THE EFFECT OF ORGANIZATIONAL COMMITMENT ON COLLUSIVE SUPERVISION OVER REPORTING

ABSTRACT

We apply the Theory of Planned Behavior framework and find that attitude, subjective norms, and perceived behavioral control (PBC) influence supervisor intentions to involve subordinates in aggressive reporting practices to the supervisor's advantage. We refer to this behavior as collusive supervision over reporting (CSOR). Using PLS Path Modeling, we find stronger materialism leads to stronger attitudes, subjective norms, and perceived behavioral control (PBC) to engage in CSOR. We find that organizational commitment counters this influence. Stronger organizational commitment is associated with reduced attitudes and subjective norms to engage in CSOR. We also consider the collision of these two variables, materialism and organizational commitment, and explain interaction effects. Our findings suggest that subordinates navigating situations wherein they are pressured to engage in aggressive reporting practices can make petitions to the supervisor's sense of organizational commitment. Organizational commitment favorably dampens the effect of materialism on attitude towards CSOR. However, the interaction effect of organizational commitment and materialism on subjective norms towards CSOR is more complicated. Through social projection supervisors project their own materialism levels onto their supervisors, and then increasing organizational commitment causes them to want to fit in even more with these supervisors. When materialism is low for a supervisor, increasing organizational commitment results in further dampening the effect of materialism, leading to improved subjective norms and lower intentions to engage in CSOR. When materialism is high, however, increasing organizational commitment amplifies the effect of materialism on subjective norms, leading to increased CSOR.

Keywords: Collusive reporting, biased reporting, Theory of Planned Behavior, Materialism, Organizational Commitment

INTRODUCTION

Much work has been done in researching bias in accounting reporting, but less work has been done in correcting this problem in the accounting profession. This body of literature includes, for example, earnings management (Healy and Wahlen 1999), budgetary slack (Douglas and Wier 2005; Fisher et al. 2002, 2000), underreporting (Coram et al. 2004; Kelley and Margheim 1990; Ponemon 1992; Blanthorne and Kaplan 2008), and acts that reduce audit quality (Coram et al. 2004; Otley and Pierce 1996, 1995). As many scholars have already identified bias as a problem across reporting areas, we do not focus on one particular area of reporting. Instead, we focus on a way in which the bias is introduced into reporting. We focus on supervisors and their intention to involve subordinates in such activities. We also do not focus on whether or not biased reporting occurs, but instead investigate a potential solution. We evaluate the effect organizational commitment has on reducing collusive supervision over reporting.

Reporting is the culmination of extensive accounting effort, whether the reporting involves budgets, financial statements, internal audit reports, auditing reports, or other accounting reports. This work is typically extensive and involves considerable interaction between accounting supervisors and their subordinates. Oftentimes, the primary product that is seen by non-accountants is some type of report. Bias in these reports reduces the overall value for the readers of the report (Fischer and Verrecchia 2002).

While we in the accounting profession adhere to concepts of integrity and objectivity (AICPA 2018) and strive to be unbiased, bias does enter into reporting (Coram et al. 2004; Douglas and Wier 2005; Kelley and Margheim 1990; Ponemon 1992; Blanthorne and Kaplan 2008). The bias of accounting supervisors, because of their positions of authority, is particularly important for the profession to understand. This study considers factors that influence supervisors' behavioral intentions to involve their subordinates in aggressive reporting practices, a construct we call collusive supervision over reporting (CSOR).

In concept, anything short of objective reporting is contrary to accounting codes of conduct. In practice, it is difficult to completely eliminate one's bias; however, it is advisable to carefully and thoughtfully reduce one's bias, and to avoid intentionally allowing one's bias to influence a report. We posit there is a continuum of severity or level of bias in reporting. One extreme is fraudulent reporting and the other is more cosmetic tweaking or spinning. This coincides with materiality of the bias from high or significant materiality to low materiality. Due to the difficulty of studying major fraudulent reporting behavior, this study focuses on clearly biased reporting behavior that is less aggressive, but still contrary to professional ethics.

A biased report is oftentimes the product of many different accountants working together. The bias may be the result of a supervisor working individually or it could be a supervised employee acting unilaterally. The biased report could also be the result of a supervisor influencing a direct report to participate. Due to the position of power supervisors are in, a supervisor's bias is most critical to address. Supervisors are in a position to both bias reports and to pressure their subordinates to participate in biasing reports. As accountants only learn so much of the profession in school and instead rely on "on the job" learning while in the profession, it is critical that we increase our understanding of this learning environment. We focus on this context, in which a subordinate is subjected to pressure by a supervisor to practice aggressive reporting.

Ultimately, whether or not the supervisor is able to successfully engage in collusive supervision over reporting is dependent on a subordinate's willingness to accede to the wishes of the supervisor. Unfortunately, research in this area paints a bleak picture. Work by Johnson et al

(2016) investigated the willingness of an audit senior to acquiesce to the unethical wishes of a supervisor. Their results show that, across a variety of contexts, the mean likelihood of acquiescing to these unethical requests was 44.8%. These results mean that each audit senior that participated in the study was nearly equally likely to accede to the unethical request as to stand up to the supervisor.

This willingness to go along with the supervisor may be explained by the subordinate displacing responsibility. Research by Mayhew and Murphy (2014) shows that subordinates are willing to misreport when told to do so by their boss by saying, “I was told to” in an effort to deflect responsibility. Similarly, other research has found that obedience pressure from a supervisor significantly increased willingness to sign off on materially misstated account balances (Lord 2001). These findings illustrate that collusive supervision over reporting is a very real threat as the subordinate feels the pressure and has the rationalization to comply with an unethical supervisor.

Previous research has shown that collusive supervision over reporting (CSOR) does occur (Cieslewicz 2016, Bishop et al. 2017). In fact, Bishop et al. (2017) states that a majority of financial statement frauds are collusive in nature. These results highlight the motivation for this research: finding an antidote to the desires of the supervisor to collude is paramount. We posit that employees who care about their organization and value their employment will wish to be ethical in their reporting behavior. This is reflected in the organizational commitment construct.

We utilize the Theory of Planned Behavior (TPB) framework to investigate the effect of organizational commitment on CSOR (Ajzen 2002). In this framework, certain predictors influence behavioral intentions, which further influence actual behavior. The predictors of behavior include attitude, subjective norms, and perceived behavioral control (PBC), which is a person's sense as to whether or not they can succeed in carrying out a behavior and is related to self-efficacy. In this study, we posit that organizational commitment influences these predictors of behavior. We also posit that materialism influences these predictors of behavior, but in the opposite direction. Materialism involves being highly motivated by self and personal gains.

In building a theoretical model illustrating these relationships, we present and discuss one component of the model at a time. We then present the full theoretical model and proceed to the testing of the model. Using PLS Path Modeling, we find that materialism does have an undesirable association with higher levels of these predictors – attitude towards CSOR, subjective norms for CSOR, and PBC. Materialism has the net effect of increasing intent to engage in CSOR. We also find, however, that organizational commitment has an inverse relationship with these predictors; organizational commitment acts to reduce intent to engage in CSOR. We also investigate the interaction effects of materialism and organizational commitment.

LITERATURE REVIEW AND HYPOTHESES

Supervisors have incentives (e.g., get promoted, earn bonuses, etc.) that can create perceived pressure. This pressure is one of the elements of the fraud triangle (Albrecht 2014). To the extent that supervisors are heavily motivated by personal gain or materialism, they could be influenced to disregard their professional responsibilities to act with integrity and objectivity (AICPA 2018) and pressure subordinates to participate in the biasing of reports to the supervisors' advantage.

This places subordinates in a bind as their career advancement, pay increases, workload, and work assignments can be influenced by supervisors. Supervisors are able to exert different kinds of pressure on the subordinate in order to successfully recruit the subordinate into acting unethically. These different types of pressure include the desire for reward or benefit, fear of punishment or retribution, and a general lack of knowledge or inexperience (Albrecht et al. 2015).

The AICPA Code of Professional Conduct requires its members to operate under the integrity principle. This principle states that all members should perform all professional responsibilities with the highest sense of integrity. The code also requires the members of the AICPA to observe both the form and the spirit of technical and ethical standards. This standard also requires the observation of objectivity. Members "should protect the integrity of their work, maintain objectivity, and avoid any subordination of their judgment", (AICPA 2018).

However, despite the education, training, and professional guidance, supervisors are still subject to varying levels of motivation to bias reports. Statement on Auditing Standards (SAS) No 99 defines and discusses the "fraud triangle", the conditions under which fraud is more likely to occur (AICPA 2002). The first element of the triangle is incentive or pressure to commit the fraud. The second element is the opportunity to commit the fraud (e.g. lack of controls, etc.). The third element is rationalization or character. Highly materialistic supervisors are relatively more likely to bias reports if there is financial benefit (Albrecht 2014, Cieslewicz 2016). Supervisors may use this pressure as a way to rationalize the behavior. Their position of power also lends itself to being able to identify and take advantage of opportunities to bias reports for personal benefit (Cieslewicz 2016). This study relates to the fraud triangle in these ways; however, we rely more on the Theory of Planned Behavior which has been more extensively tested as a framework to study unethical behavior.

The Theory of Planned Behavior

The Theory of Planned Behavior (TPB) has been found to be effective in modeling and predicting behavior, including unethical behavior (Beck and Ajzen 1991; Chang 1998; Godin and Kok 1996). We look to the TPB as a basic framework to model influences and to predict intent to engage in collusive supervision over reporting (CSOR). The TPB utilizes three measures to predict behavioral intent: attitude, subjective norms, and perceived behavioral control (see Figure 1). Attitude is a more individual measure that reflects personal beliefs or feelings. Subjective norms is a measure that incorporates influences of others on the self. Perceived behavioral control is a measure of self-efficacy given the context and nature of the behavior. Together, these three factors have been found to predict behavioral intentions related to a wide variety of behaviors.

Place Figure 1 here

Prior accounting ethics studies utilizing the TPB have focused on understanding unethical behaviors (Buchan 2005, Carpenter and Reimers 2005, Cieslewicz 2016, Cohen et al. 2010). One study also investigated the combination of TPB with the fraud triangle to investigate individual's whistleblowing intention (Brown et al. 2016). The focus of our study shifts to investigate how the TPB can be used to consider solutions to these unethical behaviors. In particular, we seek a deeper understanding of the ability of organizational commitment to compete and work against the effects of materialism as they both impact intent to engage in CSOR.

As shown in Figure 2, the first set of hypotheses examines these TPB relationships, namely that attitude, perceived behavioral control, and subjective norms influence the intent to engage in collusive supervision over reporting.

H1a: Attitude influences intent to engage in CSOR. The sign will be positive.

H1b: Perceived behavioral control influences intent to engage in CSOR. The sign will be positive.

H1c: Subjective norms influence intent to engage in CSOR. The sign will be positive.

Place Figure 2 here

Materialism

Materialism (Richins and Dawson 1992) relates to getting pleasure from buying things and to admiring others because of their homes, cars, clothes, and other material goods. Strong materialism is associated with the assumption that a life of achievement is a life of acquisition of material possessions.

Materialism is not necessarily directly related to unethical behavior. For instance, Tang and Liu (Tang and Liu 2012) did not find a main effect for the relationship between unethical behavior intention and love of money. In defining love of money, they indicate it is not materialism, although conceptually they are related. They found that love of money moderates the relationship between integrity and unethical behavior. Similarly, we anticipate that materialism will impact CSOR through the effect materialism has on the TPB predictor variables (attitude, subjective norms, and PBC).

Those who place a high priority on material goods are likely to adopt reporting postures that enable the acquisition of material goods. Materialism should positively influence attitudes towards CSOR, as spinning accounting reports in the right way is more likely to result in greater perceptions of successful performance which should lead to greater financial success. Attitudes towards CSOR should further influence intentions to engage in CSOR.

COSO's (2013) control environment includes the integrity and ethical values of the organization. COSO states that senior management and the board of directors establish the tone at the top, which includes expected standards of conduct. These ethical values and standards of conduct should positively influence the integrity of supervisors and subsequently employees in organizations (Fritz et al. 2013; Pucic 2015). In considering the implications of this for the TPB, subjective norms, or what accounting supervisors think their own supervisors value, should be an important contributor to supervisors' CSOR. For the current study, this also suggests that understanding influences on subjective norms is important. Materialism is expected to impact subjective norms for CSOR, which in turn should impact CSOR.

Strong materialism should also influence one to sense opportunity and feel confident in one's ability (i.e., PBC) to engage in unethical behaviors expected to result in the acquisition of material goods. Materialism is anticipated to influence PBC related to CSOR, which in turn influences behavioral intent to engage in CSOR.

We anticipate that materialism will have an effect on CSOR. As shown in Figure 3, the effect will be through the TPB predictor variables as follows:

H2a: Materialism influences attitude for CSOR. The sign will be positive.

H2b: Materialism influences PBC for CSOR. The sign will be positive.

H2c: Materialism influences subjective norms for CSOR. The sign will be positive.

Place Figure 3 here

Organizational Commitment

Organizational commitment is the extent to which a person feels psychologically attached to the organization for which they work. When individuals have strong organizational commitment, they are proud to tell others that they are part of the organization (Porter et al. 1974; Meyer and Allen 1997). They do not want to tarnish the organization's reputation and avoid behavior that would do so. Organizational commitment leads to positive organizational results, such as retention and good citizenship (Meyer and Allen 1997). Those with strong organizational commitment are interested in the organization's good and less focused on their own benefits. Organizational commitment is further associated with ethical leadership (Fritz et al. 2013; Neubert and Halbesleben 2015; Pucic 2015). Accordingly, we hypothesize that Organizational commitment will work to reduce CSOR. As with materialism above, we anticipate the effect will be through the TPB predictor variables as follows, see Figure 4:

H3a: Organizational commitment influences attitude for CSOR. The sign will be negative.

H3b: Organizational commitment influences PBC towards CSOR. The sign will be negative.

H3c: Organizational commitment influences subjective norms for CSOR. The sign will be negative.

Place Figure 4 here

Cognitive Dissonance between Strong Materialism and Strong Organizational Commitment

Cognitive dissonance refers to situations involving conflicting personal beliefs (Festinger 1957). As members of the accounting profession are held to professional codes of conduct, those who are also high on materialism should experience cognitive dissonance when opportunities present themselves to bias reports to their advantage.

If one is concerned about the reputation of one's employer, and has strong psychological attachment to the organization (e.g., has high organizational commitment), one should be more willing to temper personal materialistic desires and thus have a weaker attitude towards collusive supervision over reporting (CSOR). Thus, while materialism should amplify attitude towards CSOR, organizational commitment should dampen this effect. We expect an interaction to result from the cognitive dissonance arising from the internal conflict. When strong materialism is pushed up against strong organizational commitment, and the two must be reconciled in resulting attitudes towards the appropriateness of collusive supervision over reporting, a feeling of mental discomfort will lead to one or the other prevailing. In the accounting profession, attitudes favoring collusive supervision are officially unacceptable. Because of this, and in order to reduce the resulting cognitive dissonance, we hypothesize that individuals will shift to favoring strong organizational commitment and its resultant desirable effect on attitudes towards CSOR.

H4: The effect of materialism on attitude will be moderated by organizational commitment. When materialism is strong and organizational commitment is also strong, organizational commitment will dampen the effect of materialism on attitude towards CSOR.

Likewise, when strong materialism is pushed up against strong organizational commitment, the resulting cognitive dissonance should cause a professional accountant to abandon the urges of materialism for the respectability of the profession. The resulting effect for perceived behavioral control, or self-efficacy to actually engage in collusive supervision over reporting, should be to reduce it.

H5: The effect of materialism on PBC will be moderated by organizational commitment. When materialism is strong and organizational commitment is also strong, organizational commitment will dampen the effect of materialism on PBC for CSOR.

Social Projection and Subjective Norms

The TPB variables can be divided into two categories: variables that are focused more on the self – attitude and PBC (e.g., self-efficacy) – and a variable that is focused more on others in the organization – subjective norms. Similarly, materialism focuses more on individual desires, whereas organizational commitment extends beyond the self to others. This difference in the locus of these variables – materialism, attitude, and PBC to the self and organizational commitment and subjective norms to others – has implications for how the variables can be expected to interact with the TPB.

Organizational commitment is associated with others as opposed to just the self. The emphasis on others is even stronger when a person has high organizational commitment because it refers to the extent of commitment to others. Subjective norms is likewise focused on others in the organization. Subjective norms in this study refers to what a supervisor believes her supervisors think about biasing reports. The focus for both of these variables is on others in the organization. Consequently, the interaction effect of materialism and organizational commitment changes when the variable being affected is no longer just one's personal attitudes and PBC (e.g., self-efficacy) but instead focuses more on others as reflected through subjective norms.

Subjective norms are influenced by social projection, which indicates that people tend to assume others are similar to themselves (Clement and Krueger 2000, Clement and Krueger 2002, Robbins and Krueger 2005). Social projection suggests that if someone is not very materialistic, she will project this onto others in the organization.

To begin with, low materialism will be associated with relatively lower subjective norms for CSOR. This occurs as the person projects her low materialism onto her supervisors. If this person also has a great desire to be associated with the organization and to fit in (e.g., has high organizational commitment), that high organizational commitment should boost the effect of the projected low materialism, driving the resultant subjective norms for CSOR lower still. This will further reduce CSOR, which is a desirable outcome.

However, if a person is highly materialistic, that person will also tend to project this as well. He will assume that others important to the organization are similarly materialistic, including his own supervisors. If such a materialistic person also has high organizational commitment, this should boost his commitment to an organization that, from his view, values materialism. As a result, high organizational commitment should pull the resulting subjective norms for CSOR higher. This should reduce any positive effect of organizational commitment. As materialism increases, the positive effect of high organizational commitment should gradually be extinguished.

H6: The effect of materialism on subjective norms will be moderated by organizational commitment. When materialism is low and organizational commitment is strong, subjective norms for engaging in CSOR will be lower. Alternatively, when materialism is high and organizational commitment is strong, subjective norms for engaging in CSOR will be higher.

This interaction effect is represented in Figure 5. The full theoretical model is presented in Figure 6.

Place Figures 5 and 6 here.

METHODOLOGY

Questionnaire Design

The scale items were adapted from prior studies with input from finance and accounting professionals. Seven-point Likert scales were used. Subjective norms consist of one's assessment of the likelihood that important referent individuals approve of a particular behavior. We interviewed working supervisors and found that they consider the perceived opinions of their own supervisors, past and present, when developing their own subjective norms for collusive supervision over reporting (CSOR). This is consistent with Social Learning Theory (Bandura 1986), which suggests that employees will tend to follow the behavior modeled by their supervisors, and Social Information Processing Theory (Pfeffer and Salancik 1978), which indicates that people utilize information cues ascertained from their immediate social environments to develop appropriate attitudes, interpret events, and learn what others expect of them.

Items for measuring attitude were adapted from Dowling (2009). Input from practitioners was taken into consideration in order to make the attitude items as applicable to practice as possible. The items are designed to measure attitudes towards the acceptableness of CSOR. Items for perceived behavioral control were adapted from Ajzen (2002). Materialism (Richins and Dawson 1992) and organizational commitment (Porter et al. 1974; Mowday et al. 1979) items come from prior studies.

Items for collusive supervision over reporting (CSOR) were developed in reference to prior TPB studies and through discussions with accounting and finance professionals. The construct is a specific instance of behavioral intentions focusing on the context of collusive supervision over reporting. This construct incorporates aspects of this behavior as listed in Table 1.

Because social desirability bias suggests that professionals would not want to directly admit to this behavior, the survey was carefully worded. First, the instrument emphasized that the study results will be anonymous. Second, the questions were carefully worded so that participants would not feel that they were directly admitting to this behavior. Social projection (Clement and Krueger 2002) suggests that people tend to assume others are similar to themselves, and that they project their own views when asked socially undesirable questions about people in situations like their own (Clement and Krueger 2000). Social projection is even stronger when referring to closer associates (Robbins and Krueger 2005). Accordingly, the following preface was added: “When answering the questions, think about a supervisor in your organization, or a similar organization, at your position.” In debriefing after a pilot with executive MBA students, participants expressed that this was an effective way to ask them about their behavior without making them feel nervous about it. This approach protects participants and elicits more open responses. A potential downside is that it could introduce noise in the statistics. This did not ultimately present itself as a problem.

Place Table 1 here

Data Collection

We piloted the instrument with executive MBA students with professional work experience. We focused final data collection efforts on participants that would have familiarity with accounting, and that would result in a broad sample. This included participants associated with Financial Executives International, the Institute of Internal Auditors, CPA firms, and corporations. We asked contacts within each organization to circulate an invitation to participate in an email to employees in supervisory capacities. The email included a link to the survey. We followed up about 15 days later and asked the contacts to send a follow-up email. Our sample includes 109 individuals. In instances where we were able to assess response rates, they were around 10 percent, which is common for studies following this methodology.

Our study is best served by including participants with an institutional understanding of accounting that are aware of accounting supervision behavior as it occurs in practice. As shown in Table 2, the average age of our participants is 40 (max 68, min 23), and the average number supervised by our participants is 12.5 (max 40, min 2). For purposes of generalization, we were also interested in avoiding taking the entire sample from one large organization or from one area of accounting. Of the participants about 56.8% are from CPA firms, with 38.5% from external audit, 12.8% from tax, and 5.5% from consulting. About 33.9% are on the corporate side of accounting, with 11% in financial reporting and 22.9% in other areas of corporate accounting.

Place Table 2 here

RESULTS

PLS Path Modeling was used to evaluate the data. Prior to discussing the model results, the constructs will be evaluated and multicollinearity considered.

Various measures were used to review the constructs (e.g., subjective norms, etc.). The mean communalities (AVE) and loadings were evaluated for the items comprising each construct. An item was dropped from each construct except for organizational commitment, and two items were dropped from the attitude construct. The final mean communalities were all above .5, indicating that the variance explained by the constructs exceeds that explained by error. Each construct was also subjected to a principal component analysis. These analyses resulted in a single factor solution that explained at least 65 percent of the variance. The composite reliability of each construct was evaluated with both Chronbach's Alpha as well as Dillon-Goldstein's rho, which is recommended for PLS path modeling (Vinzi et al. 2010). For each variable the Dillon-Goldstein's rho is above the recommended cut-off of .70 (Vinzi et al. 2010), with each exceeding .85 (see Table 3). The Chronbach Alpha's are all above the common cut-off value of .60, as each exceeds .75.

Place Table 3 here

Multicollinearity and excessive covariance were evaluated by generating factor scores for each construct, and then regressing the factor scores for CSOR on the factor scores for the independent variables. Tolerances are above the cut-off value of 0.1, and variance inflation factors are below the cut-off value of 10 (all are below 3), indicating that multicollinearity is not problematic (Mertler and Vannatta 2005).

The model results are summarized in Table 4 and illustrated in Figure 7. Hypotheses are directional, but p-values presented are two-tailed rather than one-tailed. Consequently, we identify significance at the .1 level. We now proceed to discuss the results related for each of the hypotheses.

Place Figure 7 and Table 4 here

Hypothesis 1

First, the basic Theory of Planned Behavior relationships are statistically significant, as anticipated: Collusive supervision over reporting (CSOR) is related to attitude (.380, p=000), perceived behavioral control (.352, p=.000), and subjective norms (.218, p=.003),. These results support hypothesis 1. We proceed to evaluate whether these three TPB predictors are themselves influenced by materialism and organizational commitment.

Hypothesis 2

Materialism is positively related to each of the TPB predictor variables. Materialism has the effect of increasing attitude for CSOR (.365, p=.002), perceived behavioral control (PBC) (.533, p=.000), and subjective norms for CSOR (.234, p=.056). It is worth noting that the strongest relationship in the model is that between materialism and PBC. This suggests that materialism increases supervisors' self-efficacy related to influencing subordinates to bias reports. These results support hypothesis 2.

Hypothesis 3

PBC is a measure related to self-efficacy to succeed in a given behavior – in this case, a supervisor's perception that she or he can successfully exercise CSOR. This suggests that relatively more materialistic supervisors may believe more opportunity exists to be aggressive with reporting relative to less materialistic supervisors. This observation has implications for an essential condition for fraud to occur, that of opportunity (AICPA 2002). The extent of opportunity that exists is always critical to consider, but this, in practice, is overshadowed by the extent that individuals believe they can get away with very aggressive accounting. Holding the actual degree of opportunity constant, and perhaps even at a relatively low level, if individuals do not believe they can get away with very aggressive reporting they are less likely to act. Inversely, if individuals believe they can get away with very aggressive reporting, they should be more likely to act.

As hypothesized, organizational commitment has the desirable effect of decreasing attitude towards CSOR (-.320, p=.002) and subjective norms for CSOR (-.293, p=.007), but not PBC for CSOR (-.114, p=.262). Unfortunately, PBC, which as explained relates to self-efficacy, is not necessarily discouraged by higher levels of organizational commitment. These results support hypothesis 3.

Hypotheses 4, 5 and 6

We now move to an explanation of the hypothesized interactions. Materialism X organizational commitment did not have a statistically significant effect on perceived behavioral control (.068, p=.54); therefore, hypothesis 5 was not supported. Materialism X organizational commitment, however, did have statistically significant effects on subjective norms for CSOR (.312, p=.008) and attitude towards CSOR (.190, p=.082). These results support hypotheses 4 and 6. We next illustrate and explain the statistically significant interaction effects. As all the variables involved are continuous, we use a different approach to illustrating the interactions than would have been used with categorical variables (Soper 2019). The relationship between the independent variable and dependent variable is charted, but at different levels (i.e., +2, +1 St Dev) of organizational commitment.

We now illustrate and explain the interaction effect of materialism X organizational commitment on attitude (see Figure 8). Overall, the relationship between materialism and attitude has a positive sign so that stronger materialism is associated with stronger attitudes towards CSOR. However, the interaction effect modifies this. Organizational commitment dampens the effect of strong materialism such that the overall effect on attitude is a reduction in its strength. In other words, when materialism is strong and organizational commitment is strong (i.e., +3, +2, St Dev), there are relatively weaker attitudes towards CSOR. This is a desirable outcome. Alternatively, when materialism is strong and organizational commitment is weaker (i.e., -3, -2 St Dev), there are relatively stronger attitudes towards CSOR. This is not ideal. Organizational commitment, when high, dampens the effect of materialism on attitudes, such that there is relatively less of an attitude towards CSOR. This desirable effect diminishes as materialism weakens, which is not too problematic as attitude towards CSOR itself weakens as materialism weakens.

Place Figure 8 here

We now illustrate (see Figure 9) and explain the interaction effect involving subjective norms for CSOR. There is a positive relationship between materialism and subjective norms so that stronger materialism (higher numbers on the scale) is associated with stronger subjective norms for CSOR (higher numbers on the scale). However, the interaction effect modifies this relationship. When materialism is weak and organizational commitment is strong (i.e., +3, +2 St Dev), there are relatively lower subjective norms for CSOR. Unfortunately, this desirable effect weakens as materialism increases.

Place Figure 9 here

DISCUSSION, LIMITATIONS, AND CONCLUSIONS

Discussion

We provide insight into forces that influence collusive supervision in a context critical to all areas of accounting – reporting – and refer to this as collusive supervision over reporting (CSOR). We rely on the Theory of Planned Behavior framework and find that attitude, subjective norms, and perceived behavioral control (PBC) influence supervisors’ intentions to engage in CSOR. Attitude focuses on personal beliefs regarding CSOR, while subjective norms reflect a supervisor's perception of what his or her own supervisors believe about involving subordinates in aggressive reporting. PBC reflects a supervisor's perceptions about the ability to engage in collusive reporting supervision, and is related to self-efficacy.

The constructs of materialism and organizational commitment were examined to ascertain how they impact collusive supervision over reporting. Materialism reflects the focus of self and the pursuit of material gain. Organizational commitment reflects the level of commitment a supervisor has to her organization. Materialism and organizational commitment were hypothesized to influence collusive supervision over reporting through a pathway. They were hypothesized to impact attitude, PBC, and subjective norms, which in turn were hypothesized to impact collusive supervision over reporting.

As anticipated, we find stronger materialism is associated with stronger attitudes, subjective norms, and PBC to engage in CSOR. Individuals that are highly materialistic possess attitudes and self-confidence in their ability to achieve personal gains through CSOR. We are principally interested in whether this state can be reduced through increased organizational commitment. We find evidence that increased levels of organizational commitment are associated with reduced attitudes and subjective norms to engage in CSOR. However, we also find interaction effects that complicate the main findings.

We consider the collision of these two variables, materialism and organizational commitment. On a positive note, organizational commitment dampens the effect of materialism on attitude. As such, increasing organizational commitment is desirable.

The interaction effect of materialism and organizational commitment on subjective norms is more complicated as it depends on the level of materialism. When materialism is weak, strong organizational commitment further weakens the effect of materialism on subjective norms, which is desirable. Social projection explains this, as supervisors who have lower levels of materialism, but are highly committed to the organization, project these same values onto their supervisors, thus reducing subjective norms for collusive supervision over reporting. As they themselves have lower levels of materialism, they assume their supervisors are also less materialistic, and this effect is heightened when organizational commitment is high because supervisors wish to fit in and belong with their own supervisors. Thus, there is less inclination toward collusive supervision over reporting.

When materialism is strong, however, strong organizational commitment amplifies the effect of materialism resulting in even stronger subjective norms to engage in CSOR. As stated, subjective norms refers to what a supervisor thinks her own supervisors' values are. Social projections explains that supervisors will project their own high values of materialism onto their supervisors. Increased organizational commitment then increases the supervisor's desire to fit in and stay with the organization. When an already highly materialistic supervisor becomes more committed to an organization that he or she believes (through social projection) is led by those with high levels of materialism, the result is stronger subjective norms for collusive supervision over reporting, which leads to increased intentions to pressure subordinates to collude in questionable reporting behavior.

Limitations

The first limitation of this study relates to the sample design. In this study, we strove to represent the field of accounting by obtaining a broad sample across areas of accounting. We also attempted to increase external validity by sampling supervisors with accounting experience as opposed to students, who would not have sufficient institutional understanding of the profession to accurately represent actual practicing accounting supervisors. We also avoided sampling from one firm or corporation. Still, our sample was not random across all potential accounting supervisors in the entire population and is limited to accountants, and so we recommend further validation of our work.

Our methodology also lends itself to external validity which is in keeping with our focus on actual practice, but this comes at the expense of some internal validity, just as experiments in laboratories using participants with less experience sacrifices some external validity. To balance this, while this is beyond the scope of the current study, we recommend further testing of our findings in an experimental setting.

Conclusions

Our findings have implications for subordinates attempting to avoid being caught up in aggressive reporting practices. Our findings suggest that accounting subordinates navigating situations wherein they are pressured to engage in aggressive reporting practices can make petitions to a supervisor's sense of organizational commitment as it will reduce the effect of materialism on attitude.

However, subordinates must exercise more care in calling upon a supervisor's organizational commitment in situations in which materialism is high. When a supervisor is relatively more materialistic, appealing to the supervisor's sense of organizational commitment is not advisable. As explained, social projection explains that individuals tend to assume others are similar to themselves. Subjective norms in this case refer to what a supervisor thinks her own supervisor's values are. If a supervisor who is highly materialistic assumes his or her own supervisor is also materialistic, and if organizational commitment refers to wanting to belong to and serve the organization, increasing organizational commitment will only serve to amplify the importance of materialism, leading to greater subjective norms favoring collusive supervision over reporting.

That said, while the interaction effect between organizational commitment does make subjective norms a bigger concern, it is just one of three interaction effects. The interaction effects with attitude and perceived behavioral control reduce the intent to engage in CSOR. Overall, subjective norms has the least impact on intent to engage in CSOR out of the three TPB variables. Organizational commitment does serve as an antidote for materialism and reduces intent to engage in collusive, aggressive reporting.

These findings all have implications for organizations as they attempt to mitigate the risk of aggressive reporting. These results speak directly to the importance of establishing a good control environment. Organizations that are able to encourage organizational commitment and attract and retain talented human resources reduce the risk of CSOR. These results show that organizational commitment, as hypothesized, does reduce the intention to engage in aggressive reporting practices.

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Table 1. Items Comprising the Collusive Supervision Over Reporting (CSOR) Construct

1	De-emphasizing matters in reports that might be problematic
2	Utilizing the reporting process to gain advantage where possible
3	Use the reporting process primarily to manage perceptions
4	Preferring subordinates who deliberately avoid drawing attention to areas in which results were not achieved
5	Preferring subordinates who use the reporting process primarily to manage perceptions
6	Preferring subordinates who liberally take advantage of judgmental aspects of the reporting process to achieve results
7	Planning ahead so there will be sufficient flexibility in judgmental reporting areas so that results can be achieved
8	Selectively hiring subordinates who view the reporting process as an opportunity to manage perceptions
9	Consciously managing subordinate perceptions of judgmental matters that must be reported on so subordinates working in those areas will be more likely to arrive at desired results

Table 2. Demographic Information

	Min	Max	Number	Percent	
Gender					
Female			52	47.7%	
Male			57	52.3%	
			109		
Experience	Min	Max		Mean	
Age	23	68		40	
Number supervised	2	40		12.5	
Accounting Background					
CPA Firm					
External Auditing			42	38.5%	*
Tax			14	12.8%	*
Consulting			6	5.5%	*
			62	56.8%	*
Corporate					
Financial Reporting			12	11.0%	*
Corporate Accounting			25	22.9%	*
			37	33.9%	*

*Percentages total to less than 100 because of missing demographic data

Table 3. Composite Reliability of Constructs

Construct	Cronbach's Alpha	D.G. rho (PCA)
Organizational Commitment	0.77	0.87
Materialism	0.93	0.96
Materialism X Organizational Commitment	0.93	0.94
Subjective Norms	0.84	0.90
Attitude	0.93	0.95
Perceived Behavioral Control	0.90	0.93
Collusive Supervision Over Reporting (CSOR)	0.97	0.97

Table 4. Summary of Model Results

Hypothesized Model Relationships		Hypothesis	Direction	Path Coefficient	*p* value*
Effects of TPB Predictor Variables on Collusive Supervision Over Reporting (CSOR)					
Attitude	CSOR	H1a	+	.380	.000
Perceived Behavioral Control (PBC)	CSOR	H1b	+	.352	.000
Subjective Norms	CSOR	H1c	+	.218	.003
Effects of Materialism on TPB Predictor Variables					
Materialism	Attitude	H2a	+	.365	.002
Materialism	PBC	H2b	+	.533	.000
Materialism	Subjective Norms	H2c	+	.234	.056
Effects of Organizational Commitment on TPB Predictor Variables					
Organizational Commitment	Attitude	H3a	-	-.320	.002
Organizational Commitment	PBC	H3b	-	-.114	.262
Organizational Commitment	Subjective Norms	H3c	-	-.293	.007
Interaction Effects					
Materialism X Organizational Commitment	Attitude	H4	See text	.190	.082
Materialism X Organizational Commitment	Perceived Behavioral Control (:	H5	See text	.068	.540
Materialism X Organizational Commitment	Subjective Norms	H6	See text	.312	.008

* Directional hypotheses were made, but two-tailed results have been reported; accordingly, the reported *p* values could be cut in half

n= 109

Figure 1. Theory of Planned Behavior

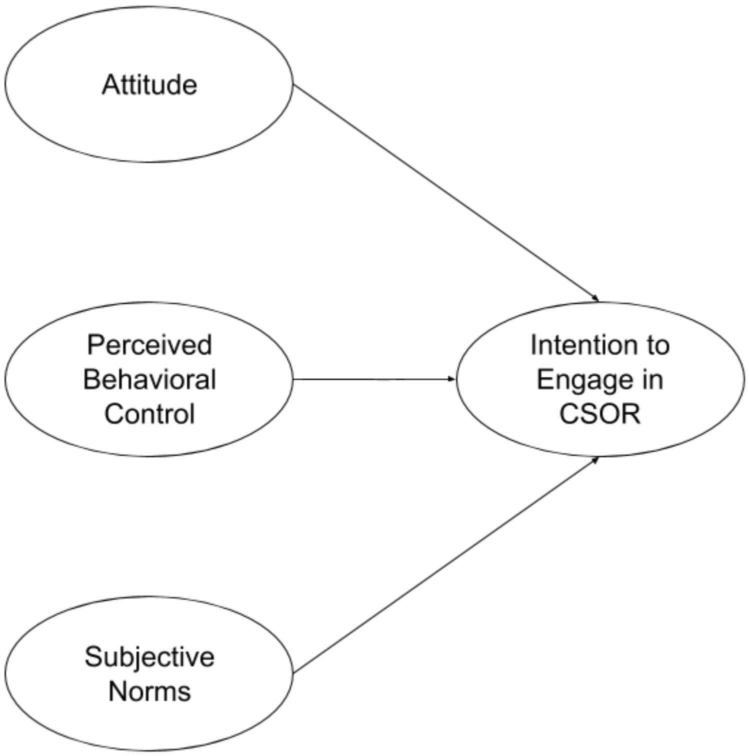


Figure 2. Theory of Planned Behavior Hypotheses

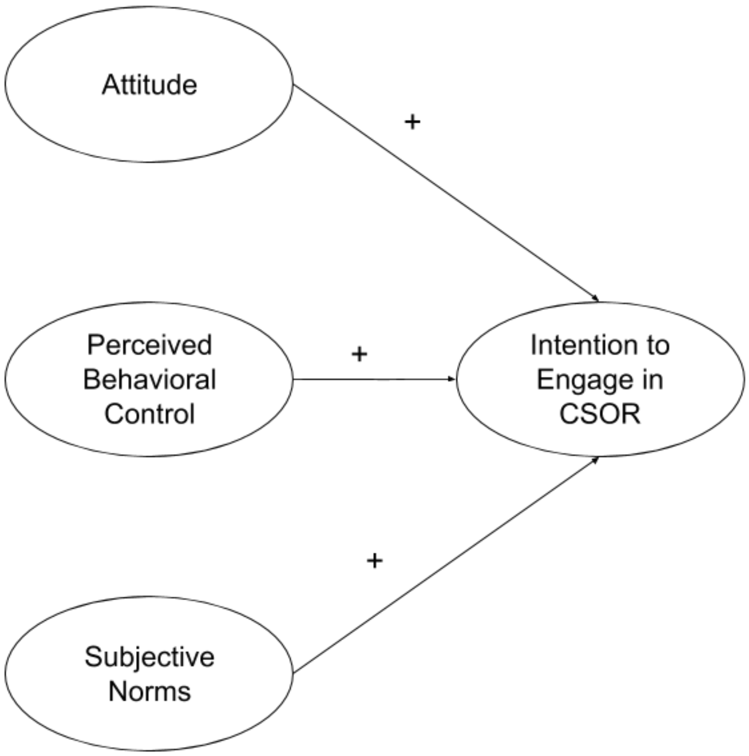


Figure 3. Materialism Hypotheses

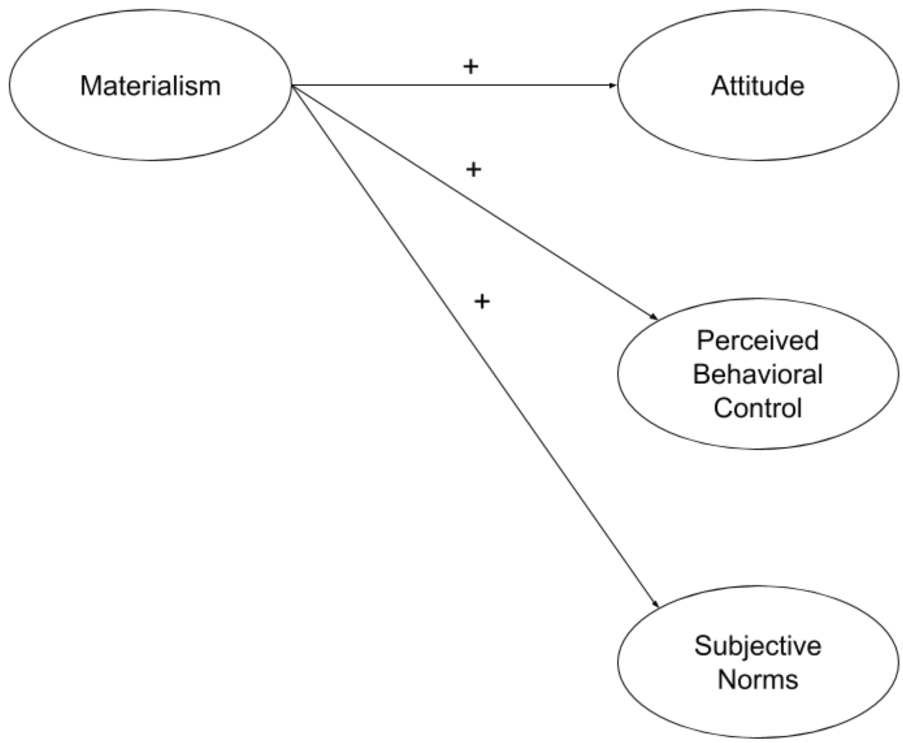


Figure 4. Organizational Commitment Hypotheses

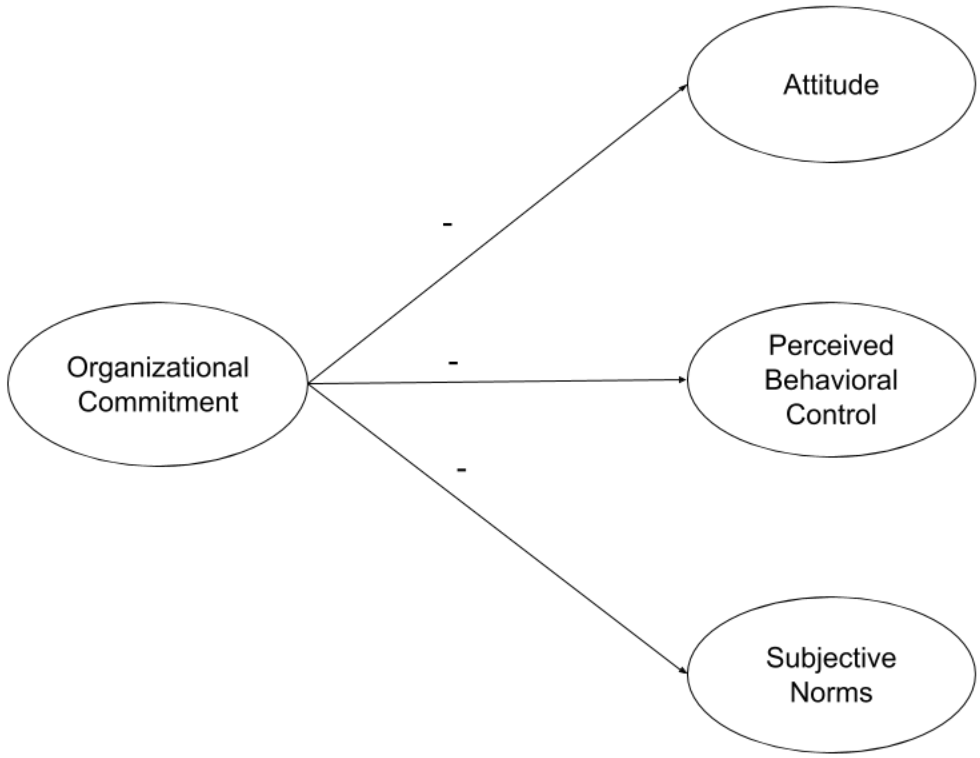


Figure 5. Interaction Effects Hypotheses

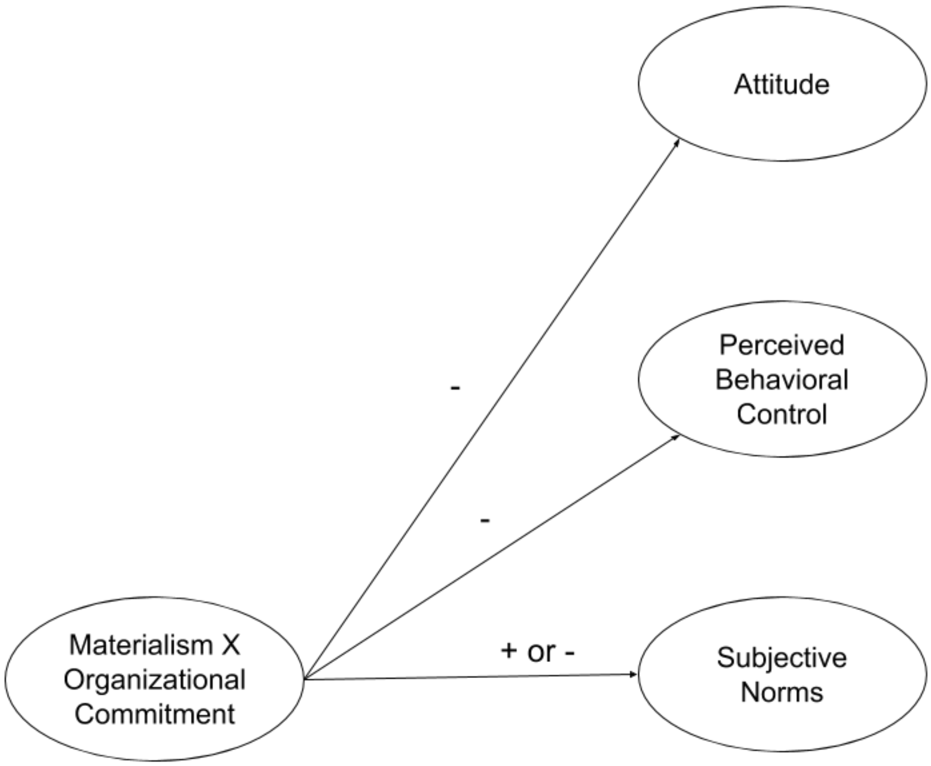


Figure 6. Full Theoretical Model

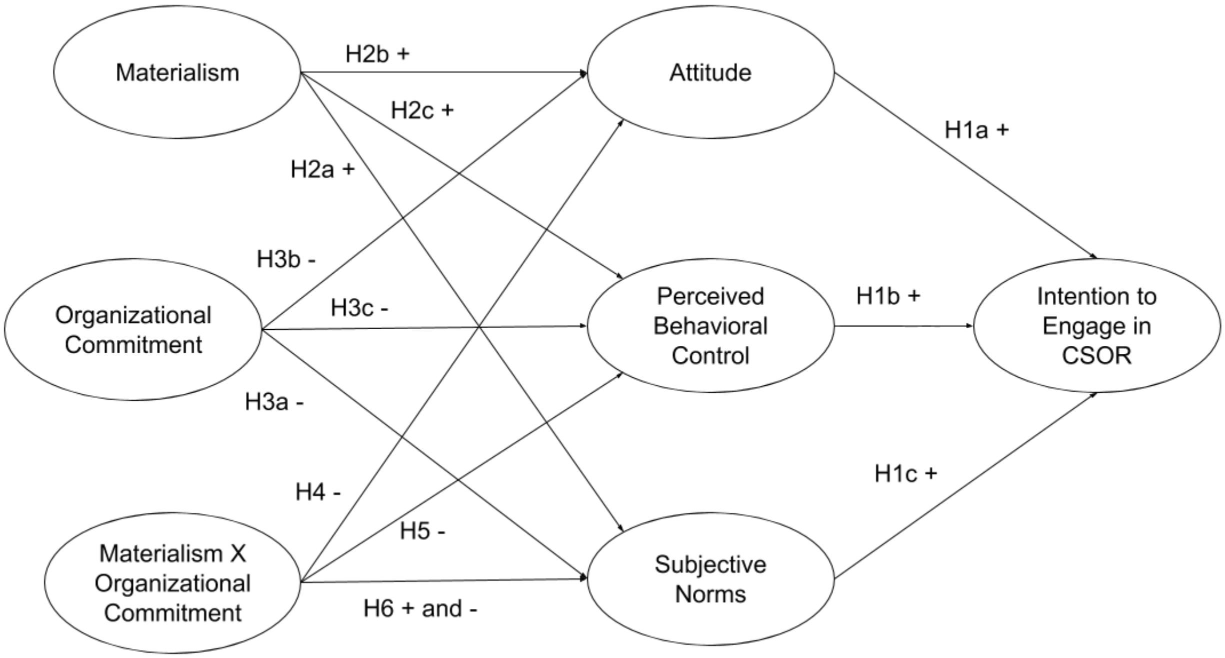
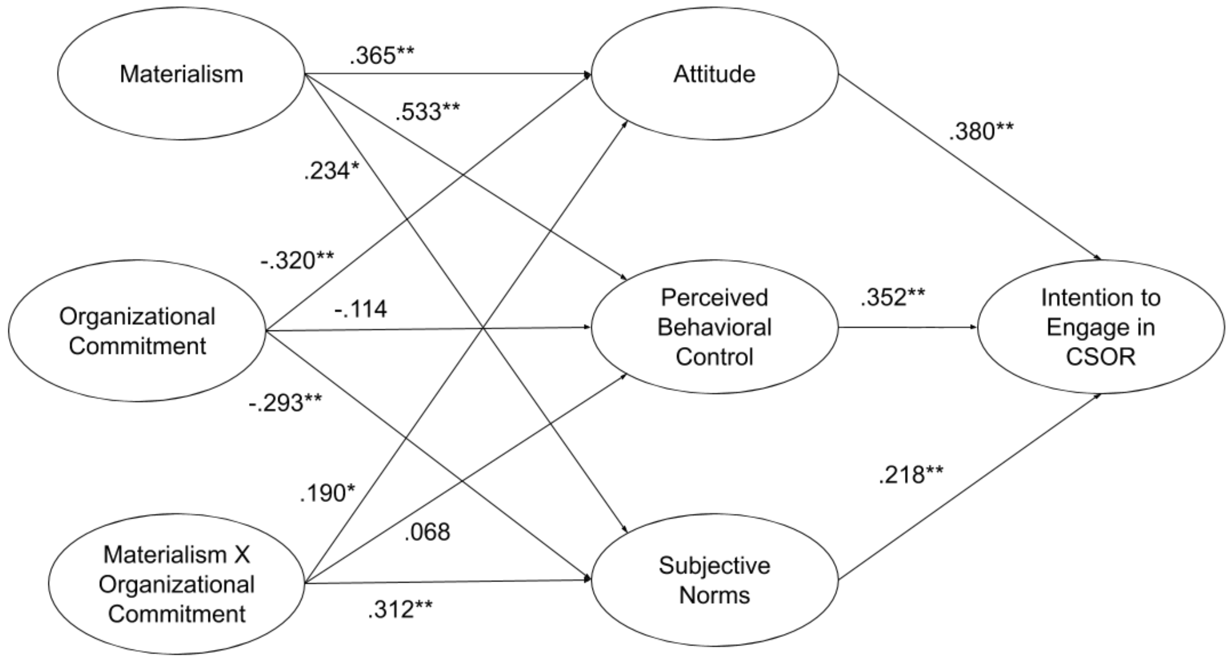
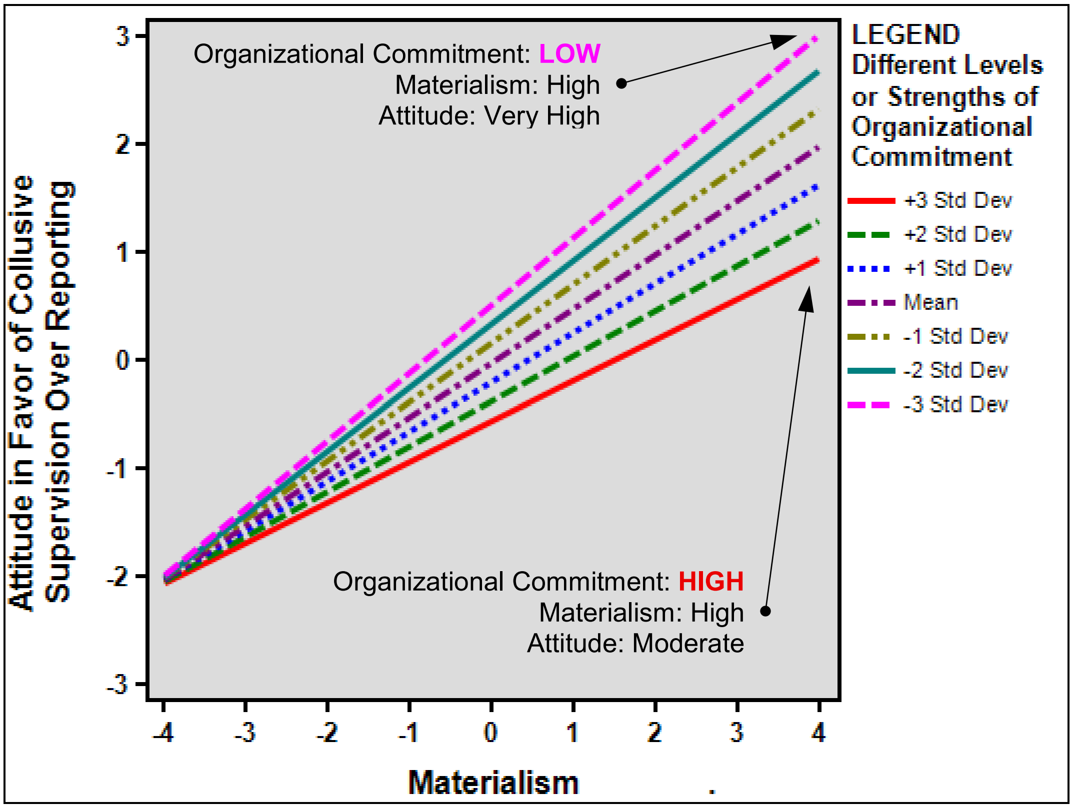


Figure 7. Model Results



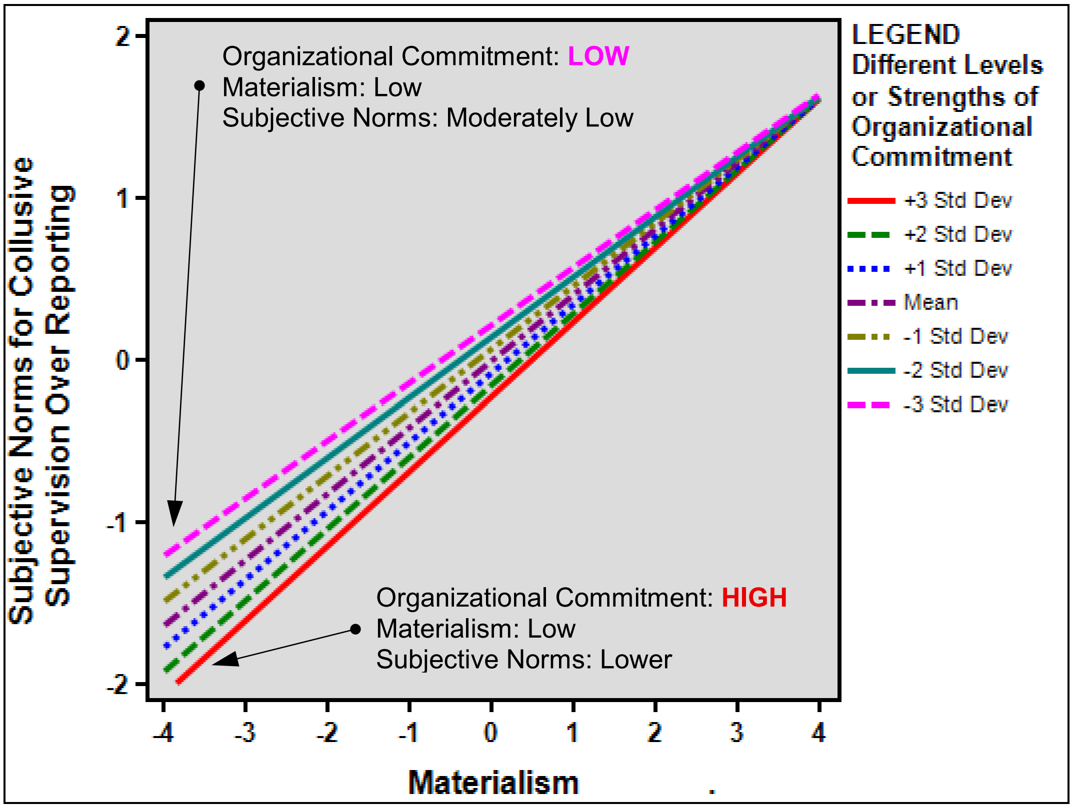
* Statistically significant at the .1 level
** Statistically significant at the .01 level

Figure 8. Illustration of the Favorable Moderating Effect of Organizational Commitment in Reducing the Effect of Materialism on *Attitude* toward Collusive Supervision Over Reporting.



Overall, stronger materialism is associated with stronger attitudes for collusive supervision over reporting (CSOR). However, strong organizational commitment reduces the effect of materialism resulting in lower subjective norms for CSOR. As illustrated, when materialism is high, subjective norms for CSOR are also high, but subjective norms are relatively lower when organizational commitment is high. This desirable moderating effect of organizational commitment strengthens as materialism increases.

Figure 9. Illustration of the Favorable Moderating Effect of Organizational Commitment in Reducing the Effect of Materialism on *Subjective Norms* for Collusive Supervision Over Reporting.



Overall, stronger materialism is associated with stronger subjective norms for collusive supervision over reporting (CSOR). However, strong organizational commitment dampens the effect of materialism resulting in lower subjective norms for CSOR. As illustrated, when materialism is low, subjective norms for CSOR are also low, but they are even lower when organizational commitment is high. Unfortunately, this desirable moderating effect of organizational commitment weakens as materialism increases.