The Effects of Corporate Governance and Auditor Rotation on CEO/CFOs' Perceptions of Auditor Independence and Financial Statement Reliability: Evidence from Nonprofit Organizations

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This study examines ways to enhance auditor independence and financial statement reliability for nonprofit organizations. Chief Officers believe the auditor is more independent and financial statements are more reliable when there is strong governance compared to minimally compliant governance. Furthermore, these chief officers believe the auditor is more independent when there is partner or firm rotation compared to no rotation. CEO/CFOs believe financial statements are more reliable when there is partner rotation compared to no rotation. These results suggest voluntarily adopting or requiring corporate governance (strong or minimally compliant) or auditor rotation (partner or firm) will enhance independence and reliability.

INTRODUCTION

This study provides evidence about the effects of corporate governance and auditor rotation on CEO/CFOs' perceptions of auditor independence and financial statement reliability for nonprofit organizations. Nonprofit scandals such as The Foundation of New Era Philanthropy, American Red Cross, United Way, and the National Association for the Advancement of Colored People (NAACP) has diminished the public's confidence and trust similar to what happened to public companies. In the passage of Sarbanes-Oxley (SOX) of 2002 (which applied to public companies only), nonprofit organizations have voluntarily implemented some of the SOX provisions (Iyer & Watkins, 2008). The SOX provisions (corporate governance and partner rotation) seek to enhance the perceptions of auditor independence and audit quality. By increasing the level of corporate governance, SOX required a qualified committee who understands the financial statements and communication with the external auditor. By requiring partner rotation, SOX lessen the economic bond created from a long-term relationship between the auditor and client.

Iver and Watkins (2008) find that 49 percent of their nonprofit organization respondents had audit committees. In addition, they find that 96 percent have an independent audit performed annually; however, 88 percent indicated that no changes have been implemented to the organization policies relating to their auditor since the passage of SOX (Iver & Watkins 2008). Vermeer, Raghunandan, and Forgione (2006) find that the composition of the nonprofit organizations' audit committee varies based on resources, monitoring mechanisms, and type.

Several studies find that auditor rotation increases auditor independence (Dopuch, King, & Schwartz, 2006; Arel, Brody, & Pany, 2006; Jennings, Pany, & Reckers, 2006; Daniels & Booker, 2011) and public confidence (Gates, Lowe, & Reckers, 2007), and affects auditor-client negotiation (Wang & Tuttle, 2009). However, these studies examine public companies. This study examines auditor rotation for nonprofit organizations.

This study examines how CEO/CFOs perceive auditor independence and financial statement reliability when there are different levels of corporate governance and auditor rotation. A 2 x 3 mixed design is used with a between-subjects variable (corporate governance) and a within-subjects variable (auditor rotation). The mixed between-within subjects analysis of variance result indicates CEO/CFOs perceive the auditor to be more independent when there is either partner or firm rotation than no rotation at all for nonprofit organizations. In addition, CEO/CFOs perceive the auditor to be more independent when there is either partner or form rotation than no rotation at all for nonprofit organizations. In addition, CEO/CFOs perceive the auditor to be more independent when there is strong corporate governance compared to minimally compliant corporate governance. CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* misstatements) when there is strong corporate governance statements to be more reliable (free from *unintentional* and *intentional* and *intentional* misstatements) when there is strong corporate governance compared to minimally compliant corporations. In addition, CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* misstatements) when there is strong corporate governance compared to minimally compliant corporate governance. The increase in independence and reliability perceptions related to auditor rotation occurs regardless of the type of governance, and the increase in perceptions related to governance occurs regardless of the strength of corporate governance.

The next section develops the hypotheses and research questions. This is followed by the research methodology and results sections. The final section provides the conclusions, limitations and future research.

DEVELOPMENT OF HYPOTHESES AND RESEARCH QUESTIONS

Carmichael (2004) states that "if audits changed so that they inspired different levels of confidence depending on the need of particular users and particular circumstances, the social usefulness of the audit would be destroyed because an audit would no longer stand for a reasonably uniform level of assurance" (Carmichael, 2004, p. 133). To examine a uniform level of assurance, we focus on the independence of an auditor and the reliability of financial statements for nonprofit organizations. The strength of the corporate governance and/or level of auditor rotation will likely have an effect on the perceptions of auditor independence and financial statement reliability.

Corporate Governance

SOX provisions are ways to enhance audit quality and restore the public's confidence (GAO, 2003). One of these provisions is the increase in corporate governance standards. Although SOX does not apply to nonprofit organizations, some nonprofit organizations have voluntarily adopted corporate governance standards (Iyer & Watkins, 2008). However, the provisions provide flexibility in the implementation to increase standards. Arel et al. (2006) find that the strength of corporate governance does not have an effect on audit report modification. However, Jennings et al. (2006) and Kaplan and Mauldin (2008) finds that strong corporate governance increases auditor independence.

Similar to Jennings et al. (2006), we provide the baseline level of regulatory corporate governance ("minimally compliant") and the high level which goes beyond corporate governance requirements ("strong"). Figure 1 provides the details of the levels of corporate governance. To examine the effect of corporate governance on independence and reliability perceptions, we hypothesize the following:

H1: CEO/CFOs will perceive auditor independence to be higher when there is strong corporate governance versus minimally compliant corporate governance.

H2: CEO/CFOs will perceive financial statements to be more reliable when there is strong corporate governance versus minimally compliant corporate governance.

FIGURE 1 DETAILS OF THE LEVELS OF CORPORATE GOVERNANCE

Minimally Compliant	<u>Strong</u>
15	15
8	12
Not Independent (Founder)	Independent
,	-
3	5
Yes	Yes
Minimally Compliant	Strong
2	6
Relatively Weak	Strong
	15 8 Not Independent (Founder) 3 Yes Minimally Compliant 2

Note: See Jennings et al. (2006)

Auditor Rotation

The type of auditor rotation implemented is another way to enhance audit quality and restore the public's confidence. However, the empirical evidence is mixed on the benefits of implementing partner and/or firm rotation. Kaplan and Mauldin (2008) find that there is not a significant difference between partner and firm rotation on perceptions of auditor independence. However, other studies find that firm rotation does increase perceptions of auditor independence (Dopuch et al. 2006, Arel et al. 2006, Jennings et al. 2006, Daniels & Booker 2011) and public confidence (Gates et al. 2007), and affects auditor-client negotiation (Wang & Tuttle 2009).

Nonprofit organizations do not require any type of auditor rotation. We use "no rotation" as the baseline condition, "partner rotation" as a higher level condition and "firm rotation" as the highest level condition. This study addresses two set of hypotheses to examine the effect of the level of auditor rotation on independence and reliability perceptions. We hypothesize the following:

H3a: CEO/CFOs will perceive auditor independence to be higher when there is partner rotation versus no auditor rotation.

H3b: CEO/CFOs will perceive auditor independence to be higher when there is firm rotation versus no auditor rotation.

H3c: CEO/CFOs will perceive auditor independence to be higher when there is firm rotation versus partner rotation.

H4a: CEO/CFOs will perceive financial statements to be more reliable when there is partner rotation versus no auditor rotation.

H4b: CEO/CFOs will perceive financial statements to be more reliable when there is firm rotation versus no auditor rotation.

H4c: CEO/CFOs will perceive financial statements to be more reliable when there is firm rotation versus partner rotation.

Additionally, we investigate whether there is an interaction effect between the level of corporate governance and the level of auditor rotation on independence and reliability perceptions. We pose the following research questions (nondirectional):

RQ1: Will the strength of corporate governance and the type of auditor rotation have an effect on CEO/CFOs' perception of auditor independence?

RQ2: Will the strength of corporate governance and the type of auditor rotation have an effect on CEO/CFOs' perception of financial statement reliability?

RESEARCH METHODOLOGY

We utilize a mixed 2 x 3 mixed design with a between-subjects variable and a within-subjects variable. The between-subjects variable is corporate governance which is manipulated on two levels: 1) minimally compliant and 2) strong. The within-subjects variable is auditor rotation which is manipulated on three levels: 1) no rotation, 2) partner rotation, and 3) firm rotation. The dependent variables are perception of auditor independence and perception of financial statement reliability which both are measured on an 11-point Likert scale. This section provides details on the participants, research task, and variables.

Participants

One thousand names and email addresses of CEOs and CFOs of nonprofit organizations are received from Hugo Dunhill email list. All participants are emailed the experimental instrument. Forty CEOs/CFOs returned the instrument in which four returned instrument were unusable. A total of 36 participants are used in this study representing a response rate of 4.86 percent.¹

Table 1 provides the demographic information of participants. Over half of the participants (52.94%) are male. Over three-fourths (76.47%) of participants are over the age of 55. Majority of participants (67.65%) had a master and/or doctoral degree. Majority of the participants (97.06%) have work experience and nonprofit experience of seven years or more. Eighty-two (82.35%) percent of the participants report a knowledge of auditing of more than 5 on an 11-point Likert scale from "0" (Not Knowledgeable at All) to "10" (Very Knowledgeable).

Research Task

We emailed an experimental case to CEO/CFOs. The experimental case provides three variations of a case scenario describing a nonprofit organization that has been audited by the same CPA firm for the past twenty two years. Participants are administered the three case scenario (within-subjects) experiment that provide either minimally compliant corporate governance or strong corporate governance (between-subjects).

The participants are asked to read each scenario and answer three questions. The three scenarios are related to a nonprofit organization with 1) no auditor rotation implemented, 2) partner rotation implemented and 3) firm rotation implemented. All participants have these three scenarios. After reading each scenario, the participants indicate 1) whether they are confident that the CPA firm is independent in performing the audit, 2) whether they are confident that the financial statements are free from *unintentional* misstatements or omissions, and 3) whether they are confident that the financial statements are free from *unintentional* misstatements or omissions.

Variables

The experiment focuses on two independent variables and two dependent variables. The first independent variable is auditor rotation. Auditor rotation is manipulated on three levels: 1) no auditor rotation, 2) audit partner rotation, and 3) audit firm rotation. The second independent variable is corporate governance. Corporate governance is manipulated on two levels: 1) minimally compliant and 2) strong. The dependent variables are the perception of auditor independence and financial statement reliability. To measure perception of auditor independence, participants are asked how confident they are that the CPA firm is independent in performing the audit. The auditor independence question is measured on an 11-point Likert scale anchored on "0" for Not Confident to "10" for Extremely Confident. To measure perception of financial statement reliability, participants are asked two questions: 1) "how confident they are that the financial statements are free from *unintentional* misstatements or omissions?" and 2) "how confident they are that the financial statements are free from *intentional* misstatements or omissions?"

The financial statement reliability questions are measured on an 11-point Likert scale anchored on "0" for Not Confident to "10" for Extremely Confident.

	Group 1	Group 2	Total
Group Size	20	16	36
Age by Percentage			
Under 46	0.00%	12.50%	5.88%
46-55	27.78%	6.25%	17.65%
56-65	50.00%	56.25%	52.94%
Over 65	22.22%	25.00%	23.53%
Gender by Percentage (Male)	50.00%	56.25%	52.94%
Degree by Percentage			
Associates	0.00%	6.25%	2.94%
Bachelors	22.22%	37.50%	29.41%
Masters	38.89%	37.50%	38.24%
Doctorate	38.89%	18.75%	29.41%
Title			
СЕО	83.33%	43.75%	64.71%
CFO	5.56%	25.00%	14.71%
President	11.11%	18.75%	14.71%
Other	0.00%	12.50%	5.88%
Work Experience			
Less than 4 years	0.00%	6.25%	2.94%
4 to 6 years	5.56%	25.00%	14.71%
7 to 9 years	11.11%	18.75%	14.71%
10 to 15 years	27.78%	12.50%	20.59%
Over 15 years	55.56%	37.50%	47.06%
Nonprofit Experience			
Less than 7 years	0.00%	6.25%	2.94%
7 to 9 years	0.00%	6.25%	2.94%
10 to 15 years	16.67%	12.50%	14.71%
Over 15 years	83.33%	75.00%	79.41%
Knowledge of Auditing			
0 to 4	5.56%	0.00%	2.94%
5	11.11%	18.75%	14.71%
6	16.67%	0.00%	8.82%
7	27.78%	31.25%	29.41%
8	22.22%	25.00%	23.53%
9	11.11%	12.50%	11.76%
10	5.56%	12.50%	8.82%

TABLE 1 DEMOGRAPHICS BY EXPERIMENTAL GROUPS

RESULTS

Condition Means

Table 2 presents the descriptive statistics. Panel A provides the means and standard deviations by experimental condition for perceptions of auditor independence. Panel B provides the means and standard deviations by experimental condition for perceptions of financial statement reliability (*unintentional* misstatements). Panel C provides the means and standard deviations by experimental condition for perceptions of financial statement reliability (*intentional* misstatements).

TABLE 2 DESCRIPTIVE STATISTICS CELL MEANS (STANDARD DEVIATIONS) AND CELL SIZES BY EXPERIMENTAL CONDITIONS

	Panel A: Auditor I	ndependence		
<u>Corporate Governance</u>				
	Minimally Compliant	Strong	Condition Means	
Rotation	n = 20	n = 16	n = 36	
No Rotation	5.70 (2.18)	8.06 (1.34)	6.75 (2.18)	
Partner Rotation	7.15 (1.84)	8.75 (0.93)	7.86 (1.69)	
Firm Rotation	7.05 (1.76)	8.63 (1.09)	7.75 (1.68)	
Condition Means	6.63 (0.29)	8.48 (0.32)	7.56 (0.21)	
Panel B	: Financial Statement Reliabil	ity (<i>Unintentional</i> M	isstatement)	
<u>Corporate Governance</u>				
	Minimally Compliant	Strong	Condition Means	
Rotation	n = 20	n = 16	n = 36	
No Rotation	5.95 (2.16)	8.13 (1.36)	6.92(2.13)	
Partner Rotation	7.20 (1.74)	8.25 (1.61)	7.67 (1.74)	
Firm Rotation	6.95 (1.79)	7.88 (1.45)	7.36 (1.69)	
Condition Means	6.70 (0.30)	8.08 (0.34)	7.39 (0.28)	
Panel	C: Financial Statement Reliab	ility (<i>Intentional</i> Mis	sstatement)	
<u>Corporate Governance</u>				
	Minimally Compliant	Strong	Condition Means	
Rotation	n = 20	n = 16	n = 36	
No Rotation	6.60 (2.21)	8.13 (1.54)	7.28(2.06)	
Partner Rotation	7.20 (1.88)	8.63 (0.89)	7.83 (1.66)	
Firm Rotation	7.20 (1.67)	8.31 (1.01)	7.69 (1.51)	

Table 3 presents the findings of the participants' perception of auditor independence when different levels of auditor rotation and corporate governance are implemented for a nonprofit organization. A repeated measures analysis of variance (ANOVA) is conducted to examine each of hypotheses and research questions. Panel A provides the main effect and interaction results. Panel B provides the pairwise comparisons for the auditor rotation variable.

7.00 (0.29)

8.35 (0.32)

7.68 (0.22)

TABLE 3

EFFECTS OF CORPORATE GOVERNANCE (HYPOTHESIS 1) AND AUDITOR ROTATION (HYPOTHESES 3A, 3B, AND 3C) ON CEO/CFOS' PERCEPTION OF AUDITOR INDEPENDENCE (RQ1)

Panel A: Repeated Measu	res Analysis of Varia	nce for Auditor Independ	ence
Source of Variation	F-ratio	Significance	Partial Eta Squared $^+$
Between-subject:			
Governance ^a (H1)	18.619	$.000^{b}$.354
Within-subject:			
Rotation ^c	10.076	$.000^{d}$.379
Interaction ^e (RQ1)	1.226	.307 ^d	.069
Panel B: Pairwise Compa	risons		
Pairwise Diff	erences	Sign	ificance ^b
NR vs. PR	(H3a)	р	< .01
NR vs. FR (H3b)		p < .05	
PR vs. FR	(H3c)	р	> .10

^aMinimally compliant versus strong. Refer to Figure 1.

^bOne-tailed tests are applied.

"No rotation vs. partner rotation vs. firm rotation.

^dTwo-tailed tests are applied.

^eInteraction of governance and rotation on perceptions of auditor independence.

⁺Partial eta squared (effect size): large (13% or greater), medium (at least 6% but less than 13%), small (at least 1% but less than 6%). See Cohen (1988).

Auditor Independence

Hypothesis 1 states that CEO/CFOs will perceive auditor independence to be higher when there is strong corporate governance versus minimally compliant corporate governance. The results support Hypothesis 1. CEO/CFO's perception of auditor independence is significantly higher (p < .01) when there is strong corporate governance (8.48) compared to minimally compliant (6.63) corporate governance. The partial eta squared is .354 which means 35.4 percent of the variance in perceptions of auditor independence is explained by corporate governance.²

Hypotheses 3a, 3b, and 3c examine CEO/CFOs' perceptions of auditor independence to be higher when there is various levels of auditor rotation implemented. The repeated measures ANOVA results show that there is a highly significant difference between the rotation conditions. The partial eta squared is .379 which means 37.9 percent of the variance in perceptions of auditor independence is explained by auditor rotation. The post hoc results show that CEO/CFOs' perception of auditor independence is significantly higher (p < .01) when there is partner rotation (7.86) compared to no rotation (6.75). H3a is supported. In addition, H3b is supported. The results show that CEO/CFO's perception of auditor independence is significantly higher (p < .05) when there is firm rotation (7.75) compared to no rotation (6.75). However, H3c is not supported. The results show that auditor independence perceptions are not significantly different (p > .10) between partner (7.86) and firm rotation (7.75) conditions.

Research question 1 examines whether the strength of corporate governance and the type of auditor rotation have an effect on CEO/CFOs' perception of auditor independence. The results did not find a significant interaction effect (p > .10). The partial eta squared is .069 which means 6.9 percent of the

variance in perceptions of auditor independence is explained by the interaction of corporate governance and auditor rotation.

In summary, CEO/CFOs perceive the auditor to be more independent when there is either partner or firm rotation than no rotation at all for nonprofit organizations. In addition, CEO/CFOs perceive the auditor to be more independent when there is strong corporate governance compared to minimally compliant corporate governance. The increase in independence perceptions related to auditor rotation occurs regardless of the type of governance, and the increase in independence perceptions related to governance occurs regardless of the strength of corporate governance. The results imply that nonprofit organizations should consider implementing partner rotation, firm rotation, and/or strong corporate governance to increase the perceptions of auditor independence.

Table 4 presents the findings of the participants' perception of financial statement reliability when different levels of auditor rotation and corporate governance are implemented for a nonprofit organization. A repeated measures ANOVA is conducted to examine each of hypotheses and research questions. Panel A provides the main effect and interaction results for the *unintentional* misstatement measure. Panel B provides the main effect and interaction results for the *intentional* misstatement measure. Panel C provides the pairwise comparisons for the auditor rotation variable related to the *unintentional* and *intentional* measures.

Financial Statement Reliability

Hypothesis 2 states that CEO/CFOs will perceive the financial statements to be more reliable when there is strong corporate governance versus minimally compliant corporate governance. The results support Hypothesis 2. CEO/CFO's perception of financial statement (whether there is *unintentional* or *intentional* misstatements) is significantly higher (p < .01) when there is strong corporate governance (8.08 and 8.35) compared to minimally compliant (6.70 and 7.00) corporate governance.

Hypotheses 4a, 4b, and 4c examine CEO/CFOs' perceptions of financial statement reliability to be higher when there is various levels of auditor rotation implemented. H4a is supported. The results show that CEO/CFO's perception of financial statement reliability (*unintentional* and *intentional* misstatements) is significantly higher (p<.10) when there is partner rotation (7.67 and 7.83) compared to no rotation (6.92 and 7.28). However, H4b is not supported. The results show that CEO/CFOs' perception of financial statement reliability (*unintentional* and *intentional* misstatements) is not significantly higher (p>.10) when there is firm rotation (7.36 and 7.69) compared to no rotation (6.92 and 7.28). H4c is not supported. Financial statement reliability (*unintentional* and *intentional* misstatements) perceptions are not significantly different (p>.10) between partner (7.67 and 7.83) and firm rotation (7.36 and 7.69) conditions.

Research question 2 examines whether the strength of corporate governance and the type of auditor rotation have an effect on CEO/CFOs' perception of financial statement reliability (*unintentional* and *intentional* misstatements). The results did not find a significant interaction effect (p > .10).

In summary, CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* misstatements) when there is partner rotation than firm rotation or no rotation for nonprofit organizations. In addition, CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* misstatements) when there is strong corporate governance compared to minimally compliant corporate governance. Similarly to independence perceptions, the increase in reliability perceptions related to auditor rotation occurs regardless of the type of governance, and the increase in reliability perceptions related to governance occurs regardless of the strength of corporate governance. The results imply that nonprofit organizations should consider implementing partner rotation and/or strong corporate governance to increase perceptions of financial statement reliability.

TABLE 4EFFECTS OF CORPORATE GOVERNANCE (HYPOTHESIS 2) ANDAUDITOR ROTATION (HYPOTHESES 4A, 4B, AND 4C)ON CEO/CFOS' PERCEPTION OF FINANCIAL STATEMENT RELIABILITY (RQ2)

Panel A: Repeated	-	of Variance for Financial St Misstatement Measure)	tatement Reliability	
Source of Variation	F-ratio	Significance	Partial Eta Squared	
Between-subject:				
Governance ^a (H2)	9.281	$.002^{b}$.214	
Within-subject:				
Rotation ^s	2.914	$.068^{d}$.150	
Interaction ^e (RQ2)	2.030	.147 ^d	.110	
Panel B: Repeated Measures Analysis of Variance for Financial Statement Reliability				
	(Intentional M	lisstatement Measure)		
Source of Variation	F-ratio	Significance	Partial Eta Squared ⁺	
Between-subject:				
Governance ^a (H2)	9.724	.002 ^b	.222	
Within-subject:				
Rotation ^c	2.262	.120 ^d	.121	
Interaction ^e (RQ2)	.205	.816 ^d	.012	
	Panel C: Pai	irwise Comparisons		
Pairwise Differences		Sig	nificance ^b	
NR vs. PR (H4a)		p < .10		
NR vs. FR (H4b) p >		p>.10		
PR vs. FR (H4c) $p > .10$		p>.10		

^aMinimally compliant versus strong. Refer to Figure 1.

^dTwo-tailed tests are applied.

^eInteraction of governance and rotation on perceptions of financial statement reliability.

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

The purpose of this study was to evaluate whether CEO/CFOs' perceptions of auditor independence and financial statement reliability are affected by different levels of corporate governance and/or different levels of auditor rotation. The results suggest that CEO/CFOs perceive the auditor to be more independent when there is either partner or firm rotation than no rotation at all for nonprofit organizations. In addition, CEO/CFOs perceive the auditor to be more independent when there is strong corporate governance compared to minimally compliant corporate governance. CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* misstatements) when there is partner than firm rotation or no rotation for nonprofit organizations. In addition, CEO/CFOs perceive the financial statements to be more reliable (free from *unintentional* and *intentional* and *intentional* misstatements) when there is

^bOne-tailed tests are applied.

^cNo rotation vs. partner rotation vs. firm rotation.

⁺See Table.

strong corporate governance compared to minimally compliant corporate governance. The increase in independence and reliability perceptions related to auditor rotation occurs regardless of the type of governance and the increase in perceptions related to governance occurs regardless of the strength of corporate governance.

This study has certain limitations. First, these views are of a select group of CEO/CFOs of nonprofit organizations. Future research should examine the perceptions of financial statements users (lenders, creditors, donors, etc.). A second limitation is the inherent nature of experimental studies. All potential relevant information could not be included in the experiment. Other factors should be examined in future research.

This study provides empirical evidence on the effects of corporate governance and auditor rotation on CEO/CFOs' perceptions of auditor independence and financial statement reliability. Research is needed on the impact and adoption of SOX and other regulatory provisions for nonprofit organizations. This research aids in providing nonprofit organizations ways to enhance auditor independence and financial statement reliability. The users of financial statements of nonprofit organizations should be interested in these results. These results suggest that voluntarily adopting or requiring some type of corporate governance standards (strong or minimally compliant) or some type of auditor rotation (partner or firm) will enhance perceptions of auditor independence and financial statement reliability.

ENDNOTES

- Response rate is calculated as follows: [36/ (1000 260 undeliverable and incomplete responses)]. The low response rate is consistent with administering surveys and experiments via email. (See Hutchinson, Fleischman, & Johnson, 1998; Hutchinson et al., 2001; Odom, Giullian, & Totaro, 1999; Beeler, Franz, & Wier, 2001; Anderson & Lillis, 2011; Dichev, Graham, Harvey, & Rajgopal, 2013).
- 2. Partial eta squared (effect size): large (13% or greater), medium (at least 6% but less than 13%), small (at least 1% but less than 6%). See Cohen (1988).

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