



Propensity to Engage in Unethical Behavior (PUB-CL): Adaptation and Validation of a Questionnaire for Leaders of Christian Organizations

Carlos E. Biaggi¹, John Issa²

¹(Assistant Professor, Faculty of Business Administration, Middle East University)

²(Assistant Professor, Faculty of Education, Middle East University)

Corresponding Author: Carlos E. Biaggi

ABSTRACT: Though many instruments have been developed to measure attitudes toward unethical behavior in business, there is a scarcity of instruments to measure it among leaders of Christian organizations. Hence, the purpose of this paper is to adapt Chen and Tang's (2006) Unethical Behavior Scale in order to make it appropriate for leaders of Christian organizations. The process consisted of calculating content and face validity, construct validity through factor analysis, and reliability through Cronbach's α coefficient. Differing with Chen and Tang's (2006) operationalization, the exploratory factor analysis revealed three factors of unethical behavior that were labeled major misbehaviors, minor misbehaviors, and not whistle blowing. The items revealed factor loadings ≥ 0.5 , and Cronbach's α coefficient was .969 for the complete scale and between .869 and .973 for the subscales. Tested among 203 participants, the final scale contains 27 items that are valid, reliable, and useful for measuring propensity to engage in unethical behavior among leaders of Christian organizations.

KEYWORDS: Unethical behavior, Attitude, Propensity, Scale, Validity, Reliability, Leadership, Christian organizations

Received 29 November, 2018; Accepted 17 December, 2018 © The Author(S) 2018.

Published With Open Access at Www.Questjournals.Org

I. INTRODUCTION

Ethics scandals in headline news worldwide are not only reporting scams of leaders of for-profit corporations but also of leaders of religious organizations. Embezzlement of church money and bullying situations are recurrently reported as pitfalls of priests and other religious leaders. Creditors overseeing Crystal Cathedral's bankruptcy case filed a lawsuit against Robert H. Schuller and other church administrators on September 2011 for drawing about US\$10 million from the ministry's endowment fund to cover their own salaries between 2002 and 2009 (Christian Post, 2011). A survey found that 85% of US Roman Catholic dioceses acknowledged embezzlement in the previous 5 years (New York Times, 2007). Two priests were found spending \$8.6 million "on trips to Las Vegas, dental work, property taxes and other expenses" (New York Times, 2007, para. 10). In another instance, a Christian school chaplain was forced to resign and was replaced by a "friend of the administrator" (Nuñez & Gonzalez, 2009, p. 42). With the argument that God's work is first, above family and everything else, a Christian school principal required extra work by the teachers, and harassed a teacher who opposed him until resignation (Nuñez & Gonzalez, 2009).

While several questionnaires have been developed to measure unethical behavior of managers and organizational leaders (e.g. Cheng & Tang, 2006; Conroy & Emerson, 2004; Napol, 2006; Shawver & Sennetti, 2009), there is a scarcity of instruments specifically designed to measure unethical behavior among leaders of Christian organizations. This paper attempts to fill this void.

One instrument widely used (Sardzoska & Tang, 2009; Tang & Chen, 2008; Tang & Chiu, 2003; Tang & Sutarso, 2012; Tang & Tang, 2010; Tang et al., 2011) is Chen & Tang's (2006) 15-item Unethical Behavior Scale (PUB), a short version of the 32-item scale developed by Luna-Arcas and Tang (2004). There are several reasons why Chen & Tang's (2006) PUB is suitable for adaptation for the use among leaders of Christian organizations. First, since "it is very difficult to observe people's unethical behaviors that are done mostly in privacy" (Chen & Tang, 2006, p. 78), behavioral intentions may be used as a substitute measure for unethical behavior (Jones & Kavanagh, 1996). The PUB is based on the Theory of Reasoned Action (Ajzen & Fishbein,

1980), which sustains that attitude toward behavior predicts intention of behavior, which in turn predicts behavior. However, it must be acknowledged that the two constructs are significantly different (Chen & Tang, 2006). Second, the PUB is built upon a Biblical definition of unethical behavior. For Chen and Tang (2006) unethical behavior may be the result of ‘love of money’ (1 Timothy 6:10), and come “from a person’s heart... which leads him to do immoral things, to rob, kill, commit adultery, be greedy, and do all sorts of evil things; deceit, indecency, jealousy, slander, pride, and folly – all these evil things come from inside a person and make him unclean” (Mark 7:21-23). Third, even though the literature has examined several different kinds of unethical behavior, Chen and Tang (2006) focus on a few, deliberate white-collar crimes. These misconducts are committed by highly respected persons in the course of their occupation (Ivancevich, Konopaske, & Matteson, 2005). Therefore, the purpose of this paper is to adapt Chen & Tang’s (2006) Unethical Behavior Scale in order to make it appropriate to measure unethical behavior among leaders of Christian organizations.

II. METHODOLOGY

The methods applied to adapt and validate the PUB were: 1) generating an item pool, 2) adopting translational validity: content and face validity, 3) calculating construct validity: factor analysis, and 4) calculating reliability: internal consistency through Cronbach’s α .

2.1 Generation of an Item Pool

For the generation of the pool of items it was deemed appropriate to maintain Chen and Tang’s (2006) five latent sub-constructs, and add a sixth sub-construct.

Chen and Tang’s (2006) five latent sub-constructs are abuse resources, not whistle blowing, theft, corruption, and deception. Abuse resources are small or trivial misbehaviors, such as cyberloafing, wasting company time (Lim, 2002), and abusing office supplies (Ivancevich et al., 2005). They include it because “unethical behavior usually starts out small” (Chen & Tang, 2006, p. 80). Not whistle blowing is included because some managers are condoning theft by “looking the other way” (Chen & Tang, 2006, p. 80). Whistle blowing is to speak out when one witnesses or has evidence of someone else’s misbehavior. Theft is “the unauthorized taking, consuming, or transferring of money, goods, data, information, and intellectual property owned by the organization” (Ivancevich et al., 2005, as cited in Chen & Tang, 2006, p. 80). While corruption involves the illegitimate give-take of resources or abuse of power for personal benefit (Luo, 2005), deception can be defined as “deceiving or misrepresenting in order to induce another individual or group to give up something of value” (Chen & Tang, 2006, p. 81). Chen and Tang’s (2006) PUB contains 3 items for each sub-construct, and can measure attitude towards unethical behavior and propensity to engage in unethical behavior. The initial Cronbach’s α obtained ranged between .74 and .97 for attitude toward unethical behavior (for the 5 factors), and between .73 and .97 for propensity to engage in unethical behavior (Chen & Tang, 2006). Confirmatory Factor Analysis rendered a “good overall fit” (Chen & Tang, 2006, p. 87), while measurement invariance showed both configurational and metric invariance, and test-retest reliability indicated consistency of the propensity measure (Chen & Tang, 2006).

The sixth sub-construct that was deemed appropriate to introduce was bullying. Nuñez and Gonzalez (2009) reported several cases of bullying (or mobbing) in Christian organizations, and suggested determining its occurrence and magnitude. Bullying is the intentional and “systematic mistreatment of an individual, designed to cause him or her to resign” (Nuñez & Gonzalez, 2009, p. 34-35). It includes actions such as assigning unreasonable goals, ignoring, disseminating rumors, criticizing, and ridiculing employees, among others.

To measure these sub-constructs an initial pool of 47 items were selected from existing questionnaires, adapted from existing questionnaires, or were created. The bullying items were created based on Nuñez and Gonzalez (2009) operationalization of bullying. The existing questionnaires used for the initial item pool were:

- The Unethical Behavior Scale: Cronbach’s α between .73 and .97 (Chen & Tang, 2006).
- The Probability to Engage in Unethical Behavior Scale: not validated (Luna-Arcas & Tang, 2004).
- Ethical Attitudes of Accounting Practitioners: Cronbach’s α .883 (Conroy, Emerson & Pons, 2010).

With the initial item pool, a Questionnaire Validation Table was created. The validation table consisted of a conceptual definition of unethical behavior, and a set of data for each item: sub-construct, operational definition, questionnaire item, original item (if change is made), reliability score, taken/adapted from, pilot study test, and scale. The operational definitions indicated which items were relevant for each sub-construct.

2.2 Translational Validity

The translational validity was assessed through content and face validity.

Content validity. The aim of content validity is to assess that the content of each item is fitting and relevant to the purpose of the study. Content validity reveals whether the content covers a comprehensive array of the attributes under analysis, and is usually done by at least seven experts (DeVon et al., 2007; Pilot & Hunger, 1999). Hence, seven experts were chosen in the fields of management, theology, and questionnaire

design, and were given the task of reviewing the initial item pool and assessing its conceptual validity. Each expert individually evaluated the applicability of each item using the following scale: applicable, needs revision, not applicable.

Face validity. Face validity is the easiest and weakest form of validity (Parsian& Dunning, 2009) because it involves assessing the questionnaire's appearance in relation of its feasibility, understanding, readability, style, format, and clarity (DeVon et al., 2007; Haladyna, 1999; Trochim, 2001). To assess the face validity of the modified PUB, five students and faculty from the target population were purposefully selected and were asked to evaluate each item in terms of:

- The clarity of the questions and response options.
- The form: appears nice and appealing.
- The grammar.

2.3 Construct Validity

Construct validity indicates the extent to which the statements in a questionnaire are appropriate to measure the significant theoretical construct (DeVon et al., 2007; Kane, 2001). Whereas translational validity assesses a qualitative differentiation between valid and invalid, construct validity is a rather quantitative assessment (Parsian& Dunning, 2009) that relates the intended variable (construct) to the proxy variable (sub-construct) (Hunter & Schmidt, 1990). Factor analysis is the tool used to assess construct validity when several items measure one sub-construct.

To conduct factor analysis, the questionnaire was sent to all 585 students and faculty of a Christian institution of higher education in Silang, Philippines. There were 206 individuals who completed the surveys, for a response rate of 35.2%. Since 3 observations were deleted as a result of excessive missing data (more than 10%) (Walker, Smith & DeBode, 2012), 203 valid responses were used for the validity and reliability tests.

Factor analysis. The statistical method usually used to group items into common clusters is factor analysis. The loadings of items on each factor help to interpret the factors, as well as reduce the number of factors (Bryman & Cramer, 1999). Since the loadings are a measure of the relationship between the items and the factors (Bryman & Cramer, 1999), the 'factor' is a group of items that load together, and therefore, relate to each other. Items that do not relate to each other are exogenous to the construct and ought to be deleted (Munro, 2005).

One of the factor analysis methods is Exploratory Factor Analysis (EFA), which evaluates the relationships among items without defining a specific hypothetical model (Bryman & Cramer, 2005). EFA has the advantage of finding the highest variance with the minimum number of factors (Delaney, 2005; Munro, 2005). While researchers do not agree on the sample size to use factor analysis, researchers usually recommend at least five respondents per variable (Munro, 2005). Besides abiding by that recommendation, this study used the following criteria:

1. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy,
2. Bartlett's Test of Sphericity,
3. Anti-Image Correlation, and
4. Factor loadings and the correlations between items and factors (Hayes, 2002).

Principal Component Analysis (PCA) is the extraction method selected for factor analysis. While Principal Axis Factoring (PAF) (another often-used method of extraction) only examines common variance, PCA has the advantage of analyzing the total variance of a variable (Bryman & Cramer, 2005). Total variance is formed by the specific variance plus the common variance (shared with other variables) (Bryman & Cramer, 2005). In addition, factors with eigenvalues ≥ 1 will be retained (Gorsuch, 1983; Heppner et al., 2006).

Finally, since the factor correlation matrix using an oblique rotation method (Promax) yielded correlations among factors above .32 (.751, .563, and .456), it was deemed appropriate to choose an oblique rotation method (Tabachnick&Fiddell, 2007). Oblique rotation methods assume factors are correlated (Gorsuch, 1983). Hence, factors were rotated using Promax, one of the most common oblique rotation methods (Gorsuch, 1983).

2.4 Reliability

Reliability indicates the ability of an instrument to measure a construct consistently and indicates the extent to which items conceptually fit together (DeVon et al., 2007; Haladyna, 1999). While a questionnaire may be reliable but not necessarily valid, then both reliability and validity tests are necessary (Beanland, Schneider, LoBiondo, Wood, & Haber, 1999; DeVon et al., 2007). Reliability involves the instrument's standard error, the content's heterogeneity, and the sampling's independence (Cronbach & Shavelson, 2004). The most common reliability measure is internal consistency reliability.

Internal consistency reliability. Internal consistency reliability evaluates the inter-item correlations and the whole instrument consistency. The inter-item correlation indicates the extent to which items conceptually fit together (DeVon et al., 2007; Nunnally & Bernstein, 1994). There are two ways of measuring internal consistency. While split-half compares the correlation between two sets of items that measure one construct, Cronbach's α averages all possible split-halves (DeVon et al., 2007; Trochim, 2001). When an instrument is formed by more than one subscale, Cronbach's α should be computed for each subscale and for the full scale (Nunnally & Bernstein, 1994). Hence, Cronbach's α was calculated for each sub-construct and for the entire questionnaire.

III. RESULTS

In this section the results of the analysis of the questionnaire will be presented: the content and face validity, factor analysis, and the internal consistency reliability.

3.1 Content and Face Validity

Seven experts assessed the content validity helping to decide whether items were to be accepted, modified, or removed. Some items were removed based on similarity to other items, others were modified for more precision, and others were removed to reduce the number of items, seeking parsimony. As a result, the questionnaire was reduced to 28 items.

Finally, five individuals from the target population evaluated the instrument's face validity, looking at the grammar, aesthetics (online appearance), and clarity. Several items were improved, and the general appearance of the survey was modified according to the recommendations received.

3.2 Factor Analysis

To run the factor analysis, the missing values (10 out of 5,684) were replaced by the mean (Downey & King, 1998), and small coefficients (below .33) were suppressed. The Kaiser-Meyer-Olkin measure of sampling adequacy was .959, above the .5 recommended (Kaiser, 1974). Bartlett's Test of Sphericity is significant for being less than α (Chi-Square = 5558.683; $df = 378$; $Sig. = .000$). In addition, Measures of Sampling Adequacy (MSA) were calculated to check that all items had an Anti-image Correlation greater than 0.5 (MacCallum, Widaman, Zhang & Hong, 1999).

Three factors were extracted with Eigenvalues greater than 1 (instead of 6 expected) using Principal Component Analysis (PCA), and rotated using Promax with Kaiser normalization. The first factor was named Major Misbehaviors (17 items), and it consisted of the Abuse Resources items (4), the Theft items (3), 3 of the 6 corruption items, 4 of the 5 deception items, and 3 of the 5 bullying items. When compared with the other 2 factors, the characteristic that may distinguish this factor is that it seems to group misbehaviors of larger magnitude. Moreover, all these items still loaded on one factor when EFA was performed only among them.

The second factor was labeled Minor Misbehaviors (5 items). This factor comprised of 2 corruption, 2 bullying, and 1 deception items. The third factor consisted of the 5 Not Whistle Blowing items. Since one item was ambiguous (loaded on both the Major and Minor Misbehavior factors), it was removed from the scale. Table 1 presents the 28 items that were factor analyzed.

Table 1 Factor Analysis

	Component		
	Major Misbehaviors	Minor Misbehavior	Not Whistle Blowing
1. Fly first class and spend a lot of organizational money on a business trip.	1.007		
2. Use the organization's phone to make personal long-distance calls.	.974		
3. Give organizational supplies away to personal friends with no charge.	.966		
4. When feeling underpaid, take cash and/or supplies home.	.931		
5. Request returning members of the church to be re-baptized to increase the number of baptisms.	.854		
6. Borrow USD 20 from a cash register overnight without asking.	.810		
7. Earning USD 100 a month (not enough to feed my family), I inflate (falsify) my expense report by about USD 10 a month.	.804		
8. Give misleading information to the board for securing one's position.	.770		
9. Falsify accounting records.	.767		

10. Use office supplies (paper, pen), Xerox machine, and stamps for personal purposes.	.759		
11. Reduce organizational expenses by deliberately not letting employees know about their benefits.	.752		
12. Bribe government officials to obtain authorization to plant a new church in a territory in which previous attempts have been unsuccessful.	.722		
13. Waste organizational time surfing on the Internet, or playing computer games, or socializing.	.722		
14. Receive gifts from others due to one's position and power.	.707		
15. Publicly criticize pastors who do not achieve baptism goals.	.632		
16. Assign objectives with deadlines that are intentionally unreasonable.	.624		
17. Report a subordinate achievement as yours.	.618		
18. Grant educational benefit to the members of the administrative committee only.	.461	.404	
19. Promote a loyal friend and competent manager to the position of vice president in preference to a better-qualified manager with whom I have no close personal ties.		.921	
20. Use pirated software in a low-income organization.		.885	
21. Hire a relative in preference to a better-qualified applicant with whom I have no close personal ties.		.605	
22. Require extra work from subordinates at the expense of health or family.		.582	
23. Ignore the suggestion of a subordinate in a meeting.		.530	
24. Take no action for administrators giving misleading information to the board.			.865
25. Take no action for discriminatory practices of the organization.			.848
26. Take no action for administrators bullying subordinates.			.836
27. Take no action for employees who steal cash.			.807
28. Take no action for employees wasting organizational time surfing on the Internet.			.772

3.3 Internal Consistency Reliability

Reliability of the scale was calculated based on Cronbach's α coefficient. The coefficient obtained was .969. In addition, Cronbach's α coefficient for the subscales were .973 for Major Misbehaviors, .869 for Minor Misbehaviors, and .897 for Not Whistle Blowing.

IV. DISCUSSION

The Propensity to engage in Unethical Behavior scale for Christian Leaders (PUB-CL) shows appropriate psychometric properties in terms of 1) translational validity (content and face validity), 2) construct validity (factor analysis), and 3) reliability (internal consistency). First, content validity, the extent to which the content covers a comprehensive array of the attributes under analysis, was assessed by seven experts (DeVon et al., 2007; Pilot & Hunger, 1999). In addition, face validity, the scale's appearance in relation to its feasibility, understanding, readability, style, format, and clarity (DeVon et al., 2007; Haladyna, 1999; Trochim, 2001) was evaluated by five respondents from the target population. Second, factorial validity was assessed through Principal Component Analysis (PCA) with an oblique rotation (Promax) after assessing the inter-correlation between the factors (Tabachnick&Fiddell, 2007). The three factors that emerged were strong and clearly discriminated (Meezenbroek et al., 2012), and the item that loaded in two factors was deleted (Munro, 2005). Third, the full scale ($\alpha = .969$) and the three subscales ($\alpha = .973, .897$ and $.869$) scored high levels of reliability as measured by Cronbach's α , indicating that the items conceptually fit together (DeVon et al., 2007; Trochim, 2001).

In addition, the PUB-CL presented some other qualities. First, it intended to be applicable among leaders of a broad range of Christian denominations. Second, the item formulation was mainly taken or adapted from a validated instrument, which increased its reliability as well as maintained the line of the business ethics discipline (Conroy & Emerson, 2004). Third, it seemed appropriate to include in an instrument measuring intent of misbehavior in Christian organizations some items on bullying (Nuñez& Gonzalez, 2009). And fourth, the instrument had a reasonably number of items (27 items).

4.1 Limitations

This study presented the following limitations. 1) Contrary to the original scale's exploratory factor analysis (EFA), which found 4 sub-constructs (Tang et al., 2002, as cited in Tang & Chiu, 2003), only three sub-constructs emerged from EFA, even after adding 2 more sub-constructs. Later studies that refined the scale, such as the study from where the 15-item PUB scale was taken do not report EFA, but confirmatory factor analysis (CFA) (Chen & Tang, 2006). Nevertheless, only the Not Whistle Blowing sub-construct emerged by itself. While the other five intended sub-constructs (abuse resources, theft, corruption, deception, and bullying) were present in the Major Misbehaviors factor, the Minor Misbehaviors factor included items from three intended sub-constructs (corruption, bullying, and deception). Hence, the factor analysis resulting from the data collected in this study discriminated items by a different typology. 2) The data was collected from mainly one Christian denomination; hence, it is not representative of Christianity. 3) Since the scale was not compared with other measures of unethical behavior, convergent validity could not be demonstrated (Voegtlin, 2011). 4) Since data was collected at one time only (no test-retest) and from one source only, the results may suffer from common method bias (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). And 5) there was no confirmation of the theoretical factors through confirmatory factor analysis (CFA) (Vandenberg & Lance, 2000; Tang & Liu, 2012).

4.2 Recommendations

There are some recommendations to strengthen the validity of the scale in further research. First, the tool may be tested in a wider range of Christian denominations to assess its inter-faith validity. Second, future research may use it along other widely accepted unethical behavior questionnaires to demonstrate its convergent validity. Third, the stability of the responses over time and common method bias may be assessed through a test-retest method. And fourth, future research may corroborate the dimensions of the scale through CFA.

V. CONCLUSION

The Propensity to Engage in Unethical Behavior scale for Christian Leaders (PUB-CL) is a valid and reliable instrument. The PUB-CL is a three-dimensional scale with 27 items that measures different kinds of Major Misbehaviors (17 items), Minor Misbehaviors (5 items), and Not Whistle Blowing (5 items) (see Appendix). The Major Misbehavior factor includes 5 kinds of wrongdoing: abuse resources (4 items), deception (4 items), bullying (3 items), theft (3 items), and corruption (3 items). The Minor Misbehaviors factor is measured by items that focus on 3 indicators: corruption (2 items), bullying (2 items), and deception (1 item). And the Not Whistle Blowing dimension is composed by factors that measure only this indicator. It is expected that leaders of Christian organizations will be more willing to not whistle blow and accept minor misbehaviors, than they are willing to engage in major misbehaviors. The scale is useful for measuring propensity to engage in unethical behavior and also for indicating areas in which actions could be developed to prevent misbehavior and foster ethical behavior.

REFERENCES

- [1]. Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice Hall.
- [2]. Beanland C., Schneider Z., LoBiondo-Wood G. and Haber, J. (1999). Nursing Research: Methods, critical appraisal and utilisation. Sydney: Mosby.
- [3]. Bryman, A., & Cramer, D. (2005). Quantitative data analysis with SPSS 12 and 13: A guide for social scientists. East Sussex: Routledge.
- [4]. Bryman, A., Cramer, D. (1999). Quantitative data analysis with SPSS Release 8 for Windows: A guide for social scientists. London: Routledge.
- [5]. Chen, Y. J., & Tang, T. L. P. (2006). Attitude toward and propensity to engage in unethical behavior: Measurement invariance across major among university students. *Journal of Business Ethics*, 69, 77-93.
- [6]. Christian Post. (2011) Crystal Cathedral scandal: A bad picture of the Church, Christianity. Retrieved October 7, 2011 from <http://www.christianpost.com/news /crystal-cathedral-scandal-a-bad-picture-of-the-church-christianity-57590/>
- [7]. Conroy, S. J., & Emerson, T. L. N. (2004).Business ethics and religion: Religiosity as a predictor of ethical awareness among students. *Journal of Business Ethics*, 50, 383-396.
- [8]. Conroy, S. J., Emerson, T. L. N., & Pons, F. (2010). Ethical attitudes of accounting practitioners: Are rank and ethical attitudes related? *Journal of Business Ethics*, 91, 183-194.
- [9]. Cronbach, L.J., & Shavelson, R.J. (2004). My Current thoughts on coefficient alpha and successor procedures. *Educational and Psychological Measurement*, 64(3), 391-418.
- [10]. Delaney, C. (2005). The spirituality scale: Development and psychometric testing of a holistic Instrument to Assess the Human Spiritual Dimension. *Journal of Holistic Nursing*, 23(2), 145-167.
- [11]. DeVon, H. A., Block, M. E., Moyle-Wright, P., Ernst, D. M., Hayden, S. J., Lazzara, D. J. et al. (2007). A psychometric toolbox for testing validity and reliability. *Journal of Nursing scholarship*, 39(2), 155-164.
- [12]. Downey, R. G., & King, C. V. (1998). Missing data in Likert ratings: A comparison of replacement methods. *The Journal of General Psychology*, 125(2), 175-191.
- [13]. Gorsuch, R. L. (1983). Factor Analysis. Hillsdale: NJ: Erlbaum.
- [14]. Haladyna, T. (1999). Developing and Validating multiple-choice test items. New Jersey: Lawrence Erlbaum.
- [15]. Hayes, S.C. (2002). Acceptance, mindfulness, and science. *American Psychological Association*, D12, 101-105.

- [16]. Heppner, P.P., Heppner, M. J., Lee, D., Wang, Y., Park, H., & W. L. (2006). Development and validation of a collectivist coping style inventory. *Journal of Counseling Psychology*, 53(1), 107-125.
- [17]. Hunter, J.E., Schmidt, F. L. (1990). Methods of meta-analysis: Correcting errors and bias in research findings. Newbury Park: Sage Publications.
- [18]. Ivancevich, J. M., Konopaske, R., & Matteson, M. T. (2005). Organizational behavior and management (7th Ed.). Boston, MA: McGraw-Hill.
- [19]. Jones, G. E., & Kavanagh, M. J. (1996). An experimental examination of the effects of individual and situational factors on unethical behavioral intentions in the workplace. *Journal of Business Ethics*, 15, 511-523.
- [20]. Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- [21]. Kane, M. (2001). Current concerns in validity theory. *Journal of Educational Measurement*, 38, 319-342.
- [22]. Lim, V. K. G. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, 23, 675-694.
- [23]. Luna-Arcas, R., & Tang, T. L. P. (2004). The love of money, satisfaction, and the Protestant Work Ethic: Money profiles among university professors in the U.S.A. and Spain. *Journal of Business Ethics*, 50(4), 329-354.
- [24]. Luo, Y. (2005). An organizational perspective of corruption. *Management and Organization Review*, 1, 119- 154.
- [25]. MacCallum, R. C., Widaman, K. F., Zhang, S. B., & Hong, S. H. (1999). Simple size in factor analysis. *Psychological Methods*, 4(1), 84-99.
- [26]. Meezenbroek, E. J., Garssen, B., Van Den Berg, M., Van Dierendonck, D., Visser, A., & Schaufeli, W. B. (2012). Measuring spirituality as a universal human experience: A review of spirituality questionnaires. *Journal of Religious Health*, 51, 336-354.
- [27]. Munro, B. H. (2005). Statistical methods for health care research. Philadelphia: Lippincott, Williams & Wilkins.
- [28]. Napal, G. (2006). An assessment of the ethical dimensions of corruption. *Electronic Journal of Business Ethics and Organization Studies*, 11(1), 5-9.
- [29]. New York Times. (2007). Embezzlement is found in many Catholic dioceses. Retrieved April 30, 2012 from <http://www.nytimes.com/2007/01/05/us/05church.html>
- [30]. Nuñez, M. A., & Gonzalez, S. (2009). Mobbing in Christian organizations: When abuse is spiritualized. *The Journal of Applied Christian Leadership*, 3(2), 34-48.
- [31]. Nunnally, J.C., Bernstein, I.H. (1994). Psychometric theory. New York: McGraw-Hill.
- [32]. Parsian, N., & Dunning, T. (2009). Developing and validating a questionnaire to measure spirituality: A psychometric process. *Global Journal of Health Science*, 1(1), 2-11.
- [33]. Pilot, D., & Hunger, B. (1999). Nursing research: principals and methods. Philadelphia, PA: Lippincott Williams & Wilkins.
- [34]. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- [35]. Sardzoska, E., & Tang, T. L. P. (2009). Testing a model of behavioral intentions in the Republic of Macedonia: Differences between the private and the public sectors. *Journal of Business Ethics*, 87(4), 495-517.
- [36]. Shawver, T. J., & Sennetti, J. T. (2009). Measuring ethical sensitivity and evaluation. *Journal of Business Ethics*, 88(4), 663-678.
- [37]. Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.
- [38]. Tang, T. L. P., & Chen, Y. J. (2008). Intelligence vs. wisdom: The love of money, machiavellianism, and unethical behavior across college major and gender. *Journal of Business Ethics*, 82(1), 1-26.
- [39]. Tang, T. L. P., & Chiu, R. K. (2003). Income, money ethic, pay satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics*, 46, 13-30.
- [40]. Tang, T. L. P., & Liu, H. (2012). Love of money and unethical behavior intention: Does an authentic supervisor's personal integrity and character (ASPIRE) make a difference? *Journal of Business Ethics*, 107(3), 295-312.
- [41]. Tang, T. L. P., & Sutarsa, T. (2012). Falling or not falling into temptation? Multiple faces of temptation, monetary intelligence, and unethical intentions across gender. *Journal of Business Ethics*. doi:10.1007/s10551-012-1475-3
- [42]. Tang, T. L. P., & Tang, T. L. N. (2010). Finding the lost sheep: A panel study of business students' intrinsic religiosity, machiavellianism, and unethical behavior intention in a public institution. *Ethics and Behavior*, 20(5), 352-379.
- [43]. Tang, T. L. P., Sutarsa, T., Ansari, M. A., Lim, V. K. G., Teo, T. S. H., Arias-Galicai, F., Garber, I., Vlerick, P., Liang, J., Akande, A., Allen, M. W., Alzubaidi, A. S., Borg, M. G., Charles-Pauvers, B., Cheng, B. S., Chiu, R. K., Codoban, I., Du, L. Z., Garcia de la Torre, C., Higgs, R. C., Jen, C. K., Kazem, A. M., Kim, K., Luna-Arcas, R., Malovics, E., Moreira, A., Nnedum, A. U. O., Osagie, J. E., Osman-Gani, A., O'zbek, M. F., Pereira, F. C., Pholsward, R., Pitariu, H. D., Polic, M., Sardzoska, E., Stembridge, A. F., Tang, T. L. N., Tombolini, M., Trontelj, M., Urbain, C., Canova, L., & Manganelli, A. M. (2011). The love of money is the root of all evil: Pay satisfaction and CPI as moderators. In L. A. Toombs (Ed.), Best paper proceedings of the 2011 annual meeting of the academy of management.
- [44]. Trochim, W. M. K. (2001). The research methods knowledge base. Cincinnati, OH: Atomic Dog.
- [45]. Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods* 3(1), 4-69.
- [46]. Voegtlin, C. (2011). Development of a scale measuring discursive responsible leadership. *Journal of Business Ethics*, 98, 57-73.
- [47]. Walker, A. G., Smith, J. W., & DeBode, J. (2012). The effects of religiosity on ethical judgments. *Journal of Business Ethics*, 106, 437-452.

APPENDIX

The Propensity to engage in Unethical Behavior scale for Christian Leaders (PUB-CL)

There are several hypothetical vignettes at work. Some vignettes may not be applicable to your situation. If you were in that situation, what is the probability that you will take action as it is suggested in this vignette?

VLP, L, A, H, VHP = Very Low Probability, Low, Average, High, Very High Probability.

1. Major Misbehavior	VLP	L	A	H	VHP
1.1 Abuse Resources					
1. Use office supplies (paper, pen), Xerox machine, and stamps for personal purposes.					
2. Use the organization's phone to make personal long-distance calls.					
3. Waste organizational time surfing on the Internet, or playing computer games, or socializing.					
4. Fly first class and spend a lot of organizational money on a business trip.					
1.2 Deception					
5. Reduce organizational expenses by deliberately not letting employees know about their benefits.					
6. Earning USD 100 a month (not enough to feed my family), I inflate (falsify) my expense report by about USD 10 a month.					
7. Give misleading information to the board for securing one's position.					
8. Request returning members of the church to be re-baptized to increase the number of baptisms.					
1.3 Bullying					
9. Assign objectives with deadlines that are intentionally unreasonable.					
10. Publicly criticize pastors who do not achieve baptism goals.					
11. Report a subordinate's achievement as yours.					
1.4 Theft					
12. Borrow USD 20 from a cash register overnight without asking.					
13. When feeling underpaid, take cash and/or supplies home.					
14. Give organizational supplies away to personal friends with no charge.					
1.5 Corruption					
15. Falsify accounting records.					
16. Receive gifts from others due to one's position and power.					
17. Bribe government officials to obtain authorization to plant a new church in a territory in which previous attempts have been unsuccessful.					
2. Minor Misbehavior					
2.1 Corruption					
18. Promote a loyal friend and competent manager to the position of vice president in preference to a better-qualified manager with whom I have no close personal ties.					
19. Hire a relative in preference to a better-qualified applicant with whom I have no close personal ties.					
2.2 Bullying					
20. Ignore the suggestion of a subordinate in a meeting.					
21. Require extra work from subordinates at the expense of health or family.					
2.3 Deception					
22. Use pirated software in a low-income organization.					
3. Not Whistle Blowing					
23. Take no action for employees who steal cash.					
24. Take no action for administrators bullying subordinates.					
25. Take no action for discriminatory practices of the organization.					
26. Take no action for administrators giving misleading information to the board.					
27. Take no action for employees wasting organizational time surfing on the Internet.					

Carlos E. Biaggi, & John Issa. "Propensity to Engage in Unethical Behavior (PUB-CL): Adaptation and Validation of a Questionnaire for Leaders of Christian Organizations". Quest Journals, Journal of Research in Business and Management, vol. 06, no. 05, 2018, pp 68-75.