

## **A Study of Respondent's Virtual Social Interaction, Leadership Style, and Moral Development**

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*The study of moral development and the effects it has on decision making have garnered a good deal of interest in the last thirty years, in an era that has seen widely publicized business scandals. The results of this study do suggest that all the components of Transformational Leadership and Contingent Reward associated with Transactional Leadership as formulated by Bass & Avolio (1994) and measured by the MLQ have a significant relationship to the respondent's Moral Development rating as measured by the DIT2, promulgated by Rest, Thoma, and Narvaez (1999e). No significant findings were associated with respondent's virtual interaction.*

### **INTRODUCTION**

O'Fallon and Butterfield (2005) in a review of 127 articles related ethical decision making to increased follower satisfaction which then lead to higher organizational performance. Martin and Cullen (2006) found in a meta-analysis of 42 studies that followers were more satisfied with organizations which implicitly communicated to the follower a psychological well-being for the follower. In these studies the more the morals of the leaders of an organization fostered ethical decisions the greater satisfaction of the followers. Rest, Thoma, and Narvaez (1999e) discuss the cognitive schemas associated with different levels or moral development as discussed by (Kohlberg, 1984) and the relationship between moral development and ethical decision making. The study of moral development and the effects it has on decision making are of particular interests to those of us in the business community as over the last several years scandals have decreased the legitimacy of our business markets. Researchers have suggested that cognitive moral schemas present in our subconscious aid our retention of factual similarities between our experiences and ultimately aid in our decision making and search for further information (Rest, et al., 1999e). Salter, Harris, Woodhull, and McCormack (2013) suggest an implicit moral theory is associated

with the cognitive schemas similar to the leadership theory noted as Implicit Leadership Theory. Eden and Leviathan (1975) investigated cognitive schemas associated with a follower prototyping a leader, a process now known as Implicit Leadership Theory. Implicit Leadership Theory, Eden et al., (1975); Lord and Maher, (1991), posits that one carries in her or his subconscious a certain slate of factors which they use to identify a leader's behavior as being those of a good leader or an ineffective leader. They further state that an individual judges their own behaviors and those of others as to how closely that behavior coincides with their schema of how one should behave. The research on trait theory and implicit leadership theory has been reinvigorated by research on transformational leadership presented by Bass and Avolio (1994) in their Full Range Leadership Model: transformational, transactional, management by exception active, management by exception passive, and laissez-faire leadership, have led to the continuing study of follower perceptions of leadership, leader implicit values, the spirituality of the leader and leadership style. Bass (1990) suggested that if transformational leadership could be based on one's background characteristics, values, ethics, or traits, then these traits were universal to mankind.

Researchers suggest that cognitive schemas related to implicit leadership and moral development are an abstract learning mechanism that resides in our subconscious which emanate from our limbic systems but find their way to the prefrontal cortex of rational decision making (Kintsch, 1994). Traditional discussions by schema theorists (Rummelhart, 1980; Taylor & Crocker, 1981) indicate that schemas are understood to be generalized knowledge structures residing in long term memory. Schemas have been theorized to be a set of expectations of self and others, as well as hypotheses, concepts or organized regularities formed in the cognition of one's mental facilities and based on the cognitive processes of similarities, associations and recurrences in experiences. While there are numerous schemas individuals possess, Narvaez (1999) identified reaction times and memories identified in moral judgment, while Rest (1986) noted these moral judgments as moral schemas.

Rest et al. (1999e) states that the Defining Issues Test 2, fashioned after Kohlberg (1984)

Seven Stages of Moral Development, measures how individuals perceive moral situations in terms of three schemas: Personal Interests, Maintaining Norms, and Post-Conventional thinking. The three schemas are presumed to be ordered developmentally. The Personal Interests schema justifies the moral decision of an actor by appealing to the personal stake that actor has in the consequences of an action; this stage is considered to occur only in early childhood. Maintaining Norms moral schema initiates in the moral decision maker a recognition that moral decisions should be made on the basis of what is good for society; this decision making ability is thought to occur in adolescents to early adulthood. The justification of a moral decision when one is at the Post-Conventional stage moral development is directed toward shared societal ideals, which are opened to rational critique and can be challenged by new experiences and logic; this cognitive organization for decision making is not fully formalized by all, and is thought to occur later on in one's maturation process, Rest et al. (1999e).

### **Leadership Schemas and Implicit Leadership Theory**

Initial discussion on follower's expectancies of leader behavior or implicit leadership emanated from Eden and Leviathan (1975) who found leader's behaviors guide a perceiver's encoding of relevant information. Subsequent research indicated a perceiver's cognitive schemas were formed unconsciously, help to organize perceptions, and increased a follower's memory of a leader's instructions, Mischel, (1977); Carlisle & Phillips, (1984); Winter & Uleman, (1984); Lord, DeVader, & Alliger, (1986); and Lord & Maher, (1991).

Lord, Brown, and Freiberg (1999) state that even small portions of behavior, perhaps even single word communications, in the absence of further communication, might elicit from

the follower a prototypical implicit based leadership style stored in memory. As provided by Eden and Leviathan (1975), leader behaviors guide memory of small tasks it is intuitive to surmise that a small prototypical behavior would guide a follower's assessment of a leader's leadership style.

Keller (1992) stated that implicit leadership investigates the relationship between the evaluations and perceptions of leaders, whether the respondent is self-judging or judging another. Kark and Shamir (2002) asserted that transformational leaders have dual influence on followers. These authors state that

transformational leaders' influence over the follower is derived by their ability to change the personal identity and the social identity of the follower through communication. The personal identity of the follower models the leader, and the social identity forms identification with the work unit. The authors go further to state that identities are formed by personality traits, quality of relationships, and group norms. Lord, et al. (1999) suggested that implicit leadership theories were a category system, which emphasized how prototypical behavior influenced the leadership perceptions and distortions in memory about leaders by perceivers. Salter, Green, Ree, Carmody-Bubb, and Duncan (2009) stated that cognitive schemas associated with Implicit Leadership Theory are influenced by an individual's Big Five Personality Traits McCrae and Costa (1992) known as: Conscientiousness, Agreeableness, and Neuroticism. Findings indicate that follower's exhibiting higher degrees of Agreeableness and Conscientiousness and lower degrees of Neuroticism rate leaders significantly higher in Transformational Leadership than did other respondents.

### **Leadership and Moral Development**

Several studies have addressed the relationship between transformational leadership and ethics, (Larsson, Eid, & Kjellevoid-Olsen, 2010; Toor & Ofori, 2009; Engelbrecht, Van Aswegen, & Theron, 2005; Hood, 2003) have found a positive relationship between transformational leadership style and ethical justice behaviors, the Ethical Leadership Scale, the Ethical Climate Questionnaire, and a leader's social, personal, and competency-based values. Salter, et al. (2013), found a significant positive relationship between (Bass & Avilio, 1994) Full Range Leadership Model's leadership styles of Contingent Reward and Inspirational Motivation and moral development. The higher the stage of moral development the respondent self rated the more they utilized Contingent Reward and Inspirational Motivation as leadership styles.

Olsen, Kjellevoid, and Johnsen, (2006). stated that individual differences in moral reasoning and moral identity significantly affect ethical leadership behavior. This research is consistent with Bass (1998a; 1998b) which suggested that leaders with a strong moral identity would be more likely to emphasize moral values in their decision making and communication with their subordinates, which may be linked to the inspirational motivation and idealized influence associated with transformational leadership. Research also suggest people with high moral reasoning should be motivated to act morally based on this internalized moral identity Rest (1986), Aquino and Reed (2002), Burns (1978) and Turner, Barling, Epitropaki, Butcher, & Milner (2002). Bass and Steidlmeier (1999) emphasized that a moral component was also necessary for transactional leadership; however Olsen et al. (2006) research did not significantly support this finding. Andreescu and Vito (2010) performed research to determine the best traits for an ideal police officer using the Leadership Behavior Description Questionnaire for XII (Stodgill, 1974), which has two styles of leadership: worker-center and task-centered. Although this research did not focus on moral development, it did show that transformational leadership is the preferred leadership style and that women tend to exhibit more transformational leadership styles.

Walker, Windley, McPhail, & Johnson (2009), Klenke (2003) April, Peters, Locke, and Mlambo (2010) concurred that spirituality is an important component of ethical leadership, in that it allows the leader the introspection required to adequately review their behaviors. Glanz (2010) also discussed the lack of empirical research on ethics and morals in leadership is evident and suggested ethical leadership is needed in strategic planning by developing a conceptual framework for justice and caring in strategic leadership.

Salter, et al. (2009) found a significant difference between the transformational ratings of the leader versus their political party affiliation of the rater, with the greatest difference between those who identified themselves as Republican and those who identified themselves as Democrats, which intuitively suggest an interaction between respondents' moral schema and a halo effect, filtering effect, or selective perception within the realm of decision-making. Rest et al. (1999e) suggests that at the highest form of level development the respondent would show a more critical rationalization of the communications and behaviors of the leader disregarding halo effects, selective perceptions, and other perceptual screens.

Salter, et al. (2013) found a positive relationship between moral development and political affiliation as the more conservative the respondent's political affiliation the higher their moral development.

As stated by Glanz (2010) little research has been done to investigate the relationship between a respondent's moral maturity rating and its effect on the prototyping of leader behavior in regard to leadership style. The purpose of the present study was to test the theoretical proposition that there is a relationship between respondent's moral maturity and the respondent's rating of their own leadership behavioral style as it aligns with Bass and Avolio's (1994) Full Range Leadership Model, when considering the effects of age, ethnicity, gender, and virtual interaction as measured by hourly computer usage per day. The research above suggests that if a follower's moral maturity predisposes him/her to engage in a leadership style. Then followers could more readily interpret the foundations of a leader's communications leading to a more complete understanding between leader's motivations and follower's understanding.

The current research examined the degree to which the respondents' self-rating of moral maturity, as measured by the DIT 2, Rest et al. (1999e), is related to the self-rating of leadership style ratings of transformational, transactional, or passive style as found by Bass & Avolio (1994) Multifactor Leadership Questionnaire (MLQ), when controlling for virtual interaction as measured by hourly computer usage, age, gender, and ethnicity. The study's research questions center on the respondent's moral development and their self-rating of their leadership style as being transformational, transactional, or passive.

As previous research found a relationship between moral reasoning and moral values relating to transformational leadership and has further suggested a moral component to transactional leadership style (Bass, 1998a; 1998b; Bass & Steidmeier, 1999; and Olsen et al., 2006). This research investigated the relationship between a respondent's moral development as measured by the DIT2 (test of Moral Development) and the transformational, transactional, and passive leadership ratings of the respondent when controlling for the respondent's age, education, gender, liberal versus conservative political outlook, computer usage, and ethnicity.

### **Moral Maturity and Computer Usage or Virtual Interaction**

Friedman-Mills (1989) suggests that our intuitive definition of a computer nerd is associated with an isolated personality one who does not enjoy face to face social interaction with others. This intuition is also associated with the idea that the more computer usage the higher isolationist intellect persist and has some validity (Becker, 1984; Friedman, 1988). This study questions the relationship between the isolated personality associated with as manifested by excessive computer usage and the moral development of the individual?

### **Moral Maturity and Political Affiliation**

This study further investigates, once again, any relationship between the respondents' political affiliation and their moral development. White (1997) in a study on moral authority and influence found a relationship between those identifying themselves as socially conservative believed that societal factors play a significantly greater influence on the moral perspectives of voters than did those with no political affiliation. Further findings indicated that those identifying themselves as left wing political affiliates attributed significantly more political influence to a need for equality, than did those individuals who claimed no political affiliation. Also, those identifying themselves as being right wing or conservative attributed less political influence to educators than did those identifying themselves as having no political affiliation. Salter, et al. (2013) found that the more one identified themselves as being politically conservative the higher was their moral development.

## **METHODOLOGY**

### **Participants**

The sample for this study was comprised of 678 respondents. Of the 678 responses, 645 were fully completed and usable, representing a return ratio of approximately 95%. Participants were undergraduates

who volunteered from two universities in South Texas and gender consisted of 42% females and 58% males, with a mean age of 22 years old with a standard deviation of 5.30 and ages ranging from 18-44. The ethnicity of the sample subjects consisted of 71% White, 24% Spanish/Hispanic/Latino, 3% Black/African American/Negro, and 2% Asia. Within the sample 97% of students were working toward their undergraduate degree, while 3% working toward their Master's degree.

### **Materials and Procedure**

This second generation study was of a correlational research design whose central topic of investigation was the relationship between the respondent's moral maturity, as operationally defined by the Defining Issues Test (DIT 2) and the respondent's self-rating of leadership style as measured by (Bass & Avolio, 1994) Multifactor Leadership Questionnaire. The DIT 2 is a measure of the respondent's moral development and is based on (Kohlberg, 1984), stages of moral development. The data collection instrument, including a demographic page and the two aforementioned survey instruments, was given to those participants who voluntarily agreed to complete the surveys, in the multiple convenience samples. The survey was constructed of three sections: the section asking respondents to give Demographic information, the *Defining Issues Test-2* section asking respondents to give a best result answer to ethical scenarios, based on the Center for the study of Ethical Development *DIT-2*. Bebeau & Thoma, (2003), which reflects Kohlberg (1984) stages of moral maturity, and lastly the respondent's rating of their leadership style as defined by Bass and Avolio (1994) Multi-factor Leadership Questionnaire measuring the Full Range Leadership Model.

The DIT-2 includes five hypothetical moral dilemmas; each followed by 12 issues that could be involved in making a decision about the dilemma. Participants were asked what decision they would make in each dilemma and which issues they consider most important in making the decision. These responses are scored to find which moral schema students follow in making moral decisions:

- Personal interest's schema: considering what will benefit me and help others to like me
- Maintaining norms schema: considering what will maintain the law and social order
- Postconventional schema: considering human rights and other moral principles,

The reliability and validity of DIT 2 Survey as it relates to a respondent's moral development has been thoroughly investigated by Rest, Narvaez, Bebeau, and Thoma, (1999b) who found internal consistency coefficients using Cronbach's  $\alpha$  ranging from  $r = .70$  to  $r = .80$ , and validity correlates related to cognitive capacity measures of moral comprehension  $r = .60$  on the measure related to cognitive capacity of pro-social behaviors and desired professional decision making and political attitudes and political choices ranging from and  $.40$  to  $.65$ .

The reliability and validity of the Multifactor Leadership Questionnaire, published by Bass and Avolio (1994), as it relates to respondent's leadership style, has been tested on numerous occasions (Avolio, et al. 1999, Judge, Piccolo, & Ilies, 2004, Rowold & Herrera, 2003, Rowold, 2004). The reliability ratings of all items on the scale ranged from  $r = .74$  to  $r = .94$ , while the validity ratings for these items ranged from  $r = .79$  for transformational leadership styles,  $r = .56$  for transactional leadership styles, and  $r = .91$  to  $r = .84$  for passive leadership style.

### **RESULTS**

A series of regression models were conducted on all of the nine styles of the Full Range Leadership Model: Idealized Influence Active, Idealized Influence Behavioral, Inspirational Motivation, Intellectual Stimulation, Individual Consideration, Contingent Reward, Management by Exception Active, Management by Exception Passive and Laissez-faire leadership as defined by the MLQ-5X and demographics (political party affiliation, ethnicity, education, gender, and age), and moral maturity as defined by the DIT-2.

As indicated in Table 1, *Moral Maturity* ratings variance could best be predicted for these respondents' by the respondent's perception of their leadership style as a leader who engages in

Transformational Leadership Style of Idealized Influence Behavior, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration accounted for 29.4% ( $R^2 = .294$ ) of the variance in ratings for Moral Development. The Transactional Leadership Style of Contingent Reward accounted for 8.9 % ( $\Delta R^2 = .089$ ) of the variance in ratings, as Management by Exception Passive or Active as well as Laissez-faire leadership styles had no significant findings. Respondent's estimation of their leadership behaviors constituting the Full-Range Leadership Model styles of contingent reward, individual consideration, idealized influence active, intellectual stimulation, and inspirational motivation showed a positive correlation to moral maturity ratings of the respondent,  $p < .01$ ,  $F(2, 645) = 10.352$ .

The demographic variable of political party affiliation was shown to add to the prediction model as ethnicity improved overall model predictability to 16.8 % ( $\Delta R^2 = .168$ ), and showed a correlation to moral maturity ratings,  $p < .01$ ,  $F(9, 645) = 18.663$ .

Gender was found to add to the prediction model predictability 4.8% ( $R^2 = .048$ ), and showed a correlation to moral maturity ratings,  $p < .00$ ,  $F(9,645) = 5.65$ .

**TABLE 1**  
**LEADERSHIP STYLE AND MORAL MATURITY RATINGS REGRESSION MODEL OF CHANGE STATISTICS**

Model	Variable	R <sup>2</sup>	R <sup>2</sup> Change	Sig. Change	Df
1	Leader Style: IA, IM, IS, IC	.294	.00	.000	6
2	Political Affiliation	.462	.168	.000	6
3	Leader Style: CR	.551	.089	.01	6
4	Gender	.559	.048	.00	6

*Note.* Leadership style variables are: IA = Idealized Influence (active), IS = Inspirational Motivation, IS = Intellectual Stimulation; CR = contingent reward; Political Affiliation consist of liberal vs. conservative.

A Scheffe Post Hoc test was run and as indicated in Table 2, the greatest difference in ratings existed between those with *Somewhat Liberal* political affiliations, who were rated significantly lower on the moral maturity Stage 3 than their *Very Conservative* political affiliations counterpart, with a mean difference = 1.30. Stage 6 moral development ratings indicated that the greatest variance in mean scores existed between those who were *Somewhat Liberal*, who were rated significantly lower, and those who were *Very Conservative*, with a mean difference = 1.36 and Stage 7 where the *Very Liberal* political affiliates scored significantly lower than the *Very Conservative* political affiliates with a mean difference = 1.33.

**TABLE 2**  
**SCHEFFE POST HOC MORAL MATURITY RATINGS BASED ON POLITICAL AFFILIATION**

Political Affiliation	Mean Difference	Std. Error	Sig.
Stages 3: SL v. VC	1.30	.167	.000
Stage 6: SL v. VC	1.36	.185	.000
Stage 7: VL v. VC	1.33	.204	.000

*Note:* SL = *Somewhat Liberal*, VC = *Very Conservative*, VL = *Very Liberal*

An Analysis of Variance between respondents' was run and indicated there was a significant difference,  $p < .000$ ,  $F(6, 645) = 12.635$ , between the political affiliation of the respondent and their moral maturity. The political affiliation mean score for those graded out as Stage One of Moral Maturity was found to be 2.05, indicating that they were slightly liberal, versus those that were graded out in Stage 7 of Moral Maturity having a mean political affiliation of 3.41 being either not affiliated politically or slightly conservative. The Analysis of Variance did indicate an intuitive anomaly which occurs at Stage 4 of Moral Maturity and the self-description of the respondent as being either liberal or conservative. An intuitive anomaly occurs as respondents' ratings of liberal vs. conservative political outlook at Stage 4 were more liberal than those rating themselves at Stage 2 or 3 at a self-rating of for being liberal or conservative of 2.88, while Stage 2 respondents' ratings were 3.13 and Stage 3 respondents' ratings were 3.36.

A subsequent Scheffe Post Hoc test was run which indicates that the greatest variance in ratings existed between those identifying themselves as using contingent reward as a leadership behavior marginally with a self-rating of 1 to those who rated themselves as utilizing contingent reward behavior regularly with a self-rating of 4. Those whose self-rating was 4, who utilized contingent reward regularly, were rated as significantly more morally mature than those who rated themselves using reward marginally, with a 1 rating, with a mean difference = 2.19,  $p < .028$ .

Another iteration of the Scheffe Post Hoc test indicates that the greatest variance in ratings existed between those identifying themselves as using inspirational motivation as a leadership behavior marginally with a self-rating of 1 to those who rated themselves as utilizing inspirational motivation behavior regularly with a self-rating of 7. Those whose self-rating was 7, who utilized inspirational motivation regularly, were rated as significantly more morally mature than those who rated themselves using inspirational motivation marginally, with a 1 rating, with a mean difference = 1.47,  $p < .00$ .

Concerning Gender post hoc Scheffe test indicate that a significant variance between men and women were noted in Stage 1, 3, 4, and 6, with the most significant difference being found in Stage 3, with a mean difference = 1.25,  $p < .012$ .

### **Hypothesis Tests**

As stated in the research question the relationship between respondent's moral maturity ratings as operationally defined by the DIT 2, and the self-ratings of their transformational leadership style, composed of , idealized influence (active) idealized influence (behavioral), inspirational motivation, individual consideration, and intellectual stimulation, based on the MLQ5X, when controlling for age, ethnicity, political affiliation, computer time or virtual interaction, and gender was found to exist. As a significant relationship was found to exist between, the respondent's self-rating of transformational leadership style and their self-ratings of moral maturity. Specifically Respondent's rated in Stage 7 of moral development utilized contingent reward more readily, than Respondents in Stage 1, who more frequently engaged in the transformational components of Idealized Influence Active, Intellectual Stimulation, and Inspirational Motivation.

Findings also, indicated a significant relationship between the transactional style known as Contingent Reward and Moral Maturity. As moral development increased from stage of development to stage of development so did the usage of Contingent Reward behavior or Transactional Style of Leadership. Finally, there were no significant findings concerning passive leadership styles, computer time or virtual interaction, and any of the tested variables.

### **Discussion**

The pertinence of this research to organizational leaders is aligned toward a better understanding of followers' moral development in association with their leadership behavioral style and communication processing behaviors, which have been stated to emanate from one's moral schemas as stated by Rest, et al.(1999e). Leaders' change styles in order to better motivate their followers to higher productivity, the understanding of the relationship between a leader's preferred leadership style and their moral development will aid followers and the leader's leader as to what motivates the mechanisms they utilize

to communicate to and motivate others. If leader's moral maturity effects their perception of a leadership style's effectiveness, then followers and their leaders could more productively communicate, which will in favorable situational environments enhance performance of the organization. It is assumed that if a leadership style is not recognized by the follower through the attribution processes imbedded in implicit leadership theory and implicit moral maturity theory, then the positive outcomes of that form of leadership are wasted on the unperceiving follower.

From a practical standpoint leaders need to understand their propensities, based on their level of moral maturity, to utilize communication mechanisms, which fulfill their need to behave congruently to their level of moral development. It is also necessary for leaders to recognize their follower's different levels of moral development. As leaders, understanding that one's default leadership styles of behavior, which emanate, at least in part, from one's level of moral development, might not speak effectively to follower's whose level of moral maturity is not complimentary, is important to motivating all levels of followers.

Of further note, if we understand constituent's levels of moral development then we can better communicate around the perceptive boundaries associated with our communicative behaviors, of selective perception, halo effect, self-fulfilling prophecy, and their interaction with follower attribution of the leader, then we could better assimilate unique follower training programs to enhance organizational behavior, which could create an efficiency of productivity.

The finding on moral maturity and political affiliation is intuitively spurious, in that it would appear to one that political affiliation is a philosophical ideal by which one would fulfill the human needs associated with different levels of Moral Development. It is intuitive that individuals within the associated different levels of political affiliation should be rated as to be in high stages of moral maturity, this finding that political conservatives are more highly rated in the levels of moral development intuitively speaks to a sample population in which the highest political affiliation numbers were slightly conservative to highly conservative.

The significant relationship found between moral maturity and the leadership traits *Inspirational Motivation* and *Contingent Reward*, concur with prior research, which suggest that the communicative behaviors of successful political leaders speak to transformational language and to transactional leadership language as well (Gardner, 1987; Hargrove, Duncan, Green, Salter, & Trayhan, 2011). Gardner (1987) and Hoyt and Blascovich (2003) suggests though transformational and transactional leadership styles might be needed to accomplish different aspects of the leadership role, both are needed for effective leadership.

Researchers were surprised to have found no relationship between gender and moral development. As intuitively suggested in (Green, Duncan, Salter, & Chavez, 2012; Salter, Green, Duncan, Berre, and Torti 2010) which suggested that women were significantly more concerned with a leader's integrity and more sensitive to the transformational and passive leadership language of the leader than men. However, while the studies mentioned above actually rated the actions of some other leader, this study rated the respondents' own moral development and their leadership style, the interesting difference between a male's implicit expectations of their own behavior and perhaps the lesser expectations one might have of the practical behavior of a leader might constitute the lack of significant difference between the ratings of men and women in this study. In other words men have the same high expectations of their own behavior as do women, it is suggested that they simply might not expect the same high standard from their leaders.

### **Limitations to the Findings**

This research's generalizability is reasonably questioned due to the convenience sample from which respondents answered the questionnaires. Thus, findings taken from a sample consisting of only those seeking a higher education in a population might not be representative of the population as a whole. Therefore, these finding are not necessarily similar to the findings of a representative sample of the entire population. In order for conclusions to be drawn about the population as a whole, this study should be repeated with a more representative sample.

## Recommendations of Future Research

While there was no significant finding regarding respondent's virtual interaction time or daily hours spent on a computer and their moral development, there were significant negative findings regarding transformational leadership styles of: Idealized Influence (Active), Intellectual Stimulation, Inspirational Motivation, and Individual Consideration and daily hours spent on a computer. These findings did indicate that the more time one engages in daily computer usage the less they rated themselves as engaging in these transformational styles of leadership. It is intuitive to suggest more research needs to be conducted on not only the effects of computer usage on society, but the effects of computer usage and leadership behaviors. More research should also be done on the implicit perception of how individuals perceive themselves and others as leaders. The relationship between implicit perception and the formulation of one's decisions is important to the better understanding and communication of leaders and constituents in our societal workplace. Researchers should recognize the different disciplines engaged in contributing to the study of leadership and make the effort to traverse uncommon ground toward a better understanding of leadership and decision-making. Subjects worthy of study include those associated with implicit motivations and concern, satisfying the intrinsic needs of the constituent and the leader at work, and communication verbal and non-verbal cues that reinforce positive emotion and result in extra effort.

While this study found a significant difference between the Moral Development of different politically affiliated individuals, intuitively these do not seem to be related. Lastly, more research should be devised attempting to understand the perceptual differences between political affiliation, leadership ratings and moral development. As stated above, political affiliation would seem to be more a mechanisms or means one would utilize to fulfill the human needs associated with different levels of moral development. Mischel (1977) suggests the process of decision formulation with schemas and their aid in information gathering seem to be subconscious and involuntary. If however, political schemas (Democrat or Republican) exist as intuition would allow, then to what reflexive decision-making processes are they responsible for our political choices? And, more importantly how can two opposed political affiliations ever come to compromise, for the betterment of society?

St. Augustine has been recorded as saying that our will is not responsible for those things in which, it possesses no control, that the will is self-determining (King, 2010). Interpretively this means we do have power over our will and that power is self-possessing. We ourselves are then responsible for having a *good will* toward our fellow human beings. Finally the author further says for St. Augustine a *good will* consisted of: 1) prudence or the knowledge of what was good for oneself and seeking it, and knowing what was not good for oneself and avoiding it, 2) bravery, the ability to take with equanimity the things that are beyond our control and to press on, 3) moderateness, what trait theorist refer to as emotional stability, and 4) justice or the need to pursue fairness for all persons. Perhaps it is somewhere within the exercise of our wills that we can consciously recognize and think past our schemas or our automatic responses to come to further reason in every situation, which will then aid in the performance of our industries and our societies.

Research should continue to study the effect that our subconscious has on our ethical decision-making and decision-making in general. While we cannot at this time follow our thought processes throughout the universe, we can at least to some extent induce where those processes may reside by inducing their emanation and reversely deducing their manifestations. As Andrew Peabody in a paper delivered to the Alpha of Massachusetts at Harvard in 1845 and reproduced in *Representative Phi Beta Kappa Orations*, Northrup (1930, p. 80) states, "Observations, consciousness, and experience are necessarily limited in space and time, and can give but partial answers. Induction extends these answers through all space and all time, converts particular facts into all-embracing truths, and puts the universe within the grasp of science."

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