

Mediating Effect of Personality Traits on Religiosity and Ethical Leadership: Basis for a Leadership Development Program

Lolina T. Mostaza, Reuel E. Narbarte, Francisco D. Gayoba, Robert Borromeo, and Jolly S. Balila

Abstract

The study aimed to determine the mediating effect of personality traits on religiosity and ethical leadership as basis for a leadership program. The relationships of variables were determined using Structural Equation Modeling (SEM). A validated questionnaire was administered to 265 respondents from 27 Christian institutions in the Philippines. These institutions were grouped into small clusters as follows: (1) Mission/Conference; (2) College/University; and (3) Hospital. A greater proportion (106, or 40.0%) of the respondents were 50 years old or more, while 29.4% were aged 41 or less, and 26.4% were from 42 – 49 years old. There were more male administrators (55.8%) than females.

The findings show that the administrators were *highly* religious, *highly* open to experience, conscientious, extraverted, and agreeable. Further results revealed that the administrators are *highly* ethical. Moreover, there is a significant relationship between religiosity and personality traits. There is also a significant positive relationship between religiosity and ethical leadership. Likewise, there is a significant relationship between personality traits and ethical leadership. Agreeableness, openness to experience, and conscientiousness predict ethical leadership. However, there is a significant difference in ethical leadership between bachelor degree holders and master degree holder. Further results revealed that personality traits fully mediate religiosity and ethical leadership.

Keywords: *Religiosity, ethical leadership, personality traits, mediation effects*

Introduction

The leadership of any organization is based on the strong character of the individuals running it (Swindall, 2011). Leaders serve as the organization's conscience. They set the moral tone that cascades from the top to the lowest level of the organizational hierarchy. Amidst the high pressure and competitive work environment, nothing can substitute for a leadership strongly anchored upon a foundation of a solid ethical framework and guided by a high standard of ethical conduct (Schermerhorn, 2012). Ethical leadership should manifest in the workplace. According to Brown and Trevino (2006), ethical leadership is defined as the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making.

Studies conducted among Harvard Business Review readers showed that behavior of superiors was ranked number one influence of unethical behavior (Carroll and Buchholtz, 2009). The National Business Ethics Survey found that unethical misconduct occurred in just 15% of the organizations where top managers modeled ethical behavior themselves while unethical misconduct occurred in 56% of the organizations in which top management only talked about the importance of ethics, but did nothing else. Further reports revealed that one-third of the workers of the organization have seen their bosses lie, steal from the company, or break the law (Williams, 2010).

The misconduct in the workplace must be attributed to several factors. Significantly, numerous studies found significant relationships of the Big Five traits to leader's effectiveness (Kalshoven, Den Hartog, & De Hoogh, 2011). Matthews, Deary, and Whiteman (2009), generally believed that traits directly influence behavior.

Scientific studies conducted showed that human behavior is influenced by religiosity. According to Aydemir and Egilmez (2010), studies show that practicing religious beliefs or attending religious activities are positively related to ethical attitudes. Moreover, religiosity is one of the factors that

influence ethical judgments. Likewise, Fernando (2005) and Jones (2010) found the influence of religion/spirituality on leadership. Hage (2013) in his study on the influence of religion and religiosity on leadership practices in the workplace recommends exploring and identifying the effects of other religions on the behavior and practices of organizational leaders in other geographies.

Various research have been made on the outcomes of a leader's ethical conduct and his intentional influence; just as situational and organizational factors affecting ethical leadership were also commonly considered. However, mediation studies are limited. According to Bormann (2013), in his integrative model of ethical leadership, he also stressed leader personality as antecedent, and recommended a more intensive study on the variables. In view of the various related literature and studies conducted, there is a need to study the relationship between religiosity and ethical leadership and examine whether its association is mediated by personality traits.

Method

Research Design

This study used Structural Equation Modeling (SEM) to determine the mediation effect of personality traits on the relationship of religiosity and ethical leadership. Structural equation modeling is a statistical modeling technique used to evaluate the validity of substantive theories with empirical data. The goal is to determine whether a hypothesized theoretical model is consistent with the data collected to reflect this theory. That is, to determine whether a certain model is valid. The consistency is evaluated through model-data fit, which indicates the extent to which the postulated network of relations among variables is plausible (Lei & Wu, 2007).

Samples

The sample consisted of 265 administrators from 27 Christian institutions in the Philippines. These institutions were grouped into small clusters as follows: (1) Mission/Conference; (2) College/University; and (3) Hospital. A greater proportion (106, or 40.0%) of the respondents belong to the age bracket 50 years old and above, 29.4% were aged 41 and below, and 26.4% aged 42 – 49 years old. There were more male administrators (55.8%) than females. A significant number of the respondents had master's degrees (38.1%), while 24.9% were bachelor graduates. The rest had taken some masters courses (17.0%), were doctoral degree holders (8.7%), had taken some doctoral courses (6.4%), college level (2.3%), and only 0.8% were high school graduates. The years of service of the respondents were varied: 52 or 19.6% have rendered for 31 years and above, while the majority (78.1%) have worked below 31 years, with 12.5% of them serving for 5 years and below.

Instrumentation and Analysis of Data

A 77-item questionnaire was developed and validated to assess administrator's personality traits, religiosity, and ethical leadership profile. All the items were rated on a five-point Likert scale. Personal background information was also obtained. Frequency count, percentage, mean, standard deviation, multiple regression, and Structural Equation Modeling (SEM) were used in this mediation study.

Results and Discussion

Religiosity

Religiosity in this study was measured according to Thayer's (1999) definition. Thayer identified ten basic Christian religious practices: worship, prayer, repentance, meditation, prophetic critiquing, Bible study/reading, fellowship, service, evangelism, and stewardship. Christians engage in these practices, sometimes referred to as spiritual disciplines, for worshiping God, learning His will, and placing themselves where He can transform them (Thayer, 1999).

Table 1 presents the level of religiosity of the respondents. The respondents of this study were perceived to have a *Very high* level of religiosity in terms of prayer, repentance, worship, and prophet critiquing and *high* in terms of Bible reading, meditation, evangelism, fellowship, stewardship, and

service. According to Finley (2013) in praying, man freely acknowledges his total dependence upon God and gives Him the freedom to intervene in his life. Longenecker, McKinney, and Moore (2004) discovered that respondents for whom religion is highly or moderately important demonstrated a higher level of ethical judgment than those for whom religion held little or no importance. Alexe (2014) contends that Godly leaders are not perfect people; they are people who grow in their relationship with God and in using their talents for God's glory, in service for God and their neighbors.

Table 1. Religiosity

	Mean	Standard Deviation	Interpretation
Prayer	4.63	0.57	Very High
Repentance	4.60	0.47	Very High
Worship	4.80	0.30	Very High
Bible Reading	4.28	0.65	High
Meditation	4.36	0.53	High
Prophetic Critiquing	4.51	0.49	Very High
Evangelism	4.20	0.72	High
Fellowship	3.96	0.71	High
Stewardship	4.47	0.46	High
Service	4.33	0.60	High
Religiosity (Grand Mean)	4.41	0.24	High
1.00-1.50 Very Low	2.51-3.50 Moderate	4.51-5.00 Very High	
1.51-2.50 Low	3.51-4.50 High		

The personality trait measured in this study has five dimensions. Table 2 describes the personality traits of the respondents as *high* in openness to experience, conscientiousness, extraversion, and agreeableness but *moderate* in neuroticism. This indicates that the administrators were open to new ideas, even the unusual ones. According to Resick, Hanges, Dickson, and Mitchelson (2006) and Treviño, Brown, and Hartman (2003) ethical leaders are usually open to new ideas. Furthermore, they too, actively seek input from subordinates (Van Wart, 2005).

It was also evident in the result that the respondents were highly responsible and reliable. As leaders, they adhere closely to their moral obligations and perceived responsibility. By acting dutifully, they are likely to be looked up to as role models of appropriate behavior (Kalshoven, Den Hartog, and De Hoogh (2011).

The administrators are friendly and cheerful, and they enjoy the company of others. Huberts, Kaptein, and Lasthuizen (2007) hold that leaders are encouraged to be approachable to make followers feel comfortable and safe to talk to them about ethical related matters, ethical dilemma and even ethical failures of their leaders.

The data implies that the administrators have a very high tendency to be helpful, compassionate, modest, and willing to compromise their interests with others. Being highly agreeable, the administrators as leaders are caring, altruistic, and concerned about the welfare of employees. They are expected to provide justification to subordinates in their decisions (Mayer, Kuenzi, Greenbaum, Bardes, and Salvador (2009). Leaders in this study were sometimes anxious, depressed, helpless, self-conscious, angry, and immoderate. As administrators, they sometimes experience negative feelings. According to Bono and Judge (2004), such leaders are less likely to serve as role models.

Table 2. Respondent's Personality Traits

	Mean	Standard Dev.	Interpretation
Openness to Experience	4.23	0.49	High
Conscientiousness	4.17	0.42	High
Extraversion	4.10	0.50	High
Agreeableness	4.28	0.39	High
Neuroticism	2.75	0.62	Moderate
1.00-1.50 Very Low	2.51-3.50 Moderate	4.51-5.00 Very High	
1.51-2.50 Low	3.51-4.50 High		

Ethical Leadership

The descriptive statistics of the respondents' ethical behavior is presented in Table 3.

Demonstration of Ethical Conduct

The mean of 4.52 indicates that the respondents *always* demonstrate ethical conduct. As leaders, they live morally and behave ethically in their personal lives and in dealing with their people at work. Brown, Treviño, and Harrison, (2005) refer to such traits and attributes of leaders as the 'moral person' aspect of ethical leadership.

Promotion of Ethical Conduct

The promotion of ethical conduct was *often* (mean = 4.11) practiced by the respondents. As leaders, they often initiate proactive efforts to influence followers' ethical behavior by communicating norms, guides, and expectations; explaining the reasons behind decisions; and using rewards and discipline to reinforce ethical standards. According to Brown and Treviño (2006), and Buchholts and Carroll (2009), leaders who make ethics an explicit part of their leadership are 'moral managers.' The overall mean of 4.32 (SD = .29) implies that the respondents display *high* ethical leadership behavior.

Table 3. The Extent of Ethical Leadership of Respondents

Item	Mean	SD	Scaled Response	
Demonstration of Ethical Conduct	4.52	0.43	Always	
Promotion of Ethical Conduct	4.11	0.57	Often	
Grand Mean	4.32	0.29	Often (High)	
1.00-1.50 Very Low	1.51-2.50 Low	2.51-3.50 Moderate	3.51-4.50 High	4.51-5.00 Very High

Predictors of Ethical Leadership among Personality Traits Dimensions**Demonstration of Ethical Conduct**

The regression result shows that the demonstration of ethical conduct is explained by the three factors among the five traits of personality, namely: agreeableness, conscientiousness, and openness to experience. As expressed in the coefficient of determination (R square change), agreeableness has the greatest contribution to the significant factors. It accounts for 44.3% of the variance in demonstration of ethical conduct. Conscientiousness and openness to change contribute 8.8% and 1.6%, respectively. This implies that the more agreeable, conscientious, and open to experience the leader is, the more likely he demonstrates ethical conduct. As a whole, the model composed of the three factors explained 54.8% of the total variance of demonstration of ethical conduct.

Table 4. Personality Traits as Predictors of Ethical Leadership – Demonstration of Ethical Conduct

Model	Unstandardized Coefficients			Significance	R ² Change
	<i>B</i>	Standard Error	<i>t</i>		
(Constant)	0.668	0.217	3.074	0.002	
1.Agreeableness	0.448	0.060	7.501	0.000	0.443
2.Conscientiousness	0.315	0.054	5.884	0.000	0.088
3.Openness to Experience	0.146	0.047	3.084	0.002	0.016

Dependent Variable: Demonstration of Ethical Conduct R² = 0.548 F = 105.442 Sig = 0.000

These findings are supported by several studies. Treviño, Brown, and Hartman (2003) stated that leaders who rated highly on agreeableness are sensitive to the needs of subordinates; further, they are caring, altruistic, and concerned about the welfare of employees. Mayer et al. (2007) also contend that these leaders are likely to treat employees in a fair and respectful manner. This result is in agreement with Kalshoven et al. (2011) who found that highly conscientious individuals tend to think carefully before acting, and further adhere closely to their moral obligations and perceived responsibilities. By acting dutifully, leaders high on conscientiousness are likely to be seen as role models of appropriate behavior. A leader who scores highly in the openness to experience scale is more likely to be perceived as ethical by being ready to entertain new ethical and social ideas (Barthelemy, 2005), and appears to welcome change and challenges (Bullock, 2006). However, in the study of Kalshoven et al. (2011), openness to experience was found to be unrelated to ethical leader behaviors.

Promotion of Ethical Conduct

Further regression analysis results on the promotion of ethical conduct show that 41.5% of the total variance in the dependent variable is explained by four of the five traits of personality, namely: openness to experience, agreeableness, conscientiousness, and extraversion. Openness to experience accounts for the highest variance (31.9%), followed by agreeableness (7%), conscientiousness (1.5%), and extraversion (1%), respectively. This implies that the higher the tendency of the leader to be open to experience, agreeable, conscientious, and being an extravert, the more likely he promotes ethical conduct. As a whole, ethical leadership and its dimensions are predicted by the common factors, namely: agreeableness, conscientiousness, and openness to experience, and extraversion.

Table 5. Personality Traits as Predictors of Ethical Leadership – Promotion of Ethical Conduct

Model	Unstandardized Coefficients			Significance	R ² Change
	<i>B</i>	Standard Error	<i>t</i>		
(Constant)	-0.084	0.328	-0.255	0.799	
1.Openness to Experience	0.317	0.079	4.003	0.000	
2.Agreeableness	0.323	0.095	3.389	0.001	0.070
3.Conscientiousness	0.188	0.081	2.305	0.022	0.015
4.Extraversion	0.169	0.080	2.103	0.036	0.010

Dependent Variable: Demonstration of Ethical Conduct R² = 0.415 F = 46.032 Sig = 0.000

The findings of Mayer et al. (2007) revealed that leaders who have the quality of agreeableness are expected to provide justifications to subordinates about decision making. Agreeably, Witt et al. (2002) holds that highly conscientious individuals give careful attention to clarifying responsibilities and demands so that employees understand what goes on and know what is expected of them. Conscientious individuals consider sharing relevant information with others as part of their duty

(Mayer et al., 2009). Extraversion was also found by Kalshoven et al. (2011) to be unrelated to ethical leader behaviors, which did not support the result of this study. According to McGraw (2016), perhaps it is because these two traits work more as a facilitation method used to convey ethical authority, but do not predict whether a leader will act in ethical or unethical ways. However, in the study of Bormann (2013), there was a significant relationship between extraversion and ethical leadership. Characterized as outgoing and communicative, an extravert is more likely to develop a reputation for ethical leadership by being a more visible and tangible model for emulation. These variables, according to the results, are more likely to demonstrate and promote ethical behavior. This means a significant relationship exists between these traits and leadership behaviors (Kalshoven et al., 2011).

Religiosity as Predictor of Ethical Leadership

Table 6 presents religiosity as predictor of ethical leadership in terms of demonstration of ethical conduct. The total variance accounted for of 38.2% is explained by stewardship and prayer. Stewardship accounts for 32.7% of the variance (Unstandardized *B* coefficient = 0.366, *t* = 6.176, *p* = 0.000). This implies that the higher the extent of the leader's stewardship, the more likely he demonstrates ethical conduct. These findings reinforce the inseparable connection between leadership and stewardship (Pollard, 2014). Prayer accounts for 5.5% of the variance in demonstration of ethical conduct (*B* = 0.310, *t* = 4.831, *p* = 0.000). This means that the more prayerful the leader is, the more likely he demonstrates ethical conduct. Recent empirical studies give substantial support to the theory that religiosity is positively related to ethical attitudes (Kurpis, Beqiri, and Helgeson (2008).

Table 6. Religiosity as Predictor of Ethical Leadership – Demonstration of Ethical Conduct

Model	Unstandardized Coefficients			Significance	R ² Change
	<i>B</i>	Standard Error	<i>t</i>		
(Constant)	1.460	0.245	5.965	0.000	
1. Stewardship	0.366	0.059	6.176	0.000	0.327
2. Prayer	0.310	0.064	4.831	0.000	0.055

Dependent Variable: Demonstration of Ethical Conduct $R^2 = 0.382$ $F = 80.831$ $Sig = 0.000$

Predictors of Promotion of Ethical Conduct

Table 7 shows that 26.5% of the total variance accounted for in the dependent variable is explained by three of the ten dimensions of religiosity, namely: stewardship, prayer, and service. Stewardship accounts for 20.6 % of the variance (unstandardized *B* coefficient of 0.220, *t* = 2.074, *p* = 0.039); prayer accounts for 4.5%; and service accounts for 1.4%. This implies that the higher the extent of the leader's stewardship, the more prayerful and service-oriented, the more likely it is that the leader promotes ethical conduct. Sullivan (2009) holds that ethical leaders are servants. They understand and feel the situations of their followers and seek ways to meet their needs. They build trust and influence by serving their people.

Table 7. Religiosity as Predictor of Ethical Leadership – Promotion of Ethical Conduct

Model	Unstandardized Coefficients			Significance	R ² Change
	<i>B</i>	Standard Error	<i>t</i>		
(Constant)	0.833	0.354	2.354	0.019	
1. Stewardship	0.220	0.106	2.074	0.039	0.206
2. Prayer	0.350	0.093	3.755	0.000	0.045
3. Service	0.160	0.073	2.198	0.029	0.014

Dependent Variable: Demonstration of Ethical Conduct $R^2 = 0.265$ $F = 31.389$ $Sig = 0.000$

Mediating Effect of Personality Traits on Religiosity and Ethical Leadership

The Structural Equation Modeling (SEM) was used to determine if personality traits mediate the effect of religiosity on ethical leadership. Figure 1 is an Ethical Leadership Structural Model. The model was evaluated for its fitness by using measures of goodness-of-fit indices.

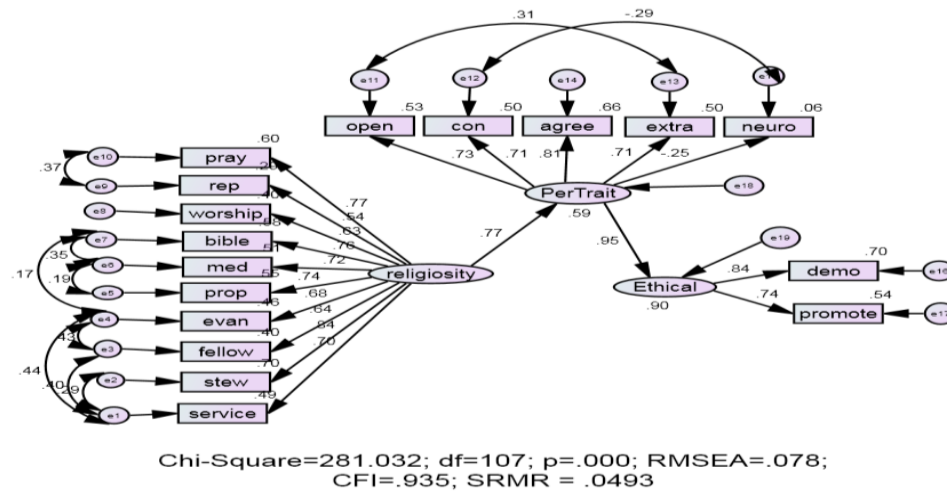


Figure 1. Structural Model of Ethical Leadership

Table 8 presents four measures of fit, namely: the ratio of chi-square (CMIN) to the degrees of freedom (df) of the model, Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR).

Table 8. Evaluation of Structural Equation Model Based on Goodness-of-Fit Indices

Fitness Measure	Terrible	Acceptable	Excellent	Model Fit	Interpretation
CMIN/DF	> 5	> 3	> 1	281.032/107 = 2.626	Excellent
CFI	< 0.90	< 0.95	> 0.95	0.935	Acceptable
RMSEA	> 0.08	> 0.06	< 0.06	0.078	Acceptable
SRMR	> 0.10	> 0.08	< 0.08	0.049	Excellent

The ratio of chi-square (CMIN) to the degrees of freedom (df) of the model of the study is 281.032/107 or 2.626. This indicates that the model has an excellent fit. Another measure of fit is the Comparative Fit Index (CFI). The CFI of the model is 0.935, which is an acceptable fit. Root Mean Square Error of Approximation or RMSEA has become one of the most, if not the most widely used assessment of misfit/fit in the application of SEM (Kelly & Lai, 2011). The RMSEA of the ethical leadership model is .078, which is an acceptable fit. The fourth measure of fit considered in the study is the Standardized Root Mean Square Residual (SRMR). The SRMR of the model is 0.049, which according to the rule of thumb means an excellent fit.

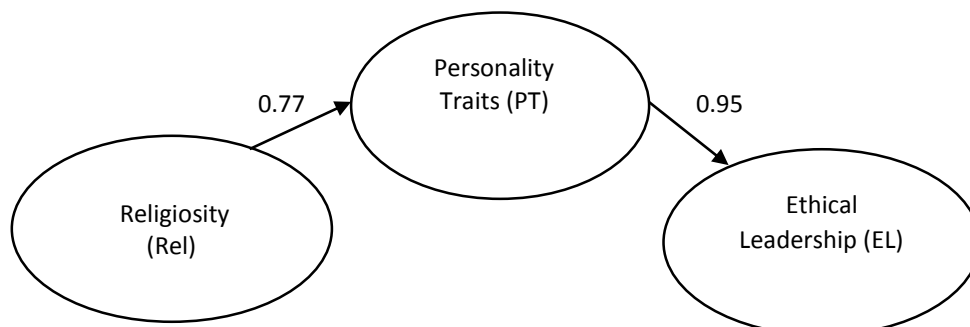


Figure 2. Final Path Diagram of Ethical Leadership Model

Figure 2 shows the final model of the relationship of religiosity and ethical leadership as mediated by personality traits. It was discussed previously that personality traits contribute to explain the effect of religiosity on ethical leadership based on the standardized path coefficient. Religiosity directly predicts personality traits with a coefficient of 0.77 but has no direct effect on ethical leadership. Subsequently, personality traits directly predict ethical leadership with a coefficient of 0.95. Thus, personality traits fully mediate the effect of religiosity on ethical leadership. The other elements of the matrix show no relationship between variables.

Direct Effect

The final model of the study shows that religiosity has a direct effect on personality traits with a coefficient of 0.77. This implies that when the extent of religiosity goes by 1 standard deviation, degree of personality traits goes up by 0.77 standard deviation. The result indicates that religiosity contributes 59.29% ($r^2 = 0.77^2 = 0.5929$) to personality traits.

Indirect Effect

Religiosity has an indirect effect on ethical leadership through personality traits. The model shows that the coefficients of the path from religiosity to personality traits and personality traits to ethical leadership are 0.77 and 0.95, respectively. Hence, religiosity has an indirect effect of 0.77×0.95 or 0.7315 standard coefficient. Total effect of religiosity on ethical leadership is 0 direct plus 0.7315 indirect or 53.29% ($r^2 = 0.73^2 = 0.5329$). Religiosity contributes 53.29% to ethical leadership through personality traits. Personality traits fully mediate the relationship of religiosity and ethical leadership.

The findings imply that religiosity in terms of participation in the ten basic Christian practices does not directly predict a leader's predisposition to demonstrate and promote ethical conduct. The positive effect of religiosity on ethical leadership as shown in the significant positive correlation between the two variables is dependent on the leader's underlying personality traits. There has to be a transformation of the leader's personality so that he can genuinely be a moral person and a moral manager to serve as the moral compass of the organization.

A review of over 150 studies revealed that the values and practices of leaders were able to motivate followers, create a positive ethical climate, inspire trust, promote positive work relationships, and achieve organizational goals (Reave, 2005).

The Proposed Leadership Development Program

Based on the established relationship of the variables as a result of the study, a Leadership Development Program was developed. This program focused primarily on the personality traits of the leader which influence his consistent behavior patterns. Strategies were formulated to improve the personality traits of leaders. Moreover, the program developed followed both the biblical and secular view of leadership that identified Christ-likeness as one of the two key elements of leadership. Transformation of character is at the heart of leadership, and such transformation is where leadership development begins. Specifically the program has four major objectives:

1. To provide an understanding of leadership as a process of transformation both in character and competence which constitute the foundation of effective leadership.
 2. To help mold leaders and potential candidates by preparing them for the transforming power of the Holy Spirit through consistent and sincere exercise of religious disciplines.
 3. To foster skills knowing one's gifted competency (ies) and its development by focusing on God as the source of all the qualities and skills of authentic leadership.
 4. To provide learning and understanding of biblical leadership principles.
- Strategies were formulated based on these objectives.

Conclusions and Recommendations

Based on the salient results of the study, the following conclusions were drawn. The administrators are highly religious because they involved themselves in and practice the basic spiritual disciplines of

prayer, repentance, worship, Bible reading/study, meditation, prophetic critiquing, evangelism, fellowship, stewardship, and service. As to their personality traits, they are highly open to experience, conscientious, extravert, agreeable and moderately neurotic. As leaders, the administrators are highly ethical because they demonstrate ethical conduct in their personal lives and professional dealings and promote to their people ethical behavior.

There is a significant relationship between religiosity and personality traits. There is also a significant positive relationship between religiosity and ethical leadership. Likewise, there is a significant relationship between personality traits and ethical leadership. Among the five traits of personality, agreeableness, openness to experience, and conscientiousness predict ethical leadership. Based on an ethical leadership model religiosity has no direct effect on ethical leadership. Personality traits fully mediate the relationship of religiosity and ethical leadership.

The recommendations of the study are as follows: 1) a leadership behavioral enhancement seminar should be included in the annual spiritual development plan of the institutions. The seminar must educate future leaders to stay calm, emotionally stable, and free from persistent negative feelings as they face various challenges in the workplace. 2) The religiosity and personality traits of the potential candidates for a leadership position must be assessed and be used as a basis for hiring, and 3) further research must be conducted utilizing leaders from non-Christian institutions to determine the incidence of ethical behavior in the workplace and the associated factors.

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References

- Alexe, C. (2014). The acts of the apostles. In Bell, S. (Ed.), *Servants & friends: A biblical theology of leadership*. Michigan: Andrews University Press.
- Aydemir, M. & Egilmez, O. (2010). An important antecedent of ethical/unethical behavior: Religiosity. *Eurasian Journal of Business and Economics*, 3(6), 71-84. Retrieved from <http://ejbe.org/EJBE2010Vol03No06 p71AYDEMIR-EGILMEZ.pdf>
- Barthelemy, J. (2005). Aggression and the big five personality factors of grades and attendance. Unpublished doctoral dissertation, University of Tennessee, Knoxville. Retrieved from <https://pdfs.semanticscholar.org/8dbf/48a22f62fbb0758bf23aace5a2ca2da9faa2.pdf>
- Bono, J., & Judge, T. (2004). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, 89, 901-910. <http://dx.doi.org/10.1037/0021-9010.89.5.901>
- Bormann, K. (2013). *Understanding ethical leadership: an integrative model of its antecedents, correlates, contingencies, and outcomes*. Dissertation for Doctor Rerum Politicarum in Faculty of Business, Economics and Social Sciences. Retrieved from <https://eldorado.tu-dortmund.de/bitstream/2003/30461/3/ Dissertation.pdf>
- Brown, M., Treviño, L., & Harrison, D. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97 (2), 117-134. Retrieved from <http://users.metropolia.fi/~minnak/ipw/Andrea%20Rijkeboer/Ethical%20Leadership%20Trevino.pdf>
- Brown, M. & Treviño, L. (2006). Ethical leadership: A review and future directions. *Leadership Quarterly*, 17(6), 595-616 Retrieved from http://www.nipc.ir/uploads/science_p_10105_5765.pdf

- Bullock, E. (2006). *Self-directed search interest profile elevation, big five personality factors, and interest secondary constructs in a college career course*. Dissertation for Doctor of Philosophy in Department of Educational Psychology and learning Systems. Retrieved from <http://diginole.lib.fsu.edu/islandora/object/fsu:181037/datastream/PDF/view>
- Carroll, A., & Buchholtz, A. (2009). *Business and society: Ethics and Stakeholder Management*. (7th edition). Canada: South-Western.
- Fernando, M. (2005). *Religion's influence on leaders: case evidence from Sri Lanka*. Retrieved from http://www.anzam.org/wp-content/uploads/pdf-manager/2379_FERNANDO_MARIO_AMI-05.PDF
- Finley, M. (2013). Revival and reformation. *Adult Sabbath School Bible Study Guide, July – September 2013*. Retrieved from https://www.andrews.edu/library/car/cardigital/Periodicals/Adult_Sabbath_School/Teachers_Edition/2013/2013_03.pdf
- Hage, J. (2013). *Influence of religion and religiosity on leadership practices in the workplace: A quantitative correlation study*. Dissertation for Doctor of Business Administration. Retrieved from <https://pqdtopen.proquest.com/doc/1346223709.html?FMT=AI>
- Huberts, L., Kaptein, M., & Lasthuizen, K. (2007). A study of the impact of three leadership styles on integrity violations committed by police officers. *Policing: An International Journal of Police Strategies & Management*, 30(4), 587-607. Retrieved from <https://www.ncjrs.gov/pdffiles1/Digitization/221486NCJRS.pdf>
- Jones, R. (2014). Jesus and leadership. In Bell, S. (Ed.), *Servants & Friends: A Biblical Theology of Leadership*. Michigan: Andrews University Press.
- Kalshoven, K., Den Hartog, D., & De Hoogh, A. (2011). Ethical leader behavior and Big Five factors of personality. *Journal of Business Ethics*, 100(2), 349-366. Retrieved from <https://doi.org/10.1007/s10551-010-0685-9>
- Kelly, K., & Lai, K. (2011). Accuracy in parameter estimation for the root mean square error of approximation: sample size planning for narrow confidence intervals. *Multivariate Behavior Research*, 46(1):1-32. Retrieved from <https://doi.org/10.1080/00273171.2011.543027>
- Kurpis, L., Beqiri, M., & Helgeson, J. (2008). The effects of commitment to moral self-improvement and religiosity on ethics of business students. *Journal of Business Ethics*, 80(3), 447-463. Retrieved from link.springer.com/article/10.1007%2Fs10551-007-9430-4#page-1
- Lei, P. and Wu, Q. 2007. An NCME instructional module on introduction to structural equation modeling: Issues and practical considerations. *Educational Measurement: Issues and Practice*, 26 (3), 33-44.
- Longenecker, J., McKinney, J. and Moore, C. (2004). Religious Intensity, Evangelical Christianity, and Business Ethics: An Empirical Study. *Journal of Business Ethics* 55, 373-386.
- McGraw, A. (2016). Using the Big Five to understand ethical leader behavior. Retrieved from <https://sites.psu.edu/psy533wheeler/2016/03/21/19-using-the-big-five-to-understand-ethical-leader-behavior/>
- Matthews, G., Deary, I., & Whiteman, M. (2009). *Personality traits*. (3rd edition). New York: Cambridge University Press.
- Mayer, D., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108 (1), 1-13. Retrieved from [http://www.sciencedirect.com/science/article/pii/S0749-5978\(08\)00055-1](http://www.sciencedirect.com/science/article/pii/S0749-5978(08)00055-1)
- Mayer, D., Nishii, L., Schneider, B., & Goldstein, H. (2007). The precursors and products of justice climates: group leader antecedents and employee attitudinal consequences. *Personnel Psychology*. 60(4), 929-963.
- Pollard, L. (2014). Paul: Principles for leadership and contextualization. In Bell, S. (Ed.), *Servants & Friends: A Biblical Theology of Leadership*. Michigan: Andrews University Press.

- Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly* 16, 655-687. Retrieved from doi:10.1016/j.leaqua.2005.07.003
- Resick, C., Hanges, P., Dickson, M., & Mitchelson, J. (2006). A cross-cultural examination of the endorsement of ethical leadership. *Journal of Business Ethics*, 63(4), 345-359. Retrieved from www.hangeslab.umd.edu
- Schermerhorn, Jr. (2012). *Introduction to Management* (12th edition). United States: John Wiley & Sons Singapore Pte Ltd.
- Swindall, C. (2011). *Engaged Leadership: Building a culture to overcome employee disengagement* (2nd Ed.). Hoboken, New Jersey, John Wiley & Sons, Inc.
- Sullivan, M. (2009). Ethical Leadership: Guiding principles for educators and administrators. *Christian Perspectives in Education* 2(2). Retrieved from <http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1028&context=cpe>
- Thayer, J. (1999). *The Christian spiritual participation profile a measure of participation in 10 spiritual disciplines*. Retrieved from <http://circle.adventist.org/download/CSPP.pdf>
- Treviño, L., Brown, M., & Hartman, L. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human Relations*, 56(1), 5-37. Retrieved from <https://doi.org/10.1177/0018726703056001448>
- Van Wart, M. (2005). *Dynamics of leadership in public service, theory and practice*. Armonk, NY/London: M.E. Sharpe.
- Williams, C. (2010). *Managing effectively*. (4th edition). Australia: South-Western Cengage Learning.
- Witt, L., Burke, L., Barrick, M., & Mount, M. (2002). The interactive effects of conscientiousness and agreeableness on job performance. *Journal of Applied Psychology*, 87(1), 164-169. Retrieved from <http://works.bepress.com/witt/12>