analyses

Recall that we did not propose a priori hypotheses regarding the interactions between sex and spirituality and whether or not a participant was a business school major or not and spirituality. However, step 3 of the hierarchical regression analyses found that the addition of these interaction terms explained a significant amount of variance in our measure of greed over and above that explained by sex, whether or not a participant was a business school major or not, and spirituality ($F = 3.81$, $df = 2, 758$, $p < .05$). Closer inspection revealed that the interaction between sex and our measure of spirituality was the only significant interaction term of the two ($\beta = -.50$, $t = -2.76$, $p < .01$). In order to better understand and interpret this interaction, we followed the procedure presented by Dawson and Richter⁵⁸ for probing and interpreting interactions by testing for significant differences between slopes. As Fig. 1 illustrates, spirituality made no difference when it came to dispositional greed for men. That is, men's score on greed was not affected by their

⁵⁸ Jerme F. Dawson, and Andreas W. Richter, "Probing Three-Way Interactions in Moderated Multiple Regression; Development and Application of a Slope Difference Test," *Journal of Applied Psychology*, 91 (2006): 917-926.

spirituality. For women, however, the result is quite different. As can be seen, those women who reported being more spiritual scored significantly lower on our measure of greed (3.3) than did women who reported being less spiritual (3.6). In other words, sex appeared to make no difference for either men or women who scored lower on our measure of spirituality when it came to greed. However, scoring higher on our measure of spirituality did make a significant difference for women when it came to greed.

Figure 1
Interaction between Sex and Spirituality



DSES = Daily Spiritual Experiences Scale

DISCUSSION

The results of our study provide evidence for five major conclusions. First, consistent with prior research in the ethics research literature, our results indicated that males self-reported significantly higher scores on a measure of trait greed than did females. Second, and also consistent with prior research, our results indicated that business school majors self-reported significantly higher scores on a measure of trait greed than did other majors. Third, our results provided evidence that more spiritual individuals self-reported lower levels of trait greed than did less spiritual individuals, thus providing evidence that spirituality may serve as an antecedent to greed and resulting ethical breaches.

However, our main interest was to determine whether or not our measure of spirituality would explain additional, unique variance in our trait measure of greed above and beyond that variance accounted for by sex and college major. Recall that prior research has resulted in well-established relationships with both sex and business major such that males and being a business major are both related to ethical outcomes. Thus, we were interested to see if our measure of spirituality would explain additional, unique variance in our trait measure of greed – a fairly rigorous test of our second hypothesis. We believe our results finding that our measure of spirituality explains additional variance in our trait measure of greed is significant for business ethics research, clearly indicating that measures of spirituality should be included in further attempts at better understanding greed and subsequent ethical breaches within organizations.

The results of our study would seem to concur with King⁵⁹ who concluded that most management scholars and journals have not taken the implications of spiritual/religious beliefs or practices seriously in conducting and publishing research aimed at describing, explaining, and predicting human behavior at work. In short, our results indicate that future scholarly research investigating greed and/or ethical behavior at work should incorporate valid and reliable measures of spirituality (e.g., Kapuscinski & Masters⁶⁰; King and Crowther⁶¹; Weaver and Agle⁶²) into their models. We believe such efforts will continue to provide

⁵⁹ James E. King Jnr., “(Dis)Missing the Obvious: Will Mainstream Management Research Ever Take Religion Seriously?” *Journal of Management Inquiry*, 17 (2008): 214-224.

⁶⁰ Kapuscinski, Afton N., and Kevin S. Masters, 2010.

⁶¹ James E. King Jnr., and Martha R. Crowther, “The Measurement of Religiosity and Spirituality: Examples and Issues from Psychology” *Journal of Organizational Change Measurement*, 17 (2004): 83-101.

⁶² Gary R. Weaver, and Bradley R. Agle, “Religiosity and Ethical Behavior in Organizations: A Symbolic Interactionist Perspective,” *Academy of Management Review*, 27 (2002): 77-97.

meaningful returns in arriving at a better understanding of greed and ethical behavior at work.

Fifth, our exploratory analyses helped provide a more nuanced understanding of the relationship between spirituality and trait greed. For men, spirituality (whether high or low) made no difference in self-reported greed, while for women it did. Another way to say this is that for the non-spiritual, sex made no difference; men and women reported equal levels of self-reported greed. Importantly however, higher levels of spirituality were significantly related to lower scores on self-reported greed for women (but not men). Thus, spirituality appears to be an important factor in understanding levels of trait greed – but only for women.

This finding is significant for several reasons. First, the somewhat inconsistent results when examining the relationship between sex and greed and/or ethical judgements and behavior may be due, in part, to spirituality. That is, perhaps the picture would become much clearer if researchers would consider spirituality when examining the relationship between sex and greed/ethical judgements and behavior. Likewise, the somewhat inconsistent findings concerning the relationship between spirituality and greed/ethical judgements and behavior may also be due, in part, to sex. That is, perhaps the picture here would also be clearer if sex were taken into consideration when examining the relationship between spirituality and ethical judgements and behavior. In sum, we agree with Smith et al.⁶³ who argued that organizational scholars need to move beyond examining simple, bivariate relationships and move toward more complex models and relationships involving the interactions of sex and spirituality with other variables.

What is it about Spiritual Females?

The question of why spiritual females scored lower on our trait measure of greed than did less spiritual females or males (regardless of whether they were spiritual or not) is an interesting one that cannot be readily answered in the present study. Nonetheless, we offer several plausible explanations for this finding. First, we believe Gender Socialization Theory (e.g., Gilligan⁶⁴; Eagley⁶⁵, Hall⁶⁶; Bem⁶⁷) offers at least a partial explanation for this finding. Gender Socialization Theory

⁶³ Raymond D. Smith, Jason D. DeBode, and Alan G. Walker, 2013.

⁶⁴ Carol Gilligan, 1982.

⁶⁵ Alice H. Eagley, "Reporting Sex Differences," *American Psychologist*, 42 (1987): 756-757.

⁶⁶ Therese A. Hall, "Gender Differences: Implications for Spiritual Formation and Community Life," *Journal of Psychology and Christianity*, 16 (1997): 222-232.

⁶⁷ Sandra L. Bem, "The Measurement of Psychological Androgyny," *Journal of Consulting and Clinical Psychology*, 42 (1974): 155-162.

posits that females are socialized differently than males from an early age. More specifically, the female socialization process is believed to have an increased emphasis on the importance of selflessness, being cognizant of others' desires, needs, and wishes, to be more nurturing, and generally more communal-minded (Dalton and Ortegren⁶⁸; Simpson et al.⁶⁹). Conversely, the male socialization process is viewed as possessing an emphasis on more typical "masculine" roles such as being more dominant, competitive, less cooperative, and generally more concerned with personal well-being as opposed to the well-being of others.

Thus, it could be the case that the combination of the female socialization process, which emphasizes typical feminine characteristics associated with an increased concern for others, interacted with spirituality, such that, for females, their spirituality had a pronounced effect. Said another way, spiritual females may have scored lower on our trait measure of greed because of the combined effects of being attentive to the needs of others gained through both their socialization process and their spiritual beliefs. Note that the socialization process for females and spiritual beliefs both emphasize benevolence towards others in general and both likely attenuate tendencies toward greed. This explanation seems especially tenable given our definition of greed as "an instrumental and self-interested desire for wealth or gain, often at the expense of another or out of disregard for others' well-being."⁷⁰ Conversely, males' spirituality may have had a lesser effect of their self-reported greed because their spirituality may have been squelched by their socialization process which emphasized more self-interest and less concern for others' well-being.

Second, it may be the case that females are more prone to offer more socially desirable responses on self-report measures. For example, Bernardi⁷¹ found that women scored significantly higher on Paulhus' Image Management Subscale than did men in seven of the 12 countries where they collected data and concluded that women may be more ethically sensitive than are men. In a later study involving 713 business students from seven countries, Bernardi and Guptill⁷² again found that females scored significantly higher on the Paulhus Image Management Subscale

⁶⁸ Derek Dalton, and Marc Ortegren, 2011.

⁶⁹ David B. Simpson, Dinah S. Cloud, Jody L. Newman, and Dale R. Fuqua, "Sex and Gender Differences in Religiousness and Spirituality," *Journal of Psychology and Theology*, 36 (2008): 42-52.

⁷⁰ Craig D. Crossley, 2009.

⁷¹ Richard A. Bernardi, "Associations between Hofstede's Cultural Constructs and Social Desirability Response Bias," *Journal of Business Ethics*, 65 (2006): 43-53.

⁷² Richard A. Bernardi, and Steven T. Guptill, "Social desirability Response Bias, Gender, and Factors Influencing Organizational Commitment: An International Study," *Journal of Business Ethics*, 81 (2008): 797-809.

than did their male counterparts. Schoderbek and Deshpande⁷³ in a sample of 174 actual managers, found that female managers were more prone to impression management than were male managers when self-reporting actual ethical conduct. Further, Dalton and Ortegren⁷⁴ found that sex differences in ethical judgements across a series of 30 ethically-charged scenarios was largely attenuated once social desirability was controlled for. Finally, and perhaps most relevant to the present study, Chung and Monroe⁷⁵ found in a sample of 121 accountants, that religious women scored significantly higher on social desirability bias across five frequently-encountered general business ethics situations than did less religious women or men regardless of their religiousness. Thus, it is plausible that our results at least partially reflect this previously documented sex difference in social desirability bias.

A third intriguing possibility is provided by findings in recent neuroscience studies. Ryan⁷⁶ concluded, based on a review of the neuroscience literature, that sex differences previously believed to be due to “nurture” (i.e., male-female differences in socializations) are now increasingly being viewed as differences in “nature” (i.e., sex differences in actual brain structures, utilized pathways, and brain chemistry). For example, Ryan⁷⁷ concluded from her review that male and female brains not only differ structurally, but that males and females likely utilize different neural pathways in arriving at ethical decisions. Further, Ryan⁷⁸ provides evidence that males’ and females’ brains also differ hormonally. For example, citing results from neuroeconomic studies, Ryan⁷⁹ concludes that there exist sex differences in oxytocin and testosterone – both of which prompt men and women to think and behave differently when making ethical decisions. More specifically, Ryan⁸⁰ reports that previous research has demonstrated that females tend to have significantly more oxytocin which has been demonstrated to result in higher trust in others while also prompting generosity, while men tend to have significantly more testosterone which depresses the trust-enhancing and generosity effects of

⁷³ Peter P. Schoderbek, and Satish P. Deshpande, “Impression Management, Overclaiming, and Perceived Unethical Conduct: The Role of Male and Female Managers,” *Journal of Business Ethics*, 15 (1996): 409-414.

⁷⁴ Derek Dalton, and Marc Ortegren, 2011.

⁷⁵ Janne Chung, and Gary S. Monroe, “Exploring Social Desirability Bias,” *Journal of Business Ethics*, 44 (2003): 91-302.

⁷⁶ Lori V. Ryan, “Sex Differences through a Neuroscience Lens: Implications for Business Ethics,” *Journal of Business Ethics*, 144 (2017): 771-782.

⁷⁷ Lori V. Ryan, 2017.

⁷⁸ Lori V. Ryan, 2017.

⁷⁹ Lori V. Ryan, 2017.

⁸⁰ Lori V. Ryan, 2017.

oxytocin. For example, Ryan⁸¹ reports that oxytocin has been shown to significantly increase generosity and trust in the Trust Game. The Trust Game is a single-play game in which a partner is given \$10 and told that they may share any amount with their anonymous partner (who is a total stranger). The partner, in turn, is paid triple the amount given by the first player. This second partner is then provided an opportunity to give back a portion of the magnified gift given by the first player. Thus, in this game, the first player is expected to give no money to their partner in order to maximize their pay-off from a traditional, rational-based economic standpoint. Interestingly, oxytocin, which is significantly higher in females, has been found to be related to trust and generosity in this game. Ryan concludes from her review of the neuroscience literature that “Sex differences do matter. As shown here, recent neuroscientific studies demonstrate that males and females have genetic, chemical, and structural brain variations that affect their emotions and thought processes and, sometimes, their moral decisions...”⁸²

These neuroscientific findings are particularly interesting when considering the “social desirability” explanation for our results offered above. That is, perhaps the relationship between social desirability and ethical outcomes for women are actually due to differences in brain structures, pathways, and chemicals/hormones rather than social desirability per se. Said another way, perhaps the relationship between social desirability and ethical outcomes for woman is merely artifactual.

Of course, this still leaves open the question of why varying brain structures and/or pathways or differences in brain chemistry would affect more-spiritual women differently than less-spiritual women and men (regardless of spirituality). Perhaps future neuroscience evidence can address this question. It would be fascinating to us to investigate whether or not spiritual females utilize brain structures and/or neural pathways that are different from men and less spiritual females.

It is also possible that the sex differences we found regarding spirituality and self-reported greed in the present study are due to the combined effect of all three of these explanations. That is, a combined effect of: a) the socialization process (Gender Socialization Theory), b) possible tendency of women to be more susceptible to providing socially acceptable responses, or, c) the effects of differences in actual brain structures and/or neural pathways and/or chemical differences in the brains of men and women. Certainly, future work aimed at further understanding why spirituality had an effect for women, but not men is needed.

In sum, we believe the present study provides evidence that future research attempting to describe, explain, and predict greed and subsequent (un)ethical

⁸¹ Lori V. Ryan, 2017.

⁸² Lori V. Ryan, 2017, pp.780-1.

behavior at work should include sex and measures of spirituality. More broadly speaking, the results of the current study point toward the importance of including multiple independent variables in more complex models when attempting to explain the relationships between both sex and greed and subsequent (un)ethical organizational behavior and spirituality and greed and subsequent (un)ethical behavior. More specifically, the current results tend to suggest that researchers may be more likely to find significant relationships between spirituality and greed and subsequent (un)ethical behavior for women who self-report being spiritual.

In terms of practical implications, the results of our study add to the preponderance of evidence which suggests that business school students may tend to be less ethical and perhaps more greedy than other students. Indeed, t-test results in the present study indicated that business school majors self-reported significantly higher levels of dispositional greed (mean = 2.9, SD = .68) than did other majors (mean = 2.7, SD = .67) ($t = 3.7, p < .001$; Cohen's $d = .48$). Thus, although business schools are increasingly emphasizing business ethics instruction and specific courses related to both normative and behavioral approaches⁸³ empirical evidence may suggest that we may be making little headway. Although the discussion of how best to go about teaching ethics in business schools is beyond the scope of the current paper, De Los Reyes, Jr., Kim, and Weaver⁸⁴ offer an intriguing approach involving attempts to combine both normative and behavioral approaches into ethics instruction. Also, in addition to university coursework, we believe our results suggest that organizations may be prudent to continually update and communicate ethical codes of conduct and provide ethics training – perhaps especially to new hires coming right out of business schools.

The current study, as any, has limitations that should be taken into consideration when interpreting our results. First, all of our measures were collected at the same time (although data was collected at four separate times), using the same method (on-line measures), and utilizing the same source (self-report). While this may raise concerns with common method variance, Conway and Lance recently noted that “the widespread belief that common method bias serves to inflate common method correlations as compared to their true-score counterparts is substantially a myth”⁸⁵ Concerning self-reported measures, Conway and Lance⁸⁶ found that the belief that other-reports (or other methods) are superior to self-

⁸³ Gastón De Los Reyes, Tae Wan Kim, and Garey R. Weaver, “Teaching Ethics in Business Schools: A Conversation on Disciplinary Differences, Academic Provincialism, and the Case for Integrated Pedagogy,” *Academy of Management Learning & Education*, 16 (2017): 314-336.

⁸⁴ Gastón De Los Reyes, Tae Wan Kim, and Garey R. Weaver, 2017.

⁸⁵ James M. Conway, and Charles E Lance, “What Reviewers Should Expect from Authors Regarding Common Method Bias in Organizational Research,” *Journal of Business Psychology*, 25 (2010): 327.

⁸⁶ James M. Conway, and Charles E, 2010.

reported measures is also a misconception as their review and analyses found that social desirability, negative affect, and acquiescence appeared to have only weak and inconsistent effects. Further, as for self-reported measures, we believe that our participants were in the best position to rate their own spirituality (as opposed to someone else rating this for them). Finally, in regards to common method variance, it should be noted that sex and whether a participant was a business major or not are not likely to create any shared variance.

Another limitation is that our data was collected from students at a single university in the Southeast United States. Because of this, extrapolating the results of this study to other countries and/or cultures should be done with caution. For example, it is possible that the results obtained from this sample obtained in the “Bible Belt,” may potentially vary from those obtained at a university located in the Northeast where attitudes tend to be more liberal and belief in God perhaps less widespread.

Another limitation is that our study did not include an actual behavioral measure of greed. While it may be argued that greed is likely to be highly related to ethical judgments, decisions, and behavior in organizational settings and some research does suggest this relationship⁸⁷ empirical evidence of these relationships is at present limited.

In conclusion, the results of our study found that being a male, being a business school major, and being less spiritual were all related to higher scores on a self-reported measure of trait greed. Further, our results indicated that spirituality explained additional, unique variance above and beyond that explained by sex and being a business school major. Our final contribution is the finding that sex mattered in the relationship between spirituality and greed. For women, being spiritual was related to lower levels of self-reported greed while for men spirituality was unrelated to self-reported greed. These findings indicate that future research should examine more complex models and relationships (such as the interactions here) when examining the relationship between sex, spirituality and greed and/or ethical outcomes.

⁸⁷ Katalin. T. Hayes, Joanna T. Campbell, and Michael A. Hitt, 2017.

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