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Linking Religiosity, Machiavellianism & Ethical Beliefs of Consumers: **Evidence from Algeria**

Tarek Belhadi*1

¹University Center of Mila - Algeria, t.belhadj@centre-univ-mila.dz

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Abstract:

The results about linking consumer ethics and religion are no more definitive. Therefore, this paper examines the relationships between religiosity, Machiavellianism and ethical beliefs for Algerian consumers regarding various questionable consumer practices. A research framework with five hypotheses was established to examine these relationships. Based on convenience sampling, 131 Algerian students completed an anonymous questionnaire. The result reveals that religiosity and Machiavellianism are significant contributors to consumers' ethical beliefs. On the other hand, religiosity did not show any significant relationship with the Machiavellian orientations of consumers.

Keywords: Consumer Ethics, Religiosity, Machiavellianism, Algeria.

Jel Classification Codes: Z10, Z12, Z13, D11.

1. INTRODUCTION:

The key challenges in the research of consumer ethics are to find out the factors that have correlation with ethical issues and to determine the attitudes of consumers towards certain ethical behaviours (Muncy & Vitell, 1992). In this respect "the link between religion and ethics seems obvious" (Weaver & Agle, 2002). A closer look at the literature suggests that religion is a powerful social force. Our societies often use religious values to determine what is right and wrong (Turner, 1997). Such norms, values, and beliefs are often arranged into a religious code governing the conduct of human affairs. For instance, the Islamic religion provides a broad basis of codified ethical rules that Muslims must follow to actualize what they believe in.

Corresponding author

According to Hunt & Vitell (1993), an individual's perception of ethics is significantly affected by his religiosity in three ways. First, religion is an essential component of the cultural environment. Second, religion is also listed as one of the personal characteristic. Finally, religion is considered as a dominant basis for individual deontological norms.

However, despite what seems conceptually an obvious link between religion and ethics, this link has long been hotly debated. In fact, researchers have provided mixed conclusions on the relationship (Parboteeah, Hoegl, & Cullen, 2008). So far, there is no definitive answer regarding the relationship between religion and business ethics. Vitell, Paolillo, & Singh (2005) clearly state: "the relationship has not been well established" (p. 175). Furthermore, even the results from the relatively limited studies linking consumer ethics with religiosity remain inconsistent and inconclusive. For instance, results from Vitell, Singh, & Paolillo (2007) indicate that both types of religiosity, intrinsic and extrinsic, were significant determinants of at least some types of consumer ethical beliefs. In a study among consumers in Hong Kong and Singapore, Ramasamy, Yeung, & Au (2010) argue that religious values are significant direct determinants of corporate social responsibility support among consumers. Likewise, the results of a study conducted in USA indicate that religiosity indirectly lead to negative beliefs regarding unethical consumer actions and positive beliefs regarding pro-social actions mediated through idealism. In addition to this indirect relationship, religiosity has direct influences on dimensions of consumer ethics (Chowdhury, but not all. 2018). Unlike the previous, other studies have found no significant relationship especially with respect to the influence of extrinsic religiosity on consumer ethics (Vitell, Paolillo, & Singh, 2005; Patwardhan, Keit, & Vitell, 2012; Arli & Tjiptono, 2014).

Parboteeah, Hoegl, & Cullen (2008) suggest that the reasons for these conflicting results can mostly be explained by some conceptual and methodological issues. For instance, most studies have tended to consider only single, unidimensional conceptualizations of religion, such as church attendance or religious affiliations, and they have considered only one religion. This studies have been conducted almost exclusively on Christian

and western samples. Abu Raiya (2008) noted that "other traditional faiths, Islam in particular, have been neglected for the most part" (p. 15).

Additionally, the ethical behaviour is not only affected by the acquisition of positive personality traits but also by the exclusion of negative personality traits. Accordingly, we suggest that consumers' ethical beliefs are not only directly linked to religious orientations but indirectly through mediating variables such as Machiavellianism. Individuals with a high degree of Machiavellian personality traits might be willing to engage in unethical behaviours. Various studies indicate that Machiavellianism is negatively correlated with consumers' ethical standards (Al-Khatib, Vitell, & Rawwas, 1997; Chan, Wong, & Leung, 1998; Al-Khatib J., Vitell, Rexeisen, & Rawwas, 2005).

While the number of studies examining the relationship between religiosity and consumer ethics is relatively limited, there are, very few studies have incorporated Machiavellianism as a mediator of the relationship. Moreover, the studies examining these relationships in the Arab Islamic community are even fewer. Thus, the current study examines consumers in Algeria on their personal religiosity, Machiavellian orientations and perceptions of questionable practices.

2. Literature Review and Hypotheses Development:

2.1. Religiosity effects:

Religion has long been a driving force that plays a powerful role in today's societies by shaping our daily life and influencing our ethical behaviours. Taylor (1989) suggests that religion is the strongest source of human values. So, it is faith rather than reason, or secular knowledge, that provides the foundation for a moral life. Since religion is listed as a key personal characteristic according to the Hunt-Vitell model (1993), religiosity can be expected to influence a consumer's ethical beliefs in a positive way. That is, those who are more religious might be expected to be more ethical in terms of their beliefs.

Weaver & Agle (2002) reported that religiosity is known to have an influence both on human behavior and on attitudes. They argue that behaviour is influenced by religious self-identity which is formed by the

internalization of role expectations offered by religion. These suggest the potential influence of religiosity on one's behaviour and consequently What is considered right or wrong in that perspective. Religion also fosters or frown social behaviour, and, therefore, an important institution that exercises control over beliefs and behaviour (Kennedy & Leigh, 1998).

However, in trying to relate religiosity with consumer ethics, there were two views on this. One suggests that religiosity does not have an effect on perceptions of business, while the other studies showed that religiosity does have an effect on consumers' ethical beliefs. For instance, Hegarty & Sims (1978) conducted an experiment by using a student sample to examine the influence of personal factors on ethical behavior and found religiosity to be not significant. Similarly, Kidwell, Stevens , & Bethke (1987) found that there was no relationship between church attendance and perceptions of what was ethical. McDonald & Kan (1997) found that religious orientation does not influence responses to ethical scenarios.

Conroy & Emerson (2004) showed that religiosity is a significant predictor of responses in a number of ethical scenarios. Kennedy & Leigh (1998) found a negative relationship between religiosity and willingness to behave unethically. Vitell, Paolillo, & Singh (2005) found that intrinsic religiosity was a significant determinant of consumer ethical beliefs, but extrinsic religiosity was not. This is consistent with the findings of Vitell & Paolillo (2003), who emphasized the need for further exploration of the relationship between religiosity and consumer ethical beliefs.

With regard to Machiavellianism as a personality trait, religiosity has been recognised as a possible significant factor corresponding to some individual differences in various aspects of personality (Saroglou, 2002). However, there is limited empirical research examining the two variables. Chen & Tang (2013) developed a theoretical model involving religiosity, Machiavellianism, and unethical intentions and investigate direct and indirect paths. The results revealed that intrinsic religiosity indirectly curbed unethical intentions through the absence of Machiavellianism. Quah, Wong, & Joshua (2008) found, on the contrary, that there is no significant relationship between religiosity and Machiavellianism.

As a result, an understanding of the role of religiosity is necessary

when addressing the issue of being ethical and less Machiavellianism.

2.2. Machiavellianism and ethical behaviour:

Machiavellianism is another construct that can be selected to predict ethical behaviour. According to Hunt & Chonko (1984) Machiavellianism is defined as a "negative epithet, indicating at least an immoral way of manipulating others to accomplish one's objectives" (p.30). According to Christie & Geis (1970), this manipulation can be described as "a process by which the manipulator gets more of some kind of reward than he would have gotten without manipulating, and someone else gets less, at least within the immediate context" (p. 106). Christie & Geis (1970) developed scales to differentiate between those with low level of Machiavellianism (low Machs) and those with high level of Machiavellianism (high Machs). High Machs are more apt than lows to behave unethically. For example, high Machs have more willingness to exploit others than lows (Vecchio & Sussman, 1991). Low Machs subscribe to higher ethical standards, whereas high Machs can easily engage in breaking ethical norms in situations that offer material rewards for (Kessler, et al., 2010).

Hunt & Chonko (1984) report that "critics often attack marketing as being manipulative and unethical, or "Machiavellian" in nature" (p. 30). So, most of research examine ethics from the sellers' side. However, marketers are not more Machiavellian than other members of society (Hunt & Chonko, 1984; Al-Khatib, Vitell, & Rawwas, 1996). Thus, this is an appropriate construct to examine in relation to consumers' ethical beliefs. In the literature of consumer psychology, it is considered that the 'Machiavellian' consumers usually do not pay regard to general morality and they incline to give priority to self-interest than to others. So, they are more likely to engage in unethical behaviour when their self-interest is involved. This self-interest oriented behaviour, perhaps, leads the more Machiavellian individual to be more accepting of potentially less ethical consumer practices (Al-Khatib, Vitell, & Rawwas, 1996; Gunnthorsdottir, McCabe, & Smith, 2002; Nagashekhara & Ramasamy, 2012).

Numerous studies have investigated the impact of Machiavellianism on consumers' ethical perceptions. The conclusions of these studies suggest that the higher the individual's Machiavellianism tendencies, the less likely that individual will negatively perceive unethical or questionable actions. For instance, consumers in Hong Kong and Northern Ireland (Rawwas, Gordon, & Michael , 1995); Austria (Rawwas, 1996); Japan (Erffmeyer, Keillor, & LeClair, 1999) were found to be influenced by Machiavellianism in ethical decision-making. Other studies have reported that neither American nor Egyptian consumers appear to be influenced by Machiavellianism, (Al-Khatib, Vitell, & Rawwas, 1997).

Additional comparative studies offers evidence of differences in the Machiavellian orientation associated with demographic descriptions such as gender, age, education background and religiosity. A number of these studies argue that females have high Machiavellian scores compare to their counterparts (Webster & Harmon, 2002; Mostafa, 2007; Nagashekhara & Ramasamy, 2012). In contradiction to this, a study found that males are high Machiavellians compare to females (Hegarty & Sims, 1978).

2.3. Consumer ethical judgments:

Greater attention has been paid recently to consumer attitudes toward unethical behaviour. Muncy & Vitell (1992) defined consumer ethics as "the moral principles and standards that guide behaviour of individuals or groups as they obtain, use and dispose of goods and services" (p. 298). The work of Muncy & Vitell (1992) is considered a key step in the evolution of attempts to measure consumer ethics. They have developed the most widely tested scale that explores the extent to which consumers think that certain marketplace practices are unethical. The consumer ethics scales (CES) consists of four dimensions: the first dimension is, 'actively benefiting from an illegal activity', which concerns with illegal actions initiated by consumers. The second dimension, 'passively benefiting at the expense of others', which includes actions where consumers benefit from sellers' mistakes which are not corrected by the consumer. While both types of the first two dimensions provide benefits at the expense of sellers and they are almost commonly perceived as illegal, these two dimensions differ according to whether consumers engage in intentionally unethical actions to benefits, or whether they simply do nothing to gain the benefit. The third dimension is 'actively benefiting from questionable actions', which refers

to the case that consumers deceive the seller by initiating activities that are likely to be perceived as legally acceptable actions. However, they are still morally questionable. Finally, the fourth dimension is 'no harm/no foul', where consumers perceive that no one appears to be directly harmed from that type of behaviour. According to previous studies, consumers believe that "actively benefiting from an illegal activities" are the most unethical while "no harm/no foul" are the least unethical (Vitell & Paolillo, 2003; Arli & Tjiptono, 2014).

In (2005), Vitell & Muncy refined the Consumer Ethics Scale and expanded it to include new items that represent three distinct dimensions: 1) downloading/buying counterfeit goods; 2) recycling/environmental awareness; 3) doing the right thing/doing good. These latter dimensions were not used in the present study as they are perhaps less applicable to non-western countries than are the other dimensions.

Vitell (2003), summarized extant research on consumer ethics. The results showed research on consumer ethics mainly focused on consumers in western and developed countries. Thus, Vitell (2003) recommended more cross cultural research to examine the universality, or lack thereof, of consumer ethics. Later, Vitell (2015) pointed out, the consumer side of ethics research has grown most significantly since the year 2000. Much of this research has been conducted in North America, but studies are no longer uncommon in other parts of the world. Concerning the Arab world, Rawwas, Vitell & Al-Khatib (1994) examined the effect of war and civil unrest on consumers' ethical beliefs, preferred ethical ideology and degree of Machiavellianism in Lebanon and Egypt. Al-Khatib, Dobie & Vitell (1995) studied the impact of Egyptian consumers' preferred ethical ideologies on their choice of action in ethically questionable situations. Al-Khatib, Vitell, Rexeisen, & Rawwas (2005) examined the inter-country differences of consumer ethics in Arab countries. Yet, ethical behaviour of consumers in the Arab market still received less attention than other regions did.

Based on the above background, we propose the following hypotheses of the effect of religiosity on Machiavellianism and ethical attitudes among

Algerian consumers:

H1: Male will exhibit higher Machiavellian scores than female.

H2: There is a positive relationship between Machiavellianism and consumer acceptance of unethical behavior.

H3: There is a negative relationship between Religiosity and Machiavellianism.

H4: There is a negative relationship between Religiosity and acceptance of unethical behavior.

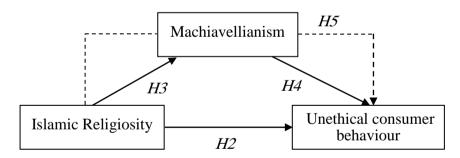
H5: Machiavellianism mediates the relationship between Religiosity and consumer acceptance of unethical behaviour.

3. Methodology:

3.1. Research Model:

The figure 1 shows the proposed relationships of the study variables. This study is designed to examine the impact of Islamic religiosity on Machiavellian orientations and ethical beliefs of Algerian consumers with a possible mediating role of Machiavellianism between dependent and independent variables.

Fig.1. The study model.



3.2. Sample and data collection:

In order to investigate the relationship between our variables, data collection was administered through convenience sampling method to students at the University center of Mila in Algeria. A total of 131 respondents completed the self-administered questionnaire. The respondents include 51.1% male and 49.9% female. The majority, 89.3%, were Undergraduate students, while the remaining 10.7% were postgraduate students. The descriptive statistics are summarised in table 1.

Table 1 descriptive statistics

		Frequency	Percentage
C 1	Male	67	51.1
Gender	Female	64	49.9
	18-24	93	71
Age	25-30	18	13.7
	+30	20	15.3
education level	Undergraduat	117	89.3
	postgraduate	14	10.7

3.3. Survey instrument:

As indicated previously, the key variables measured in this study were the religiosity, Machiavellianism and ethical beliefs. These variables were measured by means of a self-administered questionnaire.

Religiosity: There has been much debate over how Religiosity can be measured. Many researches has tended to measure religiosity using onedimensional construct of religion, such as church (mosque) attendance or attachment (Schwartz & Huisman, 1995; Agle & Van Buren, 1999; Brega & Coleman, 1999; Parboteeah, Cullen, & Lim, 2004). Yet, religiosity is a complex phenomenon that "cannot be conceived as a single, allencompassing phenomenon' (De Jong, Faulkner, & Warland, 1976, p. 866). Bergin (1991) states that "one finding that most scholars in this area agree on is that religious phenomena are multidimensional" (p. 399). It seems to cover considerable aspects such as: behaviours, attitudes, values, beliefs, feelings, meanings, experiences, knowledge, and religious support. One of the first attempts to measure religiosity is intrinsic-extrinsic Religious Orientation Scale (ROS). ROS has been developed by Allport & Ross (1967) and is one of the most widely used scales that has been tested in several marketing and consumer researches and has demonstrated acceptable reliability. According to Flere, Lavrič, Musil, & Klanjšek (2007), efforts to assess the applicability of the ROS constructs to diverse

populations have been made. Although the findings generally supporting the essential replicability of the Religious Orientation Scale (ROS) scales, many of them have raised the problem of the cross-cultural validity of the ROS framework. The ROS is specifically designed for use with Christian environments. Thus, direct cross-religions adaptation of the scale is not always possible and valid (Khraim , 2010; Mansori, 2012). Albelaikhi (1997) pointed out, although some of the existing religiosity scales used for Christians may contain some concepts and items that could be applicable with Muslims, such scales are, as a whole, culture-bound and unsuitable for measuring religiosity among Muslims (p. 2).

Based on the above discussion, an accurate multidimensional approach is needed in order to cover different facets of Muslim religiosity. Therefore, to obtain better results for this study, we relied on Glock's fivedimensional model of religiosity which has been employed in recent studies. For instance, to measure the religiosity of consumers in Pakistan Ateeq-ur-Rehman (2010) adapted a measurement in accordance with Glock's (1972) conceptual framework in which religiosity has been operationally defined as having five dimensions: ideological, ritualistic, intellectual, consequential, and experiential. The ideological dimension includes the acceptance of the overall belief system associated with a religion. For example, beliefs about God, Prophet, fate, etc. The ritualistic dimension includes participation in religious activities and practices such as: prayer, fasting, pilgrimage, etc. The intellectual dimension refers to an individual's knowledge about religion. The consequential dimensions refer to the importance of religion and ethical consequences. The experiential dimension describes subjective and emotional religious experience as an expression of personal religiosity.

Machiavellian orientation: In order to measure this construct the well-established MACH IV scale developed by Christie & Geis (1970) was used. This scale contains 20 items with 10 items worded in a Machiavellian direction and 10 items worded in the reversed direction. Each respondent was asked to select a response on a 7-point Likert scale with each of the 20 items. For positive items the Scale allowed 7 points to be selected to reflect the breakdown from a score of 1 for strong disagreement to 7 for strong

agreement. For negative items scoring is reversed. The neutral response is invariably assigned a score of 4. Scores attained by each participant were calculated by summing up ratings with total scores ranging from 20 to 140; higher scores reflected greater Machiavellianism. But in order to simplify the interpretation and to get 100 as midpoint, a constant of 20 is added in the score of each subject making highest possible score 160 (140+20) and lowest possible score 40 (20+20).

Consumer ethical judgments: The 'consumer ethics' scale developed by Muncy and Vitell (1992), and validated by others, was utilized to measure the consumer ethics construct. This scale has acceptable levels of reliability in a number of studies. Respondents were requested to select from 'strongly believe that the statement is wrong' to 'strongly believe that the statement is not wrong' using a five-point Likert scale. A high score on the scale means that consumers find these actions as more acceptable and less unethical. However, compared with the original statements used by Muncy and Vitell (1992), our items were somewhat different since some of the origin statements had little bearing on Algerian market conditions. In some cases, we adapted these measures slightly to include explicit wording specific to the focus of the study.

4. Results:

Reliability tests were conducted on the dependent and the independent variables (religiosity, Machiavellianism and consumer ethics). Results in table 2 show that the overall Cronbach's alpha of Consumer Ethics Scale was 0.818 and for Religiosity scale was 0.906, which is satisfactory. A Cronbach's alpha of 0.433 coefficient was obtained for Machiavellianism scale. This compares to some previous studies, which reported a reliability coefficient below the acceptable Cronbach's alpha values, for example, studies showed 0.57, 0.51, 0.46, 0.36 and even 0.31 among undergraduate students (Al-Khatib, Dobie, & Vitell, 1995; Wastell & Booth, 2003; White, 1984; Zook, 1985; Mudrak & Mason, 1995). Contrary, many other studies found acceptable internal consistency for the Mach-IV (e.g., 0.63, 0.70, 0.79, 0.80 in (Mostafa, 2007; Corral & Calvete, 2000; Christie & Geis, 1970; Nagashekhara & Ramasamy, 2012)). So, the low reliability of the Mach IV in our study compared to this later reliabilities may be due —as Mostafa (2007) suggested—to the translation and application of a scale that has been written in one language and translated and applied in another language and culture. Thus, the well-established reliability of this scale in numerous previous studies is such that we believe it is appropriate to use it in the subsequent analyses.

Table 2 Reliability & Means and standard deviations (SD) of variables

	N of items	Cronbach's alpha	Means	SD
Religiosity	25	0.906	3.67	0.75
Consumer Ethics	21	0.818	2.34	0.48
Machiavellianism	20	0.433	94.53	8.81

Hypothesis H1: Male will exhibit higher Machiavellian scores than female.

The MACH IV scale was used to determine the extent to which Algerian consumers might be Machiavellian. The current study results indicate relatively low Mach scores than many previous studies (M= 94.53, SD= 8.81). Comparing this results to some studies conducted in the Arab world indicates that Algerian students are less Machiavellian than those in Egypt. In examining the degree of Machiavellianism among Egyptian students, Mostafa (2007) obtained a mean score of 105.39.

Table 3 indicates the standard deviation of MachVI for both gender is around 9. On average, male's attitude toward Machiavellianism is slightly higher than female's. Male's average mean is 95.28 and female's average is 93.75.

Table 3 Male and female Mach IV scores

	Gender	N	Mean	Std. Dev	Std. Err M
MachVI	male	67	95.28	8.44	1.03
	female	64	93.75	9.19	1.14

Independent samples t-test (one-tailed test) was used to test hypothesis H1 to reveal whether males are more Machiavellian than females. The Table 4 shows that There is no significant difference in scores for males and females (p-value > 0.05). Thus, H1: Males are more Machiavellianism than females is not supported.

Table 4 Mean Differences between Male and Female

MachVI	t	df	Sig. (2- tailed)	Mean Diff.	St. E Diff
	0.995	126	0.322	1.53	1.54

Hypothesis H2: There is a positive relationship between Machiavellianism and acceptance of unethical behavior.

To investigate this hypothesis, the data were subjected to regression and correlation analysis. Table 5 below indicates a correlation value with Beta= 0.213, and p-value = 0.01, since p-value is < 0.05, null hypothesis is rejected, indicating positive correlation between Machiavellian orientations and acceptance of consumer unethical behaviour and H2 is supported.

Table 5 Regression analysis Dependent variable: Ethical Beliefs of Consumers

Model	Standardized				
	R	F-value	Beta	t-value	Sig.
Machiavellianism	0.213	6.135	0.213	2.477	0.015

Hypothesis H3: There is a negative relationship between religiosity and Machiavellianism.

The results from Table 6 illustrates that there is no significant relationship between the independent and the dependent variable. The correlation of 0.059 is not significant (p-value > 0.05), which does not support the study hypothesis. The hypothesis H3 is also not supported by result shown in Table 6. The model is statistically not significant; the F-value is 0.445, which is < 4 and p-value is 0.506. Therefore, the relationship between religiosity and Machiavellianism is not established

Table 6 Regression analysis Dependent variable: Machiavellianism

Model		Standardized			
	R	F-value	Beta	t-value	Sig.
Religiosity	0.059	0.445	0.059	0.667	0.506

Hypothesis H4: There is a negative relationship between Religiosity and acceptance of unethical behavior.

We used linear regression to test this hypothesis. The results are shown in Table 7 which clearly demonstrates that there is a relationship between religiosity and consumer's ethical beliefs. The correlation value of 0.258 is significant at the 0.05 level and the beta weight is in the expected negative direction, which supports the study hypothesis. The stronger a respondent's sense of religiosity, the more likely they were to find the various questionable consumer activities as unacceptable (or unethical).

Table 7 Regression analysis
Dependent variable: Acceptance of unethical consumer behavior.

Model		Standardized				
	R	F-value	Beta	t-value	Sig.	
Religiosity	0.258	6.500	-0.258	-2.550	0.012	

Hypothesis H5: Machiavellianism mediates the relationship between Religiosity and consumer acceptance of unethical behavior.

In order to test the mediator role of Machiavellian orientations, the conditions proposed by Baron & Kenny (1986) should be checked. According to them, there are three conditions which should be fulfilled in testing mediation: 1) the direct relationship between the independent variable (Religiosity) and the dependent variable (unethical consumer behavior) must be statistically significant. 2) The independent variable (Religiosity) should be significantly correlated with the mediator (Machiavellianism). 3) The mediator variable (Machiavellianism) should be significantly related to the dependent variable (unethical consumer behavior. Then, the total effects in which the direct and indirect

relationships are included can be analyzed. While two conditions, in this study, are fulfilled (1 and 3), the model of mediation failed to fulfill the second condition. The results above, in table 6, show that there is no significant relationship between the independent variable (Religiosity) and the mediator variable (Machiavellianism). Thus, the hypothesis of the mediating role of Machiavellianism is not supported.

5. Discussion & conclusion

The main objective of this paper is to provide more conceptual and empirical analysis of the linkages between religion and ethics by investigating the impact of religiosity among Algerian consumers on Machiavellian orientations and ethical beliefs. First, we follow Glock's (1972) multidimensional view of religion, distinguishing between five dimensions of religiosity. Second, we relate this independent variable to the dependent variables; Machiavellian orientations and individuals' acceptance of unethical behaviours, rather than asking if they personally have committed such behaviours. As Parboteeah, Hoegl, & Cullen (2008) argued that using this acceptance as our main dependent variable holds important implications, as individuals' acceptance of unethical behaviors is not equal to committing such behaviours. Rather, this is merely one of a series of steps that may eventually lead to unethical behaviour.

Unlike some studies in the western context which found that there is no significant relationship between religiosity and individuals' ethical beliefs (Kidwell, Stevens, & Bethke, 1987; Agle & Van Buren, 1999; Vitell & Paolillo, 2003), the results from the current research illustrates that religiosity significantly affects consumer's ethical beliefs. So, the stronger a respondent's sense of religiosity, the more likely they were to find the various questionable consumer activities as wrong or unacceptable. This result seems to be supported with other past studies by Kennedy & Leigh (1998), Conroy & Emerson (2004) & Parboteeah, Hoegl, & Cullen (2008). In the same way, and consistent with the hypotheses of this paper, the Machiavellian orientation was found to be related to individuals' willingness to accept unethical behaviors. Thus, Machiavellianism consumers are more likely to accept unethical consumer activities.

However, contrary to the hypotheses of this paper and consistent with the study of Ouah, Wong, & Joshua (2008) which found no significant relationship between religiosity and Machiavellianism, our analysis finds no support for our prediction regarding religiosity and Machiavellian orientation. It is possible that the low reliability discussed above of the Mach IV can explain these last insignificant findings. Additionally, Butterfield, Trevino, & Weaver (2000) discuss the role of language or categorizing in terms of how individuals interpret situations. As such, it also seems possible that the different religions and cultures will have different interpretations of the Machiavellian scale. This means that a literal translation of research instruments is not sufficient for conveying a crosscultural and cross-lingual equivalence instrument. It should be noted that our comparison of Machiavellian scores suggests that there is no significant difference in scores for males and females. Findings on gender differences in Machiavellian behaviour have been mixed. This warrants additional studies regarding in other populations.

Although it is problematic to explain non-significant findings, we surmise that the above thoughts may provide some avenues for further inquiry. Therefore the outcome is still far from being conclusive and requires further investigation.

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