

Doctor of Business Administration (DBA)

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1-1-2013

# The Role of Creativity in the Ethical Orientation of Oregon CPAs

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*George Fox University*

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The Role of Creativity in the Ethical Orientation of Oregon CPAs

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Submitted to the School of Business

George Fox University

In partial fulfillment of the degree requirements

for the degree of

Doctor of Business Administration

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July 2013

Running head: THE ROLE OF CREATIVITY

The Role of Creativity in the Ethical Orientation of Oregon CPAs

by

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has been approved as a

Dissertation for the Doctor of Business Administration degree

at George Fox University School of Business

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**Abstract**

Agency theory is the theoretical foundation upon which to explain the practice of accounting and the behavior of individual CPAs. Recent accounting scandals, however, cast doubt on agency theory's adequacy for that purpose. This research explored the impact of individual characteristics of CPAs, primarily creativity, had relative to explaining their ethical orientation. The data generated herein from a sample of Oregon CPAs was not persuasive with respect to the study hypotheses, however, it did suggest a statistically significant inverse relationship between creativity and ethical idealism. It also suggested an alarming level of CPAs whose self-assessed creativity measure did not include the notion of honesty, a primary pillar upon which the agency theory framework of practice rests. Other observations and recommendations for future research were identified.

### **Dedication**

This dissertation is dedicated to my parents, Harley F. "Pete" and Ruth B. Porter. Their enduring example of faith and hard work, coupled with an unconditional support of my educational pursuits, has been a constant source of inspiration. Simply put, this day would not have come, if it wasn't for them. Thanks, Mom and Dad.

## **Acknowledgements**

As I reflect on this dissertation, there are too many people to thank, than can possibly be listed on a few pages. I have been blessed to receive the support and encouragement of numerous friends and family, work colleagues, and a dedicated faculty at George Fox University. To all, I say thanks.

There are a few individuals to whom I owe a special debt of gratitude, however. First, my wife Keely has been a wonderful partner in this journey. She earned her Doctor of Education degree simultaneous with this effort. We spent many an evening and weekend together discussing concepts, reading scholarly papers, and debating theory. Somehow, through it all, we managed to grow from the process, and have fun. Thanks Keely, I love you.

I would also like to thank the members of my Dissertation Committee. Drs. Tim Rahschulte, Mark Rennaker, and Jim Steele helped bring clarity to my research and writing, and provided encouragement at points when it was needed. This work is simply better than it would have otherwise been, as a result of their guidance.

Acknowledgement is also due to Executive Director Sherri McPherson, and the Board of Directors and staff of the OSCPA. Their willingness to allow me access to OSCPA members for purposes of data gathering was critical to the completion of this dissertation.

I should also acknowledge the members of my cohort at George Fox University. Throughout this process, Scott Thor, Mike Lewis, Darrick Price, and Rick Putnam were terrific classmates, impressive thinkers, and supportive friends. Thanks guys.

Finally, but most important, I thank the Lord for his many blessings, and the wisdom and strength to see this project to completion. To God be the glory!

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### **Definitions**

American Institute of Certified Public Accountants (AICPA) - The private, professional advocacy organization for CPAs in the United States. This body also defines the practice standards for CPAs in the United States, including those related to audits of financial statements, and ethical conduct in practice (AICPA, 2011).

Certified Public Accountant (CPA) - Individuals licensed by the states to practice in the field of accounting. Among the services they provide to clients are the audits of organizational financial statements, preparation of organizational tax returns, and other related services. CPAs must pass the uniform CPA exam, drafted by the AICPA, and administered by the states. They must also abide by AICPA professional standards for practice. Accountants not licensed as CPAs by a state, are not allowed to use the term CPA in any manner with respect to their practice (AICPA, 2011; OAR30-801, 2011).

Creativity - Individual behavior, arising from individual expertise, that produces innovative outcomes used to solve important problems (Ford & Gioia, 2000; Kerr & Gagliardi, 2003).

Creative accounting - The preparation of financial statements in a manner that, while in conformance with the form of the applicable standards, promotes the preparers' interest, over the public interest (Gowthorpe & Amat, 2005; Jones, 2011a).

Financial Accounting Standards Board (FASB) - The private financial accounting and reporting standards setting body for non-governmental entities in the United States. The FASB is not technically subject to government oversight, although

the SEC may expand upon the accounting and disclosure requirements mandated by the FASB, as it pertains to the financial statements of companies in the United States whose securities are traded on public exchanges (AICPA, 2011).

Generally Accepted Accounting Principles (GAAP) - Accounting and financial reporting principles, as established by the appropriate standards setter (e.g. FASB) in a particular country (AICPA, 2011).

International Accounting Standards Board (IASB) - The London-based, private accounting standards setting body for non-governmental entities in many countries around the world, notably excluding the United States (Tyson, 2011).

International Financial Reporting Standards (IFRS) - GAAP in countries whose accounting and financial reporting standards are set by the IASB (Tyson, 2011).

Oregon Administrative Rules (OAR) - Laws in the State of Oregon, whereby the drafting of the actual text of the law is delegated to State Agencies, through enabling legislation. Initial proposed administrative rules are subject to public comment and/or hearings, and eventual State Agency action after consideration of such comments in light of the underlying legislative intent (OAR30-801, 2011; OBOA, 2012).

Oregon Board of Accountancy (OBOA) - Among other duties, the administrative agency in the State of Oregon delegated the responsibility to license and regulate individuals using the CPA designation (OBOA, 2012).



Oregon Revised Statutes (ORS) - - Laws in the State of Oregon adopted through legislative action (ORS673, 2011).

Oregon Society of Certified Public Accountants (OSCPA) - The industry association for CPAs who practice in the State of Oregon (OSCPA, 2012a).

Owner - Individual or entity with an ownership interest in an organization. For purposes of this research, owner also includes an individual with governance responsibility (e.g. member of a Board of Directors) for a nonprofit, governmental, or other commercial organization otherwise not having direct equity-based owners (e.g. mutual insurance company).

Public Company Auditing Oversight Board (PCAOB) - The government agency which regulates the practice of auditing, by CPA firms, of the financial statements of organizations in the United States whose securities are traded on public exchanges (PCAOB, 2012a; PCAOB, 2012b; Sweeney, 2012).

Securities and Exchange Commission (SEC) - The government agency which, among other duties, regulates the accounting and disclosure requirements for organizations in the United States whose securities are traded on public exchanges, or are otherwise legally subject to SEC oversight (PCAOB, 2012a; Sweeney, 2012).

## **Chapter 1 – Introduction**

A variety of accounting scandals in the past decades have left policymakers, regulators, and the general public with many unanswered questions. Among those questions is what role the external accountants had in their perpetration (Aßländer, 2005). These events have led scholars and policymakers to question safeguards surrounding the ethical conduct of independent CPAs (Clikeman, 2009). Is the framework for ensuring the ethical practice of CPAs adequately understood by policymakers, and if not, what may be missing? Many scholars, amongst them Alles and Datar (2004), Clikeman (2009), and Zeff (2003a, 2003b), raise questions whether society fully understands this framework.

Public discontent with accounting-related scandals illustrates the importance American society places upon the work of CPAs in the economy. They provide valuable services to their clients, from assisting them with tax planning and compliance, to assisting them in the improvement of their operations, information processing, and advising them on their overall business health. Perhaps more important, however, is their role in the audit and certification of financial statements. These statements provide important information for investors. Their credibility underpins the effective working of financial markets. Audited financial statements ultimately assist in the efficient formation of capital (AICPA, 2011; Zeff, 2003a; Zeff, 2003b). As such, CPAs "perform

an essential role in society" which is critical to "the orderly function of commerce" (AICPA, 2011, pp. 1677-1679).

Taken together, the concern over accounting scandals, and the recognition of the importance of the role of the CPA in society cause one to pause and consider the status of CPA credibility in the public mind. Complicating that reflection is the long anticipated convergence of generally accepted accounting principles in the United States with those generally accepted around the world. International accounting principles are regarded as principles focused, as opposed to having the rules focus of their American counterparts (Clay, 2007). This pending convergence has led to concern that principles-based accounting standards may be more vulnerable to abuse by the unscrupulous CPA, than would a rules-based system. Broad principles arguably require creative interpretation by practitioners as they apply them to complex business transactions. The interpretive element heightens the concern regarding the ethical conduct of CPAs, as the application of stringent rules possibly gives way to the creative application of broader principles (Clay, 2007). Accordingly, the framework to ensure the ethical conduct of CPAs warrants further investigation through research.

### **Agency Theory and the Practice of Accounting**

Individuals, including CPAs, are generally expected to pursue their own self-interest in a business context. Jensen and Meckling (1976) note the "...firm is not an individual. It is a legal fiction that serves as a focus for a complex process in which the conflicting objectives of individuals... are brought into equilibrium within a framework of contractual relations" (p. 311). In light of this, agency theory attempts to describe the

understanding that exists between a principal (e.g. owner or company) and the agent (e.g. manager or CPA). Agency theory suggests that with an appropriate balancing of terms or incentives, the principal's interests will be adequately represented by the agent. Without this safeguard, the agent's pursuit of self-interest might result in a suboptimal outcome for the principal (Eisenhardt, 1989). CPAs appear to function in the role of agent on behalf of the owner as principal (Demski & Feltham, 1978). This balancing of terms and incentives is therefore the theoretical foundation for accounting practice, and for defining the ethical obligations of accountants to their firms or clients (Cohen & Holder-Webb, 2006). Arguably, CPA behavior is regulated through the formal terms and incentives underlying the principal/agent relationship between business owner and accountant. These terms and incentives, when structured effectively, are believed to allow the CPA to serve the principal in an ethical manner, whilst pursuing their own self-interest in the conduct of their professional work (Jenson & Meckling, 1976; Shaub & Fisher, 2008).

Although agency theory provides theoretical explanation for the accountant-owner relationship, CPAs do not merely serve their clients. They are also called on to serve the public interest, as required by private and public standards of practice (Aßländer, 2005; Almer, Higgs, & Hooks, 2005; AICPA, 2011). The terms and incentives underlying the principal/agent relationship are therefore moderated by the various rules of professional accounting practice in order to recognize and serve this multiple agent relationship (Alles & Datar, 2004). This relationship is further moderated by guidelines and standards inherent within CPA firms, and the personal values of the individual CPAs (Bandura, 2002; Kulik, 2005). The net effect of these terms, incentives, and individual values, defines the behavior of the CPA (Shaub, Collins, Holzmann, &

Lowenshon, 2005). One may argue that the pursuit of individual self-interest is a behavior learned through interaction with these terms, incentives, and values (Ferraro, Pfeffer, & Sutton, 2005; Kulik, 2005).

The accounting profession changed dramatically from the 1970's forward, resulting in an alleged preoccupation with firm and individual success, and pressure on individual ethics (Zeff, 2003a). In 1977 when the AICPA changed the code of ethics to allow greater competition amongst CPAs, the balance of work began to shift from primarily the highly regulated (e.g. audit), to a greater portion comprised of the less regulated (e.g. consulting). This shift, from an attest focus to a consultive focus, led to many questions. In particular, some question whether the resultant impact impairs CPA commitment to the public interest (Clikeman, 2009; Zeff, 2003a; Zeff, 2003b).

Supporting the concern regarding CPA commitment to the public interest, the past several decades saw numerous scandals in accounting and financial reporting within the realm of U.S. corporate life. In many cases CPAs performing the audits of the companies involved in scandal failed to detect, or even facilitated, inappropriate financial activity. Once exposed, these scandals led to reforms in accounting practice and financial reporting. Such reforms were believed to adequately reconfigure the agency theory-inspired rules for CPA practice (Clikeman, 2009). On the following page, Table 1 provides an overview of certain scandals, and the resultant agency theory-inspired reforms enacted to strengthen the terms and incentives underlying the principal/agent relationship of the CPA to owners, and the public at large (Clikeman, 2009; Jensen & Meckling, 1976).

Table 1.

*Examples of Accounting Scandals and Related Agency Theory-Inspired Reforms*

<b>Year</b>	<b>Scandal(s)</b>	<b>Societal Action</b>	<b>Agency Theory-Inspired Standards Reform</b>
1932	Krueger investor swindle	1933 and 1934 Securities Acts	Required audited financial statements for public companies; defined auditor responsibilities
1938	McKesson & Robbins fraud	Established AICPA Committee on Audit Procedure	Revised process for promulgating audit standards; SEC reformed auditor engagement and reporting processes for public companies
1970	National Student Loan Marketing aggressive revenue recognition cover-up	Creation of the FASB	Removal, to a private board, of the standard setting from the purview of the accounting profession
1973	Equity Funding life insurance fraud	Metcalf & Cohen Commission hearings	Peer review and partner rotation practices implemented
1987	ZZZZ Best and Crazy Eddie frauds	Treadway Commission Hearings	Expectation gap auditing standards issuance
1989	Lincoln Savings and Loan real estate fraud	Passage of FIRREA & FDIC Improvement Act legislation	Migration towards new mark-to-market and asset impairment accounting standards
1998	Sunbeam earnings and revenue management fraud	Promulgation of new SEC Auditor Independence requirements	Required disclosure of non-audit fees; issued new materiality standards for audit practice
2001	Enron and WorldCom debacles	Passage of Sarbanes-Oxley legislation and issuance of SAS 99	Established PCAOB (formally regulating auditors of public companies), increased penalties for false financial statements; established new processes for consideration of fraud in an audit

*Note:* Adapted from Clikeman, P. M. (2009). *Called to account: Fourteen financial frauds that shaped the American accounting profession*. New York, NY: Routledge; Zeff, S. A. (2003a). How the U.S. accounting profession got where it is today: Part I. *Accounting Horizons*, 17(3), 189-205; and Zeff, S. A. (2003b). How the U.S. accounting profession got where it is today: Part II. *Accounting Horizons*, 17(4), 267-286.

As noted above, in response to various accounting scandals, policymakers took action to strengthen the terms of the CPA agency relationship to the public (Shaub et al., 2005). CPAs not only serve as an agent for the owner-principal, but also serve as an

agent to the public interest (AICPA, 2011). The post-Enron passage of the Sarbanes-Oxley legislation is an example of such an action. It significantly strengthened the rules underlying CPA practice, as well as the sanctions in the event of an ethical lapse (Alles & Datar, 2004). Despite these actions, one remains concerned that "... formal structures of control are not able to effectively prevent immoral behavior" (Aßländer, 2005, p.71). As noted in Table 1, the practice reforms enacted and refined over the past fifty years have not prevented the continued incidence of accounting scandal (Clikeman, 2009).

Because multiple factors such as agency confusion and accounting principle confusion obfuscate causality of CPA behavior, agency theory does not appear to be a simple, adequate predictor of CPA actions in an organizational setting. Martynov (2009) and Zhang (2008) echo the concern whether agency theory adequately explain the behavior of individuals. Further, Cohen and Holder-Webb (2006) suggest that the principal-agent understanding might not be strong enough to counteract perverse levels of motivated, self-interest in the professional life of individual CPAs, as evidenced by the various scandals. These questions regarding the predictive and explanatory value of agency theory are very important, as research has already identified instances where the terms of principal/agent relationship alone do not appear to be universally effective to promote ethical behavior (Zhang, 2008). Moreover, scholars have argued that the focus on agency theory alone may in itself obscure the relationships between accounting practice and the behavior of CPAs. Cohen and Holder-Webb (2006) further note that "... social science theories possess a distinctively self-fulfilling nature, in which the act of theorizing and studying causes the phenomena under consideration to alter and become more consistent with the theory" (p. 18).

If agency effects are not reliable predictors of ethical behavior in CPAs, then research should identify and evaluate factors influencing CPA behavior. Beyond the theoretical interest in explanatory relationships, determining other factors driving CPA behavior has substantive, practical application. At their peak, Enron and WorldCom together were valued at over \$110 billion (Clikeman, 2009). The massive loss of corporate market capitalization and private wealth from these and other past scandals demands society consider what other factors may influence CPA behavior. The public esteem of, and confidence in, CPAs has been negatively affected by the many recent scandals including Enron (Carnegie & Napier, 2010). Moreover, the loss of public confidence in the accounting profession, caused by these scandals, has taken a significant toll on market institutions and investor beliefs as to the usefulness and reliability of independent audits (Clikeman, 2009; Cohen & Holder-Webb, 2006). For example, evidence suggests that the public has begun to divert some attention from the opinion of auditors about organizational financial health, to the opinions and actions of short-sellers, web blogs, and other presumably less trained, but more candid third parties. This may present a long-term issue for capital formation, market integrity, and market efficiency (Norris, 2011).

In summary, the various accounting scandals provide evidence that the terms of the principal/agent agreement fail to universally explain CPA behavior. Individual CPA behavior appears influenced by factors other than those terms, even after the series of agency theory-inspired reforms which occurred during the past fifty years (Clikeman, 2009). It is considered prudent, therefore, to explore other characteristics of individual



CPAs to assess if they affect ethical conduct, before significant erosion in the public confidence in CPAs occurs (Cohen & Holder-Webb, 2006).

### **Individual Characteristics of CPAs**

The AICPA (2011) notes that ethical behavior is a voluntary behavior of CPAs. Jensen (1994) further notes that individuals must choose to appropriately respond to the incentives and conditions underlying agency theory. Given this dependence on individual cooperation, it is important to explore the individual characteristics of CPAs, as a means to further evaluate the effectiveness of agency theory as a means to predict CPA behavior.

It has been observed that situational context often drives the behavior of individuals (Gino & Bazerman, 2009). For example, personal characteristics and attitudes have been found to override the regulating role on behavior implied by agency theory. Studies have observed that certain CPAs appear to have more or less ethical attitudes than their peers based upon factors such as gender or experience (Conroy, Emerson, & Pons, 2010; Gendron, Suddaby, & Lam, 2006; Ibrahim & Angelidis, 2009).

In a more general sense, notions of ethical relativism or idealism have also been found to distort agency effects (Forsyth, 1980; Huang & Chang, 2010). Individuals view societal structures differently, applying judgments as to appropriate behavior in a manner sometimes inconsistent with the intent of those structures (Cohen & Holder-Webb, 2006). Moreover, against the grain of prior research findings, a recent study of non-CPAs suggests that creative people are more likely to be dishonest than non-creative people (Gino & Ariely, 2012).

### **Creativity as a Characteristic of CPAs**

Creativity has been found to be a useful and necessary skill for CPAs, especially in financial accounting (Bryant, Stone, & Wier, 2011). However, the usual perspective fails to value creativity. Moreover, the accounting profession often laments that it may not adequately attract creative people. Because accountants must adhere to the previously discussed agency theory inspired rules and practice requirements, designed to protect the public interest, creative individuals may choose to pursue other fields which permit greater personal freedoms (Shaub et al., 2005).

In contrast, creativity introduced into accounting has not always been viewed positively (Teodora & Nicolae, 2009). For example, malevolent creativity has been observed throughout many of the recent accounting scandals. Clikeman (2009) concluded that creative accounting exists at the heart of many of the recent financial reporting scandals. This phenomenon represents the intentional distortion of the financial results of a firm, whilst generally remaining within the confines of acceptable practice (Jones, 2011a). Put another way, creative accounting promotes the financial statement preparer's interest, over that of the public (Jones, 2011a). Creative accounting has been observed in virtually all the major accounting scandals discussed earlier, and usually began small before expanding to later desperate levels. In most cases, responsible CPAs were either complicit, or at best unaware, while the creative accounting abuses took place (Clikeman, 2009; Zeff, 2003a; Zeff, 2003b). Creative accounting is therefore deemed a significant problem in accounting overall and potentially with individual CPAs (Burger, Mayer & Bowal, 2007; Mulford & Comiskey, 2002). Accordingly, a CPA's level of

creativity appears to be an independent variable predicting the likelihood that of unethical behaviors (Gino & Ariely, 2012).

### **Empirical Concerns**

As noted above, the abuse of creativity in accounting has the potential to negatively impact society (Aßländer, 2005). Of concern is that little appears known regarding the level of creativity present in practitioners, even if one assumes that creativity represents a critically important attribute of CPAs in an increasingly complex world (Bryant et al., 2011). Gough (1979) notes that "creativity is a valued commodity in every kind of human endeavor" (p. 1398).

Conversely, recent research suggests that creative people may be more likely to cheat, especially if financial incentives are present (Gino & Ariely, 2012). Furthermore, recent research suggests a negative relationship between creativity and integrity (Beaussart, Andrews, & Kaufman, 2012). Research on CPA creativity is limited, and where explored, has often included primarily accounting students as test subjects (Bryant et al., 2011). Kerr and Gagliardi (2003) note, however, that individual expertise is the most important precursor of creativity in virtually any field. Given the lower levels of professional expertise, and general business experience, suspected among students, research with actual accounting practitioners appears necessary. Considering these concerns, it was deemed important to better understand the level of creativity inherent in actual practicing CPAs, and evaluate such levels against measures of individual disposition towards ethical conduct. Figure 1 graphically summarizes this theory question discussed above.



Figure 1. Theoretical Framework of Research.

### Research Design and Findings

Given uncertainties surrounding the relationship amongst creativity, ethics, other personal characteristics, and multiple agent roles in practicing CPAs, this research focused on the relationship between individual CPA creativity and ethical orientation. Ancillary to that analysis, it also explored the relationship between other personal characteristics of CPAs such as gender, area of practice, or size of firm, and ethical orientation. Ten hypotheses related to these relationships were developed (see Research Hypotheses section at the end of Chapter 2). The level of individual creativity, and other demographic characteristics, served as the independent variables. Ethical orientation served as the dependent variables.

This research employed a delimited sample of CPAs, surveying those who are members of the OSCPA. Two instruments were used to gather data regarding creativity

and ethics, as a means of operationalizing the theoretical constructs. The level of individual creativity was operationalized using Gough's (1979) Creative Personality Scale for the Adjective Checklist (CPS), an existing instrument designed for that purpose. Many such instruments exist, and critics lament their frequent complexity and difficulty in administration (Kerr & Gagliardi, 2003). This scale consists of thirty descriptor words, eighteen of which are indicative of higher creativity, and twelve represent lower levels of creativity. Each word is scored with a positive one or a negative one, depending upon whether the word is indicative, or not indicative of creativity. Gough's (1979) scale had previously been found to possess adequate internal validity, and correlated well to the results of other widely accepted measures of creativity. This research confirmed that reliability.

A second instrument used to operationalize ethical orientation was Forsyth's (1980) idealism and relativism scales. These scales, commonly referred to as the Ethics Position Questionnaire (EPQ), use the answers to a series of twenty questions designed to operationalize individual differences in moral reasoning. This instrument assigns a value to moral beliefs regarding ethical idealism. It also assigns a second value with respect to ethical relativism. The latter notion represents the extent to which individual beliefs are subject to change in response to situational or personal factors (Forsyth, 1980). This instrument has been used extensively in other scholarly research (Bryant et al., 2011). Forsyth (n. d.) notes median scores of 66.06 and 54.54 for idealism and relativism, respectively, based upon a summary of samples from nearly thirty countries around the world ( $n > 30,000$ ). These medians were noted when evaluating the results of this research, for reasons discussed later. Furthermore, the EPQ had previously been found to

possess adequate validity and reliability (Forsyth, 1980). Such reliability was confirmed during this research.

Data relative to these scales was gathered via an online survey. As noted earlier, the practice of accounting, as explained by agency theory, is premised on an unwavering commitment to the rules of professional ethics (AICPA, 2011). Data operationalizing the notions of ethical idealism and relativism offered a lens through which to assess such commitment (Forsyth, 1980), and revealed several important findings with respect to the ethical orientation of Oregon CPAs. First, while the relationships between the variables were weak, the direction of such relationships were generally shown to be as hypothesized. The relationship between creativity and idealism, inverse in nature, was also statistically significant, meaning it is not likely the result of random error (Newton & Rudestam, 1999). While creativity does not appear to be a major contributor to a lower level of idealism in Oregon CPAs, it does appear to be a factor. Creativity, inversely related to idealism, does appear to contribute to an individual CPA's willingness to deviate from the agency-theory inspired rules of practice.

The research provided little insight into the relationship between creativity and relativism. It was observed as being weak, yet positive. It was also not statistically significant. The participant data did suggest that levels of relativism in Oregon CPAs are considerably lower than they are for society at large, based upon data collected over time by Forsyth (n. d.) and others. The rules orientation of accounting training and practice may be at least partially responsible for this fact.

Finally, it was observed that the word "honest" was not universally selected by study participants, from amongst the adjectives included on Gough's (1979) CPS.

Professional ethics and legal regulation (AICPA, 2011; ORS673, 2011) universally demand honesty from CPAs. To the extent that a material portion of Oregon CPAs do not deem honesty an element of their individual self-image, concern arises. A dishonest CPA can do serious damage to the public interest (Clikeman, 2009). To the extent that honesty is not at the forefront of CPA images of self, one can imagine unintended negative outcomes may be more likely to occur (Applbaum, 1999; Gino & Bazerman, 2009; Radtke, 2008). That data, alarming on its face, could be argued to suggest that policymakers and regulators may not have adequately framed the risk of dishonesty in the profession. A code meant to regulate the behavior of honest individuals may fail in its intent, if honesty isn't a universal norm.

With respect to the demographic factors and ethical orientation, several findings were evident. While again, the relationships were observed as weak, the relationships between gender and relativism, work experience and relativism, and firm type and idealism were statistically significant. In effect, the data suggested female participants had higher level of relativism than their male counterparts. In addition, the data suggested that Oregon CPAs reporting a medium level of experience have a higher level of relativism than their highly experienced counterparts. Finally, the data suggested that Big-Four firm participants demonstrated lower levels of idealism than all other participants. As for this last finding, it likely suffers from a lack of statistical power, and should be evaluated accordingly (VanVoorhis & Morgan, 2007).

### **Risks and Limitations**

This research is limited by four primary factors. First, test subjects were delimited to members of the OSCP who responded to the survey. Thus, the results may not be generalizable to CPAs from other jurisdictions. Second, biases impacting participants (e.g. response bias) may limit the usefulness of the survey instruments, if such biases result in responses which are not otherwise valid. Third, individual levels of creativity were determined through self-assessment rather than via a third-party researcher or clinician (Ng & Feldman, 2012). Thus, an other-report assessment of an individual's level of creativity might differ from a participant's self-report. Finally, the researcher is a CPA in the State of Oregon, and a member of both the AICPA and OSCP. Individuals with similar backgrounds were the participants in this research. While each of these limitations is substantively mitigated by factors inherent in the research design, users of the research will be cautioned with respect to their possible impact on research results (Creswell, 2009).

### **Implications For Future Research and Practice**

The framework for accounting practice is designed to regulate the behavior of honest individuals. But, the seemingly widespread accounting scandals and the apparent failure of some CPAs to consistently fulfill their responsibility to the investing public suggests that not all CPAs are honest or ethical. Further research is therefore required. Prior research suggests that individual characteristics, such as creativity, may defy the well intentioned, and agency theory-inspired, rules of practice designed to protect the public interest (Clikeman, 2009; Cohen & Holder-Webb, 2006; Martynov, 2009).



Ignoring factors such as creativity, which may lead to CPA dishonesty, runs the risk of a spiraling process where agency theory-inspired practice reforms are defeated by repeated malevolent creative practices that merely view enacted reforms as another puzzle to solve and abuse. Regarding such an outcome, Jones (2011b) notes that "...firms will have to follow ever-increasing accounting regulations, and there is likely to be a creative accounting arms race. Both legislation and the creative accounting schemes used to combat them become more sophisticated" (p. 490).

Rather than face such a dysfunctional outcome, this research sought to explore the possible limitations of agency theory in explaining CPA behavior, particularly with regard to their role in protecting the public interest (Aßländer, 2005; Cohen & Holder-Webb, 2006; Shaub & Fisher, 2008). Despite the observation of generally weak relationships amongst the variables, evidence was generated to suggest that creativity plays at least a partial role in the ethical reasoning of CPAs in practice. To the extent that creativity adversely impacts an individual CPA's idealistic fidelity to the rules of practice, however, an alternative regulatory and training framework may need to emerge to protect the public interest. Such a framework ought to include a stronger focus on individual learning and awareness of self, as opposed to a narrow focus on routine changes to rules of practice that ultimately have proven inadequate to prevent creative accounting or other unacceptable CPA behavior (Yuthas, Dillard, & Rogers, 2004).

As an alternate framework of practice is considered, related training programs should be designed taking into account the influence of creativity, and its relationship to other psychological or environmental factors on CPA decision processes (Al-Beraidi & Rickards, 2006; Bandura, 1990). Some of these factors, working in concert with one

another, may act as a catalyst in motivating CPAs to fail in their ethical responsibilities (Bandura, 1990; Rick & Lowenstein, 2008). On a positive note, this research suggested that Oregon CPAs exhibit a considerably lower level of ethical relativism than other research subjects. One could speculate that this may relate to the efficacy of prior training. But more needs to be done to explore methods of training that reveal to CPAs aspects of their psychology that may lead them into problem areas.

## **Chapter 2 - Literature Review**

The review of literature for this dissertation condenses the theoretical literature explaining the practice of accounting. In particular, it summarizes such literature to a point enabling the exploration of the relationship of individual creativity, and other demographic characteristics, to individual ethical orientation. This is important, as such ethical orientation informs the personal standards of practice maintained by individual CPAs.

Creativity is a personal characteristic that represents an individual's capacity to find innovation solutions, to complex domain level problems (Csikszentmihalyi, 1996; Ford & Gioia, 2000; Zeng, Proctor, & Salvendy, 2011). It is a very useful attribute of individuals, especially those functioning in a business context (Gino & Ariely, 2012). The accounting profession is no exception, requiring its practitioners to exhibit individual creativity as a means to navigate the complexity of professional standards, tax regulations, business transactions, and human interactions (Bryant et al., 2011).

The conduct of individual CPAs is generally theorized to be explained through the lens of agency theory (Jensen & Meckling, 1976). However, a progression of accounting scandals and subsequently enacted practice reforms suggest that a simple view of agency theory alone is insufficient for explaining individual CPA behavior. Does creativity, and other demographic characteristics, factor into CPA ethical orientation? This literature review framework, and flow, is graphically illustrated by Figure 2 below.

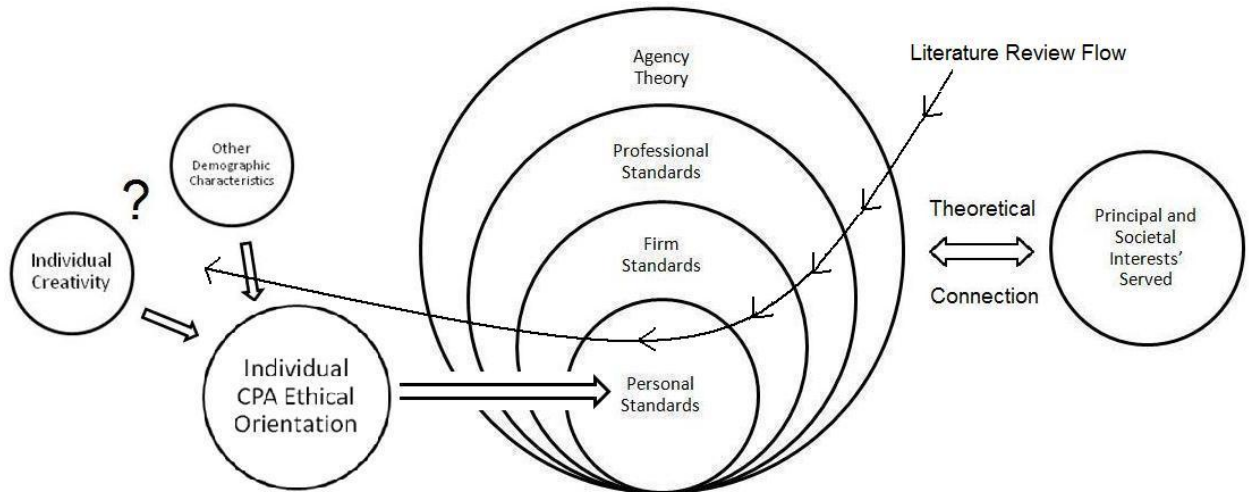


Figure 2. Framework for Literature Review

This literature review begins by exploring the broad notion of agency theory, and how it applies to the practice of accounting, specifically in the State of Oregon. Agency theory is explored from both the point of view of the traditional principal/agent relationship, to that of the multi-agent scenario (Ross, 1973). The latter is of particular concern when considering the role of professional advisors such as CPAs, who share not only a responsibility to their clients, but also to the public at large (AICPA, 2011).

The exploration then proceeds to include elements of the principal/agent relationship for CPAs as established by federal, state, and professional regulatory bodies. It also includes requirements imposed upon the CPA through firm standards, and personal values and conduct. From there, the literature review addresses apparent weaknesses in the theoretical framework previously discussed, particularly in light of the various accounting and reporting scandals reported in recent years (Clikeman, 2009). The occasional failure of individual CPAs within this agency theory framework for accounting practice is also discussed (Jensen & Meckling, 1976).

In light of concerns regarding those scandals, the review of literature concludes with a review of the notion of creative accounting, and its role in such scandal. The construct of creativity is then reviewed, and its connection to accounting and financial reporting. Such connection, and the resultant possible moderating impact of individual creativity, upon the agency theory framework underpinning the practice of accounting, including the debated global standards convergence, is then discussed. Negative aspects of individual creativity, including, possible connection to differences in moral reasoning are then discussed. Finally, this literature review concludes with the formation of hypotheses related to the constructs reviewed.

### **Overview of Agency Theory**

Agency theory attempts to inform the relationship that exists between principals (e.g. owners) and agents (e.g. managers). That relationship is challenging given the differing objectives that drive the behavior of each (Jensen & Meckling, 1976). "The agency problem arises because (a) the principal and the agent have different goals and (b) the principal cannot determine if the agent has behaved appropriately" (Eisenhardt, 1989, p. 61)

The fundamental premise of agency theory is that it assumes that both principal and agent should be expected to pursue their own self-interest. Such self-interest is theorized as the driver of human behavior in a business context (Fong & Tosi, 2007). Unfortunately however, notions of self-interest will generally diverge amongst individuals, resulting in conflict. In light of this dilemma, the theory seeks to inform the structuring of the agent's relationship to the principal in such a manner as to mitigate the

costs that such divergence of interests would ordinarily impose upon the principal (Jensen & Meckling, 1976).

Agency theory has its roots in the work of two scholars in the early 1970s. Working separately, Ross (1973) and Mitnick (2006) each proposed an understanding of the principal/agent dilemma, and discussed possible solutions to the inherent conflicts. Ross (1973) developed theory around the economic considerations of the principal/agent relationship. He observed that the agent needed strong incentives to induce behavior that respected, and sought to promote, the principal's interest. He further observed that the challenge with the design of such incentives lay in crafting them in a manner that optimized the outcome for the principal (Mitnick, 2006; Ross, 1973).

Working in a similar time period, Mitnick (2006) explored the principal/agent dilemma at the organizational level. He made the general observation that organizations represent an aggregation of conflicts between principals and their agents. These conflicts must be mitigated in order for the organization to function at optimal levels. Similar to Ross' (1973) observations regarding the micro-level negotiation between one agent and one principal, Mitnick (2006) noted that over time organizations adapt to their environment through the incremental design of policing structures that balance the various conflicts between organizational players in a manner sufficient to achieve organizational goals (Mitnick, 2006).

With that body of theory as a foundation, Jensen and Meckling (1976) released their seminal paper on agency theory in 1976 (Mitnick, 2006). They sought to explain the relationship between principal and agent, when the principal delegates responsibilities to the agent, which the principal is either unable or unwilling to do perform. Consistent

with the earlier scholars, they observed that the agency problem related to conflicts of interest which arise whenever there are divisions of labor between owners and managers. They believed such conflicts were endemic to human behavior. Noreen (1988) pithily described this dilemma with the observation that at "the heart of agency theory is the assumption that people act unreservedly in their own narrowly defined self-interest" (p. 359). Given this concern, Jensen and Meckling (1976) suggested that conflicts were certain to occur, and could be managed with the proper design of the relationship terms (Fong & Tosi, 2007; Jensen & Meckling, 1976).

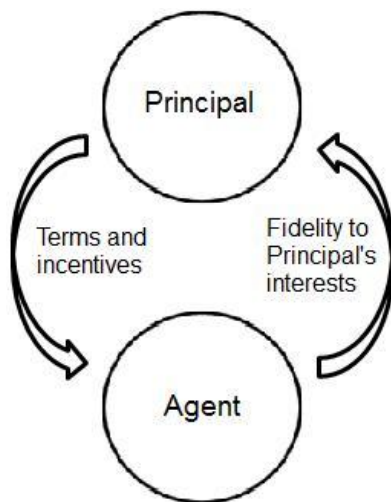
Through a series of mathematical proofs beginning from the standpoint of the complete unification of ownership and management functions, to the point where ownership and management functions totally diverged, Jensen and Meckling (1976), argued that agency theory was applicable to a wide range of organizational relationships. For example, in addition to the owner/manager relationship previously discussed, they noted that agency theory informed various aspects of capital formation, including debt financing, equities offerings, and the behavior of securities analysts. They also theorized that agency theory informed the construction of professional relationships, such as those between accountants, lawyers, their clients, and the public at large (Jensen & Meckling, 1976).

At the heart of Jensen and Meckling's (1976) arguments was the presumption that organizations were merely a series of relationships, with terms needing to be regularly defined, monitored, and modified. They contended that through such a process, the inherent conflicts of interest between owners (principals) and their various managers,

service providers, and advisors (agents) could be successfully managed (Jensen & Meckling, 1976).

Jensen and Meckling (1976) defined the agency relationship as "a contract under which one or more persons... perform some service on their (the principal's) behalf which involves delegating some decision making authority to the agent" (p. 310). This contract between the principal and agent, whether formal or informal, seeks to promote outcomes that result in the protection and furthering of the principal's interest. This success is achieved, through the contractual alignment of the agent's behavior to the interests of the principal (Jensen, 1983; Jensen & Meckling, 1976). Similar conceptual elements exist within the leadership and organizational theory literature (Shafritz, Ott, & Jang, 2005).

Figure 3 graphically depicts this relationship.



*Figure 3.* Overview of Agency Theory

The alignment of interests was considered imperative as the principal is compelled to delegate powers to the agent in order for the agent to complete the tasks for



which they were hired. Without such delegated powers, the agent is ineffective. Accordingly, before the principal delegated necessary decision-making functions to the agent, a series of terms and incentives needed to be designed and implemented, to mitigate the inevitable divergence from the principal's interest. This was expected to occur as the agent pursues their own self-interest. Once the initial alignment was constructed, the principal's role then turned to one of monitoring the agent's performance. The principal modifies incentives as necessary to achieve desired outcomes (Jensen & Meckling, 1976). The nature of the agreement between the agent and principal will depend on the risk aversion, or tolerance, of both parties. It will also depend on the availability of information. Information is a key tool used by the principal to aid in monitoring the agent's actions (Eisenhardt, 1989)

The monitoring function is one example of agency costs borne by the principal. Jensen and Meckling (1976) identified other costs that relate to the separation of ownership and management responsibilities. They represent the inherent inefficiencies which naturally result from the division of such functions. Recognizing that the principal is often not in a position to fully evaluate agent performance, other agency costs are also realized (Eisenhardt, 1989). For example, in addition to monitoring cost, Jensen and Meckling (1976) argued that the principal realized bonding costs, essentially costs incurred to transfer to third parties a portion of the principal's risk that the agent will not perform as intended. These costs are often incurred in recognition that perfect monitoring is not possible. Further, they noted that the principal also incurred residual losses. Such losses represent a cost in the form of the value that is ultimately lost

(beyond bonding protections) when agent performance fails to optimize the principal's interest in any other manner (Jensen & Meckling, 1976).

Shapiro (2005) further expanded upon the definition of these costs. That expanded list included a variety of costs including "... the costs of recruitment, adverse selection, specifying and discerning preferences, providing incentives, moral hazard, shirking, stealing, self-dealing, corruption, monitoring and policing, self-regulation, bonding and insurance" and others (p. 281). In essence, the principal bears a wide variety of costs and risks to employ and monitor the agent. Despite incurring these costs, it is noteworthy that the principal's interest still may not be fully optimized (Shapiro, 2005).

Subsequent to Jensen and Meckling's (1976) work, other scholars explored agency theory from a variety of specific reference points. For example, scholars explored its application to mergers (Amihud & Lev, 1981), corporate acquisitions and divestitures (Argawal & Mandelker, 1987; Walking & Long, 1984), selling activities (Anderson, 2008), and compensation arrangements (Conlon & Parks, 1988; Eisenhardt, 1985). In general, this research largely supported the basic elements of agency theory as originally defined, and discussed above (Eisenhardt, 1989).

### **Applicability of Agency Theory to the Practice of Accounting**

Agency theory serves as an underlying premise for scholarly explanations of the role that professional advisers play with respect to business owners. The theory exists to help explain the adviser's (agent) behavior, as it pertains to the owner (principal). One such advisory role, the professional accountant or CPA, provides a good example (Demski & Feltham, 1978; Jensen & Meckling, 1976). "Overall, the domain of agency

theory is relationships that mirror the basic agency structure of a principal and an agent who are engaged in cooperative behavior, but have differing goals" (Eisenhardt, 1989, p. 59). As with the relationship between owners and managers, the immediate interests of the owner typically differ from those of the CPA (Eisenhardt, 1989).

CPAs regularly serve business owners, nonprofit managers, and other organizational representatives. Performing audits of organizational financial statements is one common way the CPA-agent serves the owner-principal. Providing tax advice and preparing tax returns are others. These delegated acts assist the principal in their monitoring role, insofar as it relates to management's operation of an organization on their behalf as the owner. For example, external accounting fees may be construed to represent a monitoring cost (Demski & Feltham, 1978; Fama & Jensen, 1983; Jensen & Meckling, 1976). Typically, the CPA directly serves the principal through interaction with an organization's Board of Directors. That group commonly acts as principal in the case where ownership of the organization is broadly distributed amongst many investors. In smaller organizations, the CPA may interface directly with a single owner. In either case, the CPA-agent assists the owner-principal in its monitoring role (Fama & Jensen, 1983).

The traditional notion of agency theory is complicated somewhat, however, with respect to the peculiarities of the practice of accounting (and certain other professions). As noted earlier, agency theory is used to explain the behavior of accountants (Eisenhardt, 1989). But in the case of a professional adviser such as the CPA, the related principal is likely be in a relationship with several agents all performing dedicated tasks that the owner is unable to do themselves (Ross, 1973). These agents may need to

interact with each other in order to ensure the principal's interests are adequately safeguarded (Eisenhardt, 1989; Zhang, 2008). An example is when the CPA and management work together to produce audited financial statements. Research suggests that having multiple agents serve the same principal reduces risk somewhat. This is due in part to the ability to call on the greater body of expertise, and the inherent checks and balances, that multi-agent scenarios provide (Fama & Jensen, 1983).

While the principal may be served by multiple agents, likewise the agent, particularly the CPA, commonly has at least two principals to also respect. One principal is the owner. Another principal is the public interest. Although the CPA's direct, agent responsibility is to the primary business owner, lenders, taxing authorities, minority owners, and others may also claim a principal/agent relationship to the CPA (Fama & Jensen, 1983). Burger et al. (2007), in describing the duality of responsibilities the agent CPAs has to multiple principals, noted that "professionalism once meant practitioners simultaneously managed the interests of client's and society" (p. 68). On the following page, Figure 4 portrays the relationship between an agent and multiple principals.

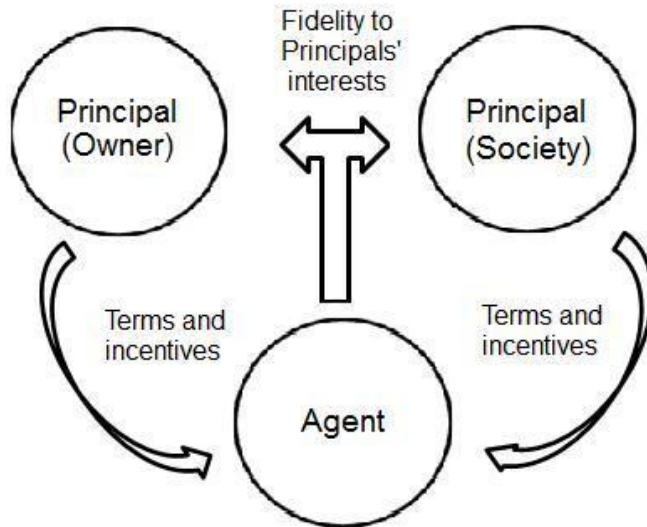


Figure 4. Overview of Agency Theory - Multi-Agent Scenario

Jensen (1983) noted that the role of the CPA is critical to the development of organizations. The role of the CPA, particularly in the audit context, adds important elements such as credibility and trustworthiness, to the financial representations organizations make to the outside world. For example, banks frequently will not lend money to organizations without the borrower providing them with financial statements audited by a competent CPA. In this way, the role played by the agent-CPA is vital to the formation of capital, and in the encouragement of economic activity in general (Jensen, 1983; Noreen, 1988).

In the past forty years, there have been instances where CPAs have struggled with their ability to serve multiple principals, however (Clikeman, 2009). As noted earlier, agency theory is premised upon the notion that agents will pursue their own self-interest. Accordingly a contract, containing incentives should be developed between the owner-principal and agent-CPA to manage such self-interest using terms and conditions, to

govern their relationship (Jensen & Meckling, 1976). Unfortunately, as the practice of accounting is highly technical and specialized, the principal is left with a great deal of uncertainty. The principal is potentially at a disadvantage if forced to negotiate these terms and conditions without assistance. With respect to the acts the principal seeks to delegate to the agent-CPA, Eisenhardt (1989) notes "the agency problem arises because (a) the principal and the agent have different goals and (b) the principal cannot determine if the agent has behaved appropriately" (p. 61). Uncertainty regarding CPA behavior is not only true in a single principal/agent relationship, it may be even more troublesome in multiple principal/agent scenarios as neither the owner-principal, nor the public at large, are typically qualified to ascertain the quality of the CPAs work.

The inability to design terms, or determine the effectiveness of the CPA's work can best be explained by considering three agency theory-related problems that emerge from environmental uncertainty (Mole, 2002). First, is the issue of adverse selection. This is the notion that the principal does not have the expertise, or lacks sufficient information, to evaluate the qualifications of the agent. As noted above, given the specialized nature of accounting work, this problem is potentially acute. Second, moral hazard, or the notion that the principal cannot evaluate the effort put forth by the agent, is also a problem. The principal is frequently unable not only to evaluate the technical competence of the agent-CPA, but also may not be able to ascertain the intentions and thoroughness of the agent's work. Finally, the principal may be at risk for the agent-CPA to seek to alter their initially agreed upon terms, after work has commenced (Mole, 2002).

Professional and governmental regulation exists to mitigate the issues of uncertainty plaguing the principal/agent relationship, both the principal-owner and for the public as principal. Regulations are intended to define many of the terms, conditions, and incentives underlying the agency relationship. For example, professional licensing and certification is intended to protect the principal from adverse selection in the hiring of CPAs, by providing a level of assurance as to the individual CPA's basic qualifications and expertise (AICPA, 2011; Mole, 2002). Moreover, given the due care related responsibilities conferred on CPAs by professional standards and regulation, the principal is left with some assurance that the CPA will be thorough in their work (AICPA, 2011). Finally, professional and regulatory standards also require the agent-CPA to clarify terms prior to the commencement of work in a fashion, so as to reduce the risk that they will change, without a requisite adjustment in the scope of the work itself (AICPA, 2011; Mole, 2002). For example, in a mixed-methods study of the perceptions of work provided on behalf of small businesses by various third parties, Mole (2002) concluded that accounting advice was rated second most useful, only below that of direct customer advice, as compared to advice provided by other third parties, including lawyers and bankers.

Despite the forgoing, one wonders whether professional and governmental regulatory regimes are adequate, to produce appropriate behavior in CPAs (Burger et al., 2007). Research with management accountants suggests that motivated self-interest is the primary cause of the reduction in the ethical quality of related behaviors. Further, research suggests that a more holistic understanding of CPA responsibilities to principals helps to promote appropriate behaviors in accounting work (Shaub et al., 2005). Thus, a

broad framework for understanding CPA behavior that moves beyond the simple principal/agent relationship is required. Accordingly, the following sections discuss this broader framework, including professional, regulatory, and firm level controls that seek to promote ethical CPA conduct in response to the overriding principal/agent framework. In addition, it will also discuss individual level standards of conduct, such as individual commitment to ethics, pertinent to the same. Indeed, regarding abusive tax shelters promoted by CPAs, research suggests professional standards alone do not always deter individuals from unethical conduct if the incentives for such conduct are sufficiently high. The achievement of CPA conduct supportive of both the owner-principal interest, and the public interest, requires attention of various policy-makers including those at the professional, government, and firm levels. It also requires individual CPA commitment (Burger et al., 2007; Eisenhardt, 1989; Jensen, 1983; Jensen & Meckling, 1976). On the following page, Figure 5 graphically depicts the layering of these various sources of professional, firm, and individual requirements that define the practice of the CPA to the variety of principals served (Eisenhardt, 1989; Jensen, 1983; Jensen & Meckling, 1976).



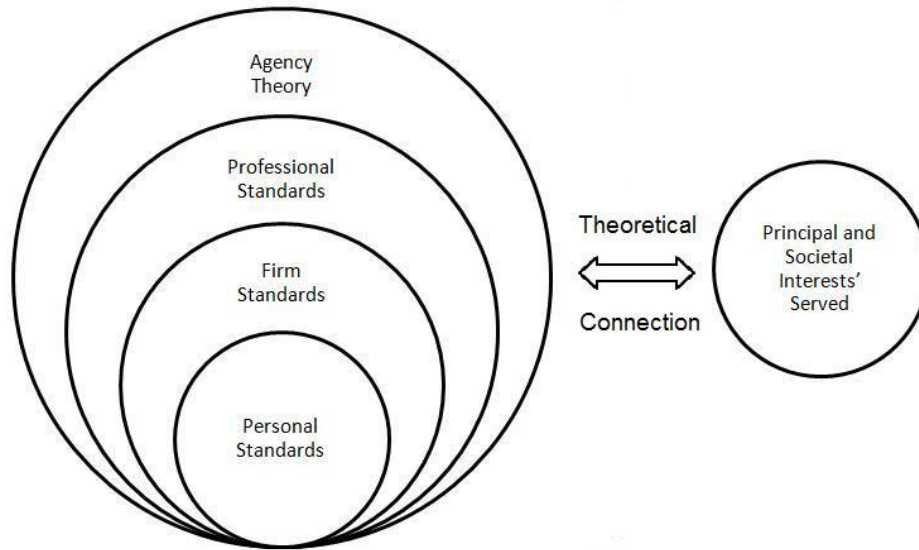


Figure 5. The Relationship of Agency Theory to the Practice of Accounting.

A discussion of each of these layers is provided in the following pages.

### **Professional Standards**

Professional standards of conduct for CPAs are comprised of several layers of regulation, both from private and governmental imposed sources (AICPA, 2011; ORS673, 2011; PCAOB, 2012a; Sweeney, 2012). The first component of such standards are those developed by the AICPA. Governmental regulators such as the SEC or state boards, also introduce additional standards as they deem appropriate, given their views of the need for additional regulation, and in response to perceived audit or compliance failures (Clikeman, 2009). Taken together these standards seek to mitigate the risks of adverse selection, moral hazard, and term modification previously discussed (Mole, 2002). They also seek to ensure that the public interest is protected whilst also protecting the interests of the owner-principal (AICPA, 2011; Mole, 2002).

**AICPA standards.**

The primary body of professional practice standards for CPA's is defined by the AICPA. The AICPA, a voluntary membership organization, promotes the accounting profession in a variety of ways, and promulgates a code of conduct for their behavior, and standards for professional practice (AICPA, 2011).

The first rudimentary ethics rules for CPAs were released by the AICPA in 1905 (Dobbin & Jung, 2010). Currently, the AICPA promulgates a comprehensive code of conduct. It is generally the starting point for ensuring professional CPA conduct, by both public and private regulatory bodies. It then serves as a normative baseline for the imposition of other requirements by governmental regulatory bodies (AICPA, 2011). The effectiveness of AICPA professional standards of conduct are first determined through the voluntary compliance by CPAs. Such standards apply to anyone using the CPA designation, whether in public practice, private business, governmental organizations, or academia (AICPA, 2011).

AICPA standards are intended to protect the public interest, while also ensuring high levels of service quality and attention to the interests of clients (AICPA, 2011). In drawing a distinction between CPAs and other professionals, Almer et al. (2005) referred to this dual responsibility by saying, "...CPAs have a responsibility to third parties including the general public, rather than to just their clients or patients" (p. 5). Moreover, the AICPA (2011) code notes that "the principles call for an unswerving commitment to honorable behavior, even at the sacrifice of personal advantage" (p. 1675). The public expects CPAs to be honest, and to act with the upmost integrity and objectivity in fulfillment of their important role in society (AICPA, 2011).

To that end, the AICPA believes strongly that its focus on multiple principals is paramount amongst its core responsibilities. Accordingly, the code of conduct notes that:

...a distinguishing mark of a profession is acceptance of its responsibility to the public. The accounting profession's public consists of clients, credit grantors, governments, employers, investors, the business and financial community, and others who rely on the objectivity and integrity of certified public accountants to maintain orderly function of commerce. This reliance imposes a public interest responsibility on certified public accountants. The public interest is defined as the collective well-being of the community of people and institutions the profession serves. (AICPA, 2011, p. 1679)

In response to that objective, the AICPA code of conduct requires integrity, independence (both in fact, in mind, and in appearance), objectivity, the absence of conflicts of interest, fidelity to generally accepted accounting principles (as promulgated by the FASB and other secondarily designated financial accounting standards setters), honesty in communication and reporting, and refraining from the commitment of acts otherwise discreditable to the profession. In particular, the code emphasizes that the CPA should never subordinate their judgment to the views of a client manager, owner, or other individual (AICPA, 2011).

The conflicts among the interests of different principals are also a point of concern in the code of conduct (AICPA, 2011). It recognizes that the interest of the owner-principal may be opposed to the interest of the public at large, lenders, or other third parties. It warns the agent-CPA that excessive client advocacy is a threat to the

public interest. As a means of mitigating such concerns, the code defines a number of restrictions on practice including limitations on the nature and scope of services a CPA can provide to a client and parameters for their performance. These restrictions serve as a means to protect professional independence, integrity and objectivity. For example, actions such as the signing of legal documents for a client, or performing internal audit work for an audit client, are services that may impair the CPAs independence and objectivity from an attest standpoint. The code admonishes the CPA to be constantly vigilant for the possibility of threats to their ethical conduct. Among these threats are the risk that the CPA will fail objectively to assess the quality and impartiality of their work, that their work leads them to a point of excessive client advocacy, that their self-interest may cloud their judgment in client matters, that the CPA becomes so close personally to the client that it impairs their impartiality, or that the CPA might subordinate their judgment to the client or third party for reasons of status, remuneration, coercion or other influence (AICPA, 2011)

### **Sarbanes-Oxley/PCAOB.**

Subsequent to the Enron and WorldCom scandals more than a decade ago, in 2002 the United States Congress passed the Sarbanes-Oxley (SarBox) legislation (Clikeman, 2009). Essentially, the need for such legislation was deemed critical as policymakers questioned the CPA profession's ability to protect the public interest through self-regulation. They feared that independent CPA's had inappropriately close ties to client management. They also felt there was a need for reform in the various regulatory monitoring activities in place (Dobbin & Jung, 2010).

SarBox ended the accounting profession's ability to independently regulate itself, at least with respect to the portion of work it performs, particularly audit related, for publically traded entities (Sweeney, 2012). This development was significant in that it added an additional layer of regulatory input to the terms and conditions under which CPAs serve the interests of their clients, as well as the public (Sweeney, 2012).

Perhaps the most significant change to CPA responsibilities brought about by SarBox, was in the creation of the PCAOB (Clikeman, 2009; Sweeney, 2012). The PCAOB introduced the first significant federal regulation of auditing standards and related CPA practice. While the SEC had long interpreted the accounting standards that public companies had to follow, the PCAOB for the first time had direct regulatory oversight of audit conduct. The PCAOB's authority extends only to the auditors of companies whose securities are publically traded (PCAOB, 2012a). But it is believed its actions will have influence over the promulgation of standards by the AICPA, the states, and the behavior of firms and individual CPAs. Indeed, it is believed that the PCAOB has added significant clarity to the terms, conditions, and expectations which embody the agency theory arrangement underlying the practice of CPAs (Sweeney, 2012)

The PCAOB defines its mission as "... to oversee the audits of public companies in order to protect the interests of investors and further the public interest in the preparation of informative, accurate and independent audit reports" (PCAOB, 2012b , p. 1). To accomplish this, the PCAOB has focused on actions that it believes enhance auditor skepticism and overall objectivity (PCAOB, 2012b). Upon review of many of the recent scandals, critics of the profession alleged that for a variety of reasons, CPAs auditing public companies had drawn too close to management of the firms under audit.

Reasons cited for this included the presence of lucrative consulting opportunities beyond auditing, the push for higher fees in general, and the observation that many CPAs eventually left the public practice of accounting to assume positions in the companies they audited (Clikeman, 2009).

Many observers conclude that SarBox had positive effects. As noted earlier, the legislation was passed to address scandals such as Enron, WorldCom, Adelphia, Quest and others (Sweeney, 2012). One observer noted that "the changes in the law were designed to improve - and have improved - the accuracy of financial reporting" (Brosen in Sweeney, 2012, p. 40).

SarBox has not been universally embraced, however. Critics note that its requirements have been very expensive for organizations to implement. In part due to such criticisms, smaller public companies have received exemptions from certain SarBox requirements. Finally, despite the strenuous requirements of SarBox, the PCAOB continues to identify audit deficiencies. For example, it has taken nearly 50 enforcement actions since its founding (Sweeney, 2012).

#### **State of Oregon standards.**

Licensing and certain regulation of CPAs is also the domain of the states, particularly for practice directed at non-publically held companies. In Oregon, as with most other states, the legislature empowers the OBOA to adopt standards promulgated by the AICPA, PCAOB, and other professional bodies for purposes of regulating various services provided by CPAs to the public. Examples of such services include, but are not limited to, audit and tax work (ORS673, 2011, p. 23-24).

The primary objective of the OBOA is to ensure the existence of a credible accounting profession, and to protect the interests of the clients of CPAs as well as the broader public interest. The OBOA (2012) notes that, “the mission of the Oregon Board of Accountancy is to protect the public by regulating... performance of all services provided by licensed accountants” (p. 1).

There are approximately 6,200 licensed and active CPAs in Oregon (Hunsberger, 2013). These individuals work in public practice, private industry, government, and academia. As noted earlier, an important objective of the OBOA is to ensure that CPAs protect the public interest, while they serve their clients interests (OBOA, 2012). State statutes describe this concern as follows:

The public interest requires: (1) the promotion of reliable information used for guidance in financial transactions and accounting for, or assessing the financial status or performance of, commercial, noncommercial and governmental enterprises; (2) that persons professing special competence in accountancy or offering assurance as to the reliability or fairness of presentation of such information demonstrate their qualifications to do so, and that persons who have not demonstrated and maintained such qualifications, including public accountancy professionals not in public practice, not be permitted to hold themselves out as having special competence or to offer such assurance; and (3) that the conduct of persons licensed in having special competence in accountancy be regulated in all aspects of their professional work and that the use of titles relating to the practice of public accountancy that have the capacity or tendency to

mislead or deceive the public as to the status or competence of persons using the titles be prohibited (ORS673, 2011, p. 6-7).

This statement describes well the view that the risk of the adverse selection and moral hazard in particular, are real. State regulation of accountants is thus intended to act as a forum for establishing the terms and conditions to mitigate any effect of issues of CPA self-interest, on owner-principals and the public at large (ORS673, 2011).

The OBOA also is charged with ensuring the independence and objectivity of CPAs in practice. Fearing that CPAs could be somehow induced to certify deviations from accepted accounting principles, OARs note the following:

There is a strong presumption that established accounting principles would nearly in all circumstances result in financial statements that are not misleading. There may be unusual circumstances where literal application of pronouncements on accounting principles would have the effect of rendering financial statements misleading. In such cases the proper accounting treatment is that which will render the financial statements not misleading. The question of what constitutes unusual circumstances is a matter of professional judgment involving the ability to support the position that adherence to a promulgated principle would be regarded by a reasonable person as producing a misleading result (OAR 30-801, 2011, p. 6).

### **Firm Standards**

Given the agency theory inspired professional and legal framework which seeks to define the responsibilities of agent-CPAs to their clients and the public, CPA firms



likewise design various internal standards intended to reflect the appropriate service framework, and inform the actions of their staff. Organizational behavior is the product of a variety of factors, which respond to, and interact with, one another (Wood & Bandura, 1989).

Most CPA firms adopt internal operating practices and standards that are closely aligned, or more stringent, than standards suggested by the AICPA and regulatory bodies (Greenwood & Suddaby, 2006; Hood & Koberg, 1991). But other factors also influence their conduct. These include internal goals and firm culture (Bobek & Radtke, 2007; Hood & Koberg, 1991; Wood & Bandura, 1989).

Goals influence behavior in significant ways (Wood & Bandura, 1989). Within the CPA firm, individual CPA-owners establish goals. These goals assume various characters. Some may relate to efficiency or profitability. Some may relate to quality or professional achievement. Whatever goals the CPA firm establishes, they are generally translated into internal incentives for the individual CPA. These internal incentives have a significant effect on individual CPA behavior. In addition, the mastery of a subject such as accounting, affects individual beliefs about the appropriateness of behaviors, regardless of incentives. The combination of individual response to internal incentives, and the perceived mastery of accounting practice, potentially affects organizational performance. Wood and Bandura (1989) note that, "...human behavior is, of course, governed largely by people's perceptions of their efficacy and the social environments, rather than simply their objective properties" (p. 374).

Part of the concern regarding the social environment discussed above, also relates to firm culture (Hood & Koberg, 1991). The internal culture of the CPA firm may be defined as a set of behaviors, artifacts, and symbols which share common and evolving meanings amongst the members of the group (McCrae, Terracciano, Realo, & Allik, 2008; Hooker, 2003). Or it may also be simply described as "the way we do things around here" (Deal & Kennedy, 1982, p. 4). Whatever level of simplicity one chooses to conceptualize culture, it has a strong influence on how the individual CPA responds to firm espoused standards of conduct (Hood & Koberg, 1991).

Culture plays a material role in determining how individuals behave in organizations, including CPA firms (Gino, Ayal, & Ariely, 2009; Martin, 2004). It informs how individuals value and think about their own personal behaviors (Ponemon, 1992). Schein (1993) developed an understanding of what constitutes organizational culture. He defined it as:

A pattern of shared assumption that the group learned as it solved its problems of external adaption and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 17).

Schein's (1993) description of culture is notable for its implications. It clarifies how organizational participants view their individual place within the organization, how they arrive at their beliefs about the organization, how they view the underpinnings of personal motivation, their underlying philosophical views, and how they communicate

with one another (Martin, 2002; Schein, 1993). It also impacts how they express themselves creatively (Hood & Koberg, 1991).

A strong CPA firm culture, rich with positive symbolism, influences the behavior of individual CPAs (Gino, Ayal, & Ariely, 2009; Hood & Koberg, 1991; Martin, 2002; Ponemon, 1992). Cultures do not always feature traits supportive of organizational success, however. Strong cultures may at times act as a barrier to organizational functioning (Sørensen, 2002). Cultural resistance to the CPA firm's responsibilities under the agency theory-inspired regulation of accounting practice may result. For example, there may exist an imbalance between internal culture symbols within a firm (e.g. achieving profitability goals), as compared to cultural symbols which emphasize the protection of the public interest. CPA firm managers must seek to ameliorate any inconsistency between firm culture, and accountant professional responsibility (Bolman & Deal, 2003; Denison & Mishra, 1995). Such efforts to manage culture are difficult, however (Martin, 2002). For example, research suggests that the nature of culture, and its impact on individual and subculture behavior, varies depending upon overall firm size (Haugh & McKee, 2004). As accounting firms differ in size quite dramatically, the role of managing individual CPA firm cultures in a manner supportive of professional objectives must be tailored in each circumstance (Hood & Koberg, 1991). Moreover, Ponemon (1992) suggests that socialization processes within firms have the potential to select out highly ethical individuals, if the underlying firm culture fails to honor or prioritize ethical behavior in meaningful ways.

In light of these considerations, CPA firm leaders seek to design internal practice rules, professional guidelines, and individual incentives, in order to manage their

organizations, the behaviors of their staff, and ensure an internal firm culture supportive of their professional responsibilities to clients and the public (Hood & Koberg, 1991; Wood & Bandura, 1989). Their ability to successfully manage these processes leads to the fulfillment, or not, of the agent-CPAs responsibilities to clients and the public interest (Clikeman, 2009; Hood & Koberg, 1991; Wood & Bandura, 1989).

### **Individual Standards of Conduct**

As noted earlier, the agency theory inspired incentives and structures underlying the notion of CPA practice, rely greatly upon voluntary cooperation by individual CPAs (AICPA, 2011). At the level of the individual, incentives, standards, or regulation, may be insufficient to ensure that CPA actions protect the interests of all principals (Burger et al., 2007). Thus, the conduct of the individual warrants further discussion.

Certain aspects of the behavior of CPAs driven by individual psychology (e.g. creativity), have not been extensively studied (Bryant et al., 2011; Tenbrunsel & Messick, 2004). In other cases where a significant body of research exists regarding CPA behavior, such research has at times shown contradictory results (Conroy et al., 2010; Gendron et al., 2006; Radtke, 2000). For example, some research suggests that certain traits present in individual CPAs correlate to greater levels of ethical conduct. Research completed with large, multi-national accounting firms, concluded that CPA's act more ethically as their level of experience in their firm increases (Ponemon, 1990). This behavior changes, however, as the individuals reach the highest levels of firm hierarchy (Ponemon, 1990). Conversely, Conroy et al. (2010), who showed CPAs thirty vignettes featuring ethical dilemmas in accounting and control matters, produced evidence

indicating that age was a positive predictor of ethics. In essence, they posited that older CPAs may be less accepting of moral ambiguity than younger CPAs (they cautioned that their findings were somewhat inconsistent with that of other research). Similarly, Karcher (1996) found age to be a positive predictor of individual sensitivity to ethical dilemmas. But as Ponemon (1990) and Ponemon and Gabhart (1994) suggest, if one equates age with experience, one would expect age to be a negative predictor of ethical behavior.

In addition, the same Conroy et al. (2010) research noted above suggested that female CPAs were more likely to reject moral ambiguity than male CPAs. In another study, professional accountants in four southern states were surveyed about the importance of issues facing the profession (Ibrahim & Angelidis, 2009). The authors observed that women were somewhat more concerned about professional ethics than men. Technical competence, rather than ethics, was the highest concern of both genders, however (Ibrahim & Angelidis, 2009). Sweeney (1995) extended this discussion over gender differences further by suggesting that those at higher levels of firm hierarchy perhaps had lower ethical conduct as fewer women were represented in their ranks. In contrast however, Radtke (2000) found similar responses between men and women when responding to vignettes representing ethical dilemmas. Similarly, Karcher (1996) found insignificant differences between genders with respect to individual sensitivity to ethical dilemmas.

In another example of existing research, through a survey of Chartered Accountants in Canada (the Canadian equivalent of an American CPA), Gendron et al. (2006) noted that older, more experienced professionals, working in smaller firms, and

focused on accounting and auditing, were more supportive of auditor independence requirements than younger, less experienced, consulting and tax professionals working in larger firms. They construed support for independence requirements as a proxy for ethical values. Despite these findings, the authors cautioned that they were preliminary in nature, and required further substantiation (Gendron et al., 2006).

Viewing the issues in a different way, a common failing that scholars have observed in a variety of accounting scandals is rationalization. In many instances of accounting scandal, upon reflection, it is clear that individual CPAs simply rationalized unethical behavior (Clikeman, 2009). Bandura (2002) notes that during the act of rationalization, people employ a variety of techniques such as the creation of “sanitizing language” (p. 104) as a means to disguise ethical dilemmas inherent in their behaviors. In essence, they conceptualize their behaviors in a fashion so as to deflect personal responsibility (Bandura, 2002; Gino, Ayal, & Ariely, 2012).

In addition to the above, Bandura (2002) found that individuals rationalize their behaviors through a “diffusion of responsibility” (p. 107). This represents thought processes that serve to eliminate feelings of personal responsibility. This commonly occurs during times of group decision making, and other formal divisions of work responsibility (Bandura, 2002). In the accounting context, Radtke (2008) likened this to Applbaum's (1999) theory of role morality, essentially justifying otherwise unacceptable harm to another, if such harm occurs solely through the completion of one's duty as a CPA. While that study found that a majority of CPAs queried rejected the notion of role morality, as a group they were less repulsed by it than physicians (Radtke, 2008).

A third way individuals rationalize their behaviors is through a “distortion of circumstances” (Bandura, 2002, p. 108). In this case, the individual attempts to place distance between their actions, and notions of harm suffered by others. They do this through characterizing of the true circumstances resulting from their behavior in a manner so as to minimize perceived harm or other negative consequences (Bandura, 2002).

While rationalization may be enabled through a variety of means, ultimately it reflects unwillingness by the individual to take responsibility for their actions. This directly contradicts the affirmative responsibility that professional and regulatory standards require from the CPA in practice. Throughout those standards, the CPA is reminded of their duty to consider the public interest at all times. They are encouraged to reflect upon their personal conduct in a critical, thoughtful manner (AICPA, 2011; ORS673, 2011). The absence of this sort of recurring self-censure, whether caused by rationalization or some other factor, may very well lead the CPA to take actions that fail to respect the interests of the owner-principal, or the public at large, and which violate professional ethics (Bandura, 2002; Clikeman, 2009; Sweeney, 2012)

In light of the above observations, it is instructive to further explore the underpinnings of human behavior, and its possible moderating effect on agency theory. Bandura (2002) describes human behavior through the lens of social cognitive theory. Based upon that theory, moral behavior is the product of personal and social influences. Individuals initially adopt personal standards for their behavior. They later adjust their behavior based upon the confluence of those standards and the circumstances they

encounter (Bandura, 2002). Bandura (2002) notes that "...moral actions are the product of the reciprocal interplay of cognitive, affective and social issues" (p. 102).

Bandura (1978) theorizes personal behavior is theorized as the product of various processes working in concert with one another. Examples of those processes include aspects of individual performance, such as quality concerns, or a desire for personal authenticity. Matters of judgment such as personal standards, social norms, judgments about the collective value of actions, are also examples of such processes. Finally, self-response mental processes such as instinct, gut-feelings, or response to rewards, are processes which also drive behavior. Incremental improvement in the personal behavior of an individual is realized over time as the individual learns from this interaction of factors (Bandura, 1978).

Self-regulation ultimately allows the individual to modify their behaviors to an acceptable form. Bandura (1978) describes this process as "... the development of capabilities for self-reaction requires adoption of standards against which performances can be evaluated" (p. 353). Various external factors (e.g. professional, regulatory, or firm norms of behavior) exist to reinforce these individual, self-regulatory processes (Bandura, 1978).

Unfortunately, individuals may disengage from the various regulatory processes over their behavior (Gino et al., 2012). This risk also relates back to the notion of rationalization. "Reprehensible conduct is made personally and socially acceptable by portraying it in the service of beneficial or moral ends" (Bandura, 1978, p. 354). To the extent that the CPA rationalizes unethical behavior, particularly through disguising such actions as moral (e.g. overstating earnings to raise shareholder value), the owner-



principal, and the public interest will not be served (Bandura, 1978; Bandura, 2002; Clikeman, 2009; Radtke, 2008).

The individual behavior of CPAs also develops over time. Through service and experience, and through exposure to other environmental factors (e.g. professional standards), the CPA ultimately comes to define their behavior. These and other factors interact, ultimately coalescing into behaviors unique to each individual (Bandura, 1983). Individuals and their environments do influence one another. As it pertains to CPA practice, however, individuals ultimately must choose behaviors that respect the terms that underlie protection of owner-principal, and the public, interests, despite occasional environmental incentives to do otherwise (AICPA, 2011; Bandura, 1978).

### **Agency Theory and its Ability to Describe CPA Behavior**

Regulation of the accounting profession has been designed with the notion of agency theory at its foundation (Jensen, 1983). Unfortunately, and as noted earlier, despite the extensive body of terms, conditions, incentives, and practice guidance for CPAs, individuals have contributed to a variety of accounting scandals over time. In these, the profession witnessed business failure, where significant amounts of capital was lost, and public confidence in the financial system was damaged (Clikeman, 2009). Despite the agency theory-inspired reforms (e.g. SarBox) that followed such scandals, one does begin to wonder whether accounting standards and rules of practice are unable to adequately predict individual CPA behavior (Zeff, 2003a; Zeff, 2003b).

Indeed, accounting scandals do seem to provide evidence that the terms and incentives (i.e. professional standards) of the principal/agent agreement underlying accounting practice fail to universally explain individual CPA behavior. As previously noted, individual behavior is at times influenced by factors other than those terms (Cohen & Holder-Webb, 2006). One may reasonably question whether formal terms and incentives underlying accounting work effectively to prevent unethical actions by CPAs (Aßländer, 2005; Clikeman, 2009).

Scandals such as Enron suggest that agency theory-inspired terms and incentives do not always work. Agency theory, as a positivist notion, claims to represent discernible truth. That claim may be excessive, and may lead to a belief in the infallibility of agency theory-inspired standards as a predictor of individual CPA behavior (Ghoshal, 2005). For example, optimistically, it would appear reasonable to assume that certain individuals serve principals well without the need for significant incentives. Conversely, despite the rigor and persuasiveness of existing incentives, it is also reasonable to conclude that some individuals may not represent the principal's interests well, given their circumstances (Fong & Tosi, 2007). Buchan (2005) observed that individual attitudes towards appropriate standards of conduct greatly influenced their intended behaviors. Unfortunately, Tenbrunsel and Messick (2004), again with regard to Enron and other scandals, observed that detailed "...codes of conduct... have in some cases produced no discernible differences in behavior" (p. 224).

Various scholars are searching for explanations as to why the agency theory model appears to fail in universally predicting CPA behavior. To that end, Zeff (2003b) observed that the decline in the effectiveness of the accounting regulatory system to

prevent scandal, tied directly to the rise in the rendering of increasing volumes of consulting services. Consulting services represent the more creative, and less regulated part of accounting practice (Zeff, 2003b).

Moreover, there has been much speculation about how the accounting profession has evolved in recent decades. In that regard, a few important developments warrant mention. First, in the 1970s, the profession witnessed the introduction of greater competition with the repeal, from the code of conduct, of prohibitions against the solicitation of another CPA's client (Hood & Koberg, 1991). Around the same time, the profession experienced a rapid increase in the growth in the rendering of consulting services delivered by CPA firms to their audit clients, and others. Next, some allege that with the creation of accounting standard setters independent from the AICPA (e.g. FASB), the large multi-national CPA firms began an incremental withdrawal from a variety of other professional activities (Zeff, 2003b). Critics argue that this withdrawal led to more insular, firm specific behavior (Clikeman, 2009; Zeff, 2003b). In addition, some also allege that over roughly the same time period the profession's identity evolved from that of an accounting and audit service provider, to that of a more general, business advisor. Finally, these factors taken as a whole are believed by some to have led to a weakening of the multi-agent commitment of individual CPAs, and CPA firms. That commitment was believed to have morphed from one primarily focused on the public interest, to one of fidelity to the client management's interest, and the short-term financial results possible from lucrative consulting opportunities. Audit work, a pillar of capital markets, and a point of reliance for owners and society, became a loss-leader for CPAs eager to consult for client managers (Zeff, 2003b).

The critics of the agency theory as framework for accounting practice are many. One may argue that an agency theory-inspired view of ethical accounting practice has limited usefulness in that its ultimate effectiveness is dependent on individual compliance (AICPA, 2011; Yuthas et al., 2004). Scholars argue that agency theory alone cannot fully predict individual behavior. They note that the varying stages of individual development affect ethical behavior, particularly as individuals relate their self-interest to the various terms and incentives they face (Martynov, 2009).

Moreover, critics note that the reliance on self-interest, premised in agency theory, may in itself lead to suboptimal results. "When self-interest is perceived as the norm, people will behave in a self-interested manner and expect others to do the same" (Cohen & Holder-Webb, 2006, p. 22). In essence, concerns exist that intense focus on self-interest becomes self-fulfilling with damaging circumstances. Individuals may at times blindly pursue their self-interest, despite appropriate incentives to do otherwise. This may in part be caused by the belief that individual self-interest is a learned behavior. Conflicts between individual self-interest, and expected behavior, may become so great, that incentives alone may not suppress them. Individual incentives, such as high remuneration, could become so out-of-proportion to other aspects of the agency relationship, that responsibilities to the public interest may indeed be lost. As it pertains to accounting practice or other specialized fields, individuals develop an understanding of such self-interest through socialization and study (Ferraro et al., 2005; Ponemon, 1992). If such processes do not adequately emphasize moral duties, such as a responsibility to the public interest, unacceptable behavior may result (Ponemon, 1992; Quinn & Jones, 1995).

Critics of agency theory also note that the underlying incentive structure within principal/agent arrangements is not alone sufficient to explain agent behavior. Other factors may serve as motivators of individual behavior, or otherwise moderate the effect of incentives on agent behavior (Fong & Tosi, 2007). Agency theory, while based upon notions of the relationships of individuals to each other, has little basis in sociological research (Shapiro, 2005). As noted earlier, information about the agent is frequently unknown by the owner-principal. This information asymmetry potentially creates adverse effects on the principal. To counter this, the accounting profession and regulators develop rules, licensing requirements, ethics requirements, self-regulation processes, training and development programs, and other terms and incentives, as a means to mitigate potential problems. Regulators seek to overcome adverse selection through the existence of these processes. These processes are typically outcome oriented, such as the attainment of a license to practice. They often are not behavior oriented, however. Given the time lag involved in evaluating complete outcomes, improper behaviors may not be discovered until after a scandal has progressed to a point beyond repair. Moreover, the multiple agent nature of accounting practice creates added challenges for the professional and regulatory bodies attempting to monitor the CPA's work. They may simply make mistakes, or place monitoring emphasis in the wrong area (Shapiro, 2005).

Agency theory inspired thinking may also become excessively embedded in the culture of organizations. In doing so, it may motivate behavior in destructive ways (Kulik, 2005). For example, individuals are often principals and agents at the same time. CPAs serve as an agent of their client and the public interest (AICPA, 2011). But they

also may be a principal-owner within their CPA firm context. The conflict of interest inherent in this scenario potentially dilutes the effectiveness of incentives underlying that CPA's service to the audit client. Shapiro (2005) notes that, "... the assumption that principals are in the driver's seat is problematic" with respect to their ability to bargain for proper terms and incentives with the CPA (p. 267). In addition, various accounting scandals suggest that CPA firms may have focused too much emphasis on their own interest (e.g. internal profitability). As a result, their ethical focus may have been on a superficial interpretation of requirements, rather than the perhaps time consuming effort underlying the pursuit of individual or firm virtue (Clikeman, 2009; Kulik, 2005).

Goal conflict is the classic agency problem. Agency theory suggests that aligning the goals of the agent to that of the principal is a solution to mitigate the problem (Jensen & Meckling, 1976). This solution potentially oversimplifies the complexity of organizational life, and accounting practice. As noted earlier, circumstances often require the CPA-agent to make decisions based upon the interests of multiple principals, including themselves (Shapiro, 2005). Individual CPAs may make different professional judgments than their peers, despite encountering similar circumstances. The AICPA (2011) code of conduct acknowledges the possibility of honest differences of opinion. But such differences have been observed to lead to earnings manipulation at times, which is a common problem observed in accounting scandals (Clikeman, 2009; Cohen, Pant, & Sharp, 2000).

In addition, the expertise required in specific situations (e.g. audits of financial statements), may shift the balance of power within the agency relationship from the owner-principal (and public interest), to the CPA-agent. Over time, personal

relationships between the CPA and the management of a client may socially reframe the principal/agent relationship in unacceptable ways (Shapiro, 2005).

Scholars have observed that immoral behavior is often driven by individual psychology, rather than by normative views of the regulatory structures of a profession. Self-interest is theorized to respond to incentives to reduce principal/agent conflict. Despite this, human behavior cannot always be conformed to such a normative ideal (Jensen, 1994). The greater the opportunity for rationalization presented by a given situation, the more likely it is to occur (Bazerman & Gino, 2012). Rationalization, as previously discussed, is related to the notion of self-deception. Probing the construct of rationalization further, Tenbrunsel and Messick (2004) note that to "...deceive oneself somehow implies that one must know that something needs to be hidden or kept secret" (p. 225). Intentionally deceptive actions such as this were significant contributors to the many recent accounting scandals (Clikeman, 2009). Said another way, excessive individual focus attention on self-interest appears to have been a significant factor that led to self-deception. It may represent a significant flaw in the applicability of agency theory to the practice of accounting (Tenbrunsel & Messick, 2004).

One may further argue that CPAs are taught to choose behaviors that align closely with their self-interest, rather than behaviors that may be best from a normative or conceptual basis. They may at times also suffer from the notion of unrealistic optimism. The focus on self-interest may also cause an individual CPA to fail to anticipate the loss of their personal objectivity. This loss may relate to the conflicts of interest discussed above (e.g. lucrative fee opportunities), or it may relate to individuals decision-making when confronted with complex circumstances (Bazerman & Gino, 2012; Clikeman,

2009). To solve complex problems in a manner that aligns with the CPA's self-interest, the CPA may be tempted to apply unusual or creative solutions that otherwise may not conform to professional or societal expectations (Shaub & Fisher, 2008). For example, Zhang (2008) found that in a multi-agent setting, an agent may condone unethical behavior, if they view the principal as unethical. Similarly, the CPA-agent may condone a client cheating on their tax liability if they view the government as likely to waste the tax dollars collected. That research further suggests that such perceived unfairness has been shown to also lead to collusive behavior amongst agents (Zhang, 2008).

In summary, critics of agency theory's ability to predict the behavior of CPAs in practice can cite scandal after scandal to support their argument (Clikeman, 2009). Research into such scandals has led to a series of reforms intended to address the adequacy of the underlying incentives, terms, and conditions (i.e. professional standards) under which CPAs practice (Clikeman, 2009; Zeff, 2003a; Zeff, 2003b). The implementation of the SarBox legislation does appear to have improved the reliability of financial reporting somewhat (Sweeney, 2012). Certain scholars suspect that individual psychology might better be used to predict CPA behavior, however (Tenbrunsel & Messick, 2004). While that may be true, research has yet to resolve this concern either way.

### **Does Agency Theory Adequately Predict CPA Behavior?**

As noted above, despite the extensive body of terms, incentives, and other guidelines in place to govern accounting practice, agency theory may not be able to predict the behavior of agent-CPAs, with respect to owner-principals and the general public. In light of this, one is left to consider what other factors might be relevant. To this



end, some voices have suggested that research ought to consider elements of individual psychology for possible answers (Tenbrunsel & Messick, 2004).

Elements of individual psychology may indeed provide insight, as the agency theory-inspired rules for accounting practice are predicated on individual cooperation (AICPA, 2011). An individual CPA, who chooses not to cooperate with those requirements, may go undiscovered for some time. This is notable, as in recent laboratory experiments with non-CPA volunteers, findings suggested that if a regulatory scheme is optional, unethical behavior is more likely to occur. Furthermore, if such regulation is easy to avoid, worse outcomes were more likely to result than if there had been no regulation in place at all (Gino, Krupka, & Weber, 2012). As Jones (1991) notes, unethical behavior equates to behaviors that are "... either illegal or morally unacceptable to the larger community" (p. 367). In essence then, CPA behaviors that violate the agency theory inspired rules of practice may be considered as unethical behaviors (AICPA, 2011).

Given that conclusion, identifying the elements of individual psychology underlying unethical behavior as observed during the recent accounting scandals becomes an important consideration. Gino and Bazerman (2009) observed that situational context often drives the behavior of individual. For example, personal characteristics and attitudes have been found to override the regulating role on behavior implied by agency theory. Female, more experienced accountants, those participating in traditional accounting and auditing work, and those working at smaller firms have been observed as possibly having more ethical attitudes. Findings have been somewhat contradictory

regarding age, however (Conroy et al., 2010; Gendron et al., 2006; Ponemon, 1990; Ponemon & Gabhart, 1994).

Scholars generally agree that creative accounting was at the heart of the Enron and other scandals seen in the past few decades (Aßländer, 2005; Clikeman, 2009). One characterized this as "... although Anderson [Enron's independent auditor] should have been keeping an eye on Enron's business and accounting practices it was more concerned with creative finance and accounting tools for their biggest client" (Aßländer, 2005, p. 66).

The notion of creative accounting has been described in a variety of ways. One example is "...any and all steps used to play the financial numbers game, including aggressive choice and application of accounting principles, fraudulent financial reporting, and any steps taken towards earnings management or income smoothing" (Mulford & Comiskey, 2002, p. 3). Intentional deception, even if otherwise within the rules of acceptable practice, highlights a possible limitation of agency theory as a framework for predicting the behavior in CPAs (Kulik, 2005). Such deception appears more likely to occur in organizations where the behavior of creative individuals is motivated by the underlying organizational culture (e.g. Enron) in a manner that the malevolent judgments associated with creative accounting, are actively encouraged. This occurs despite the traditional agency terms and incentives in place (Bandura, 1989; Beaussart et al., 2012; Kulik, 2005). Moreover, against the grain of prior research findings, a recent study of non-CPAs suggests that creative people are more likely to be dishonest than non-creative people (Gino & Ariely, 2012). In light of these findings, it is important to further explore the construct of creativity and its relationship to the practice of accounting.

## **Background on Creativity**

The world is increasing complex and challenging. Technology, globalization, demographic change, scarce resources, and many other factors drive a need for constant innovation, and the design of creative solutions to the problems of the contemporary world. Zeng et al. (2011) recently described this dilemma well with the statement, "...to pursue sustained development, society has placed more emphasis on creativity than ever before" (p. 24). Creativity has therefore been considered a useful, even essential, skill for individuals and organizations (Gino & Ariely, 2012).

While acknowledging the need for creativity in solving societal problems, scholars do however have difficulty defining what exactly it represents. Psychologists, behavioral scientists, and other professionals frequently grapple with agreement on a generally accepted definition. Despite their differences, most definitions of creativity do include the notion of producing results that are socially valuable (Kerr & Gagliardi, 2003). Moreover, beyond their value, a significant number of scholars look to outcomes themselves to define whether individual behavior is creative or not (Amabile, 1988). Finally, at times creativity is simply thought to be whatever an appropriate expert labels it, again based upon outcomes (Domino & Giuliani, 1997).

To that end, creativity is often regarded as behavior that results from the application of individual skill to specific subject matter. Many argue further that creative behavior is dependent on an individual possessing a significant degree of expertise in an area or skill in a given area (Csikszentmihalyi, 1996). "Expertise is necessary for creativity... creative individuals rely on their content-specific knowledge to reason about

the immediate problem situation and produce creative solutions accordingly” (Zeng et al., 2011, p. 33).

Noting the requirement for expertise, many argue that creativity should be viewed at a domain level. It is argued that creativity is a "domain specific, subjective judgment of the novelty and value of an outcome or product of a particular action" (Ford & Gioia, 2000, p. 707). Moreover, creativity appears to be enhanced when individuals with common views, in a common context, work on matters that are surrounded with uncertainty (Ford & Gioia, 2000).

Given that creativity appears to be a domain specific behavior, yet one which produces beneficial results for society, one must further consider that creativity can result from either targeted, or routine behaviors. Ideas or innovations may result from either type of work, in that either can lead to something new and valuable. Muhr (2010) argues that creative process causes changes in the individual. But that same creative process must disregard the notion that its result will in fact be something useful. Creative thought must be open-ended, essentially responsive to the idea that preconceptions of outcomes may not be correct. Further, Muhr (2010) argues that creativity is not about what one does, but how one comes to know oneself. It is not simply about creating something new, but rather the recognition that the status quo should be challenged (Muhr, 2010).

The open-mindedness needed for creativity suggests that certain individuals are more likely to be creative than others. Scholars have identified a variety of characteristics of creative individuals and seek to design instruments sufficient to measure such characteristics. Such measurement is often difficult, however, or requires substantial expertise (Kerr & Gagliardi, 2003). For example personal characteristics

indicative of high personal creativity, identified through research, include wide personal interests, an openness to environmental complexity, high levels of personal intuition, keen individual sensitivity to environmental aesthetics, high tolerance of ambiguity, and strong personal self-confidence (Oldham & Cummings, 1996). As another example, in a study designed to assess how working conditions, and other elements of organizational context led to higher individual creative behavior, among other findings, the authors noted that individuals with the aforementioned characteristics produced the most creative work product (Oldham & Cummings, 1996). Accordingly, creativity and creative potential appear to be related to individual psychological characteristics, as opposed merely to environmental context (Kerr & Gagliardi, 2003; Muhr, 2010; Oldham & Cummings, 1996).

### **Creativity and CPAs**

Increased globalization, business complexity, rising client sophistication, and other factors require an emphasis on creativity in the practice of accounting, just as in other disciplines in business (Al-Beraidi & Rickards, 2006). The AICPA (2011) notes that, among other skills, active problem solving and the ability to think creatively are integral to CPA success in the future.

There is not a significant body of research on creativity in accounting, however (Bryant, Stone, & Wier, 2011). One study, completed using data provided by the U. S. Department of Labor, suggested that creativity is an important characteristic in accountants. Based upon a statistical analysis of benchmark data for the occupational categories of accounting, law, health care, and engineering, the authors concluded that

accounting work requires as much creativity as the other professions. The study results did suggest, however, that differences existed between aspects of accounting practice. For example, financial analysis was found to require more individual creativity than audit or tax practice (Bryant, Stone, & Wier, 2011). Another study, found that perceptual differences existed regarding the creativity of individual CPAs. Through a survey of professionals working in large CPA firms in a large western city, the authors found that partners of those firms were more likely to view the internal culture of the CPA firm as innovative and supportive of creative behavior, than did lower ranking staff members. No significant differences were found among practice areas, however (Hood & Koberg, 1991).

Despite the need for creativity, Bryant, Stone, and Wier (2011) observed that the field of accounting may not attract highly creative individuals. They posited that this was due to a general perception that creativity is not a necessary skill for success, or is otherwise not valued within the profession (Bryant et al., 2011). Many people wrongly assume that accounting does not require creativity and imagination (Teodora & Nicolae, 2009). Indeed, other scholars note that the perception that creativity is a job requirement is a significant determinant of the degree to which employees will exhibit creative behaviors (Unsworth, Wall, & Carter, 2005). Moreover, the accounting profession often laments that it may not adequately attract creative people. This concern relates to the fact that accountants generally must adhere to the previously discussed agency theory-inspired rules and practice requirements designed to protect the public interest. It is feared therefore, that creative individuals may choose to pursue other fields which offer a less structured professional framework (Shaub et al., 2005).

Ironically, creativity has been found to be a useful skill for CPAs, especially in financial accounting and analysis (Bryant et al., 2011). Indeed, creativity in accounting may not be a bad thing. One suspects that intent determines the character of individual actions (Ali Shah, Butt, & Tariq, 2011). Moreover, in a survey of financial managers in Romania, there was clear consensus that they preferred accountants who were creative and innovative, as opposed to those who were not. It was further observed that most organizations need access to creative individual accountants simply to meet the requirements of increasingly complex, financial reporting responsibilities (Teodora & Nicolae, 2009). Finally, as it pertains to ethical dilemmas, one study resulted in the conclusion that "... creativity may enable individuals to develop complex solutions to difficult ethical problems" (Bierly, Kolodinsky, & Charette, 2009, p. 102). Creativity most certainly has the potential to be a useful skill in an accounting context.

In contrast, creativity introduced into accounting has not always been viewed positively. "Most of us consider the financial accounting activity rigid, which does not have the possibility of using imagination" (Teodora & Nicolae, 2009, p. 844). As noted earlier, the abuse of creativity has been observed in many of the recent accounting scandals. Jones (2011a) described the essence of this problem as "using the flexibility in accounting within the regulatory framework to manage the measurement and presentation of the accounts so that they give primacy to the interests of the preparers not the users" (p. 5). Ali Shah et al. (2011) suggested that:

...creative accounting refers to the use of accounting knowledge to influence the reported figures, while remaining within the jurisdiction of accounting rules and

laws, so that instead of showing the actual performance or position of the company, they reflect what management wants to tell the stakeholders. (p. 531)

Other scholars simply commented "creative accounting is recognized as a synonym for deceptive accounting" (Sen & Inanga, n.d., p. 3). In essence, from an agency theory perspective, creative accounting leads the CPA-agent to ignore the interests of the public and other owner-principals, thereby compromising their ethical responsibility (AICPA, 2011).

While scholars have attempted to develop a theoretical framework regarding the behavior underlying creative accounting, there does not appear to be one unifying theme as to what it is, or why it happens. Based upon a meta-analysis of existing literature on creative accounting in Europe, euphemisms for its effects range from cooking the books to earnings management (Balaciu, Bogdan, & Vladu, 2009). Creative accounting does appear to take many forms, but it frequently manifests itself as earnings management, the acceleration of revenue recognition, improper valuation of assets, understatement of liabilities, and failures to properly define the accounting entity (Ali Shah et al., 2011; Clikeman, 2009; Gowthorpe & Amat, 2005; Mulford & Comiskey, 2002). It has also been observed as attempts by individual CPAs or firms to influence the overall accounting standard setting process in a manner that would further the self-interest of financial statement preparers, at the expense of the public interest (Gowthorpe & Amat, 2005). While accepting that flexibility in the application of accounting principles is essential in a complex business world, such adaptation cannot come at the expense of accuracy in financial statements (Mulford & Comiskey, 2002). Indeed, creativity, abusive in intent, appears to be a concern in accounting, and a potential problem with



individual CPAs. This is evidenced by Enron, abusive tax shelters, and other scandals (Burger et al., 2007; Mulford & Comiskey, 2002).

How creative are CPAs? If significantly creative, what link may exist between individual creativity and the notion of creative accounting? Little research has been conducted in this area. As noted earlier, Ford and Gioia (2000) suggest that creativity manifests itself from a platform of domain level expertise, such as professional accounting skill. As such, professional accounting skill should form the foundation upon which one could observe individual creativity occurring (Amabile, 1996). Furthermore, creativity in itself need not imply a lower commitment to, or lack of compatibility with, high personal values and conduct. For example, in simulated cost allocations, MBA students with creativity training appeared to reach more equitable solutions, as compared to other students without such training (Ogilvie & Simms, 2009). In another study of Ph.D. students (responding to questions that presented ethical dilemmas), creative thinking and ethical decision-making appeared closely related (Mumford, Waples, Antes, Brown, Connelly, Murphy, & Devenport, 2010). Reflecting on Enron and other recent accounting scandals, Carnegie and Napier (2010) suggest that greater individual CPA creativity is a byproduct of the profession's movement towards the business advisor role, as opposed to the accountant and auditor role previously discussed (Zeff, 2003b).

The structure of an accounting practice impacts the individual creative expression of CPAs, however. Kirton (1976) notes that creativity in an unstructured setting is more likely to lead to innovative behaviors, while creativity in a formal, structured setting will more likely lead to adaptive behaviors (e.g. adhering to principles). This implies a greater likelihood of adaptive behavior by accountants, rather than innovative behaviors.

For example, in a study of creativity among professional accountants in Saudi Arabia, the findings suggested that accountants exhibit both adaptive and innovative behaviors within their practices. The nature of their specific work assignments largely determined which behavior, adaptive or innovative, would emerge (Al-Beraidi & Rickards, 2006).

There is also significant evidence to suggest that levels of individual creativity are consistent across professions (Meneely & Portillo, 2005). If that is true, CPAs, to some degree, ought to exhibit similar levels of creative behavior, as compared to other professionals. It may be however, that prevailing generalizations about the low level of creativity in CPAs may, to some degree, limit individual demonstration of creative behavior in the workplace. This relates to social desirability bias, essentially the tendency of individuals to conform to the behavior of the larger group (Meneely & Portillo, 2005). Creativity, therefore, appears to be both an individual and group concern.

#### **Possible convergence with international accounting standards.**

Material to the discussion of creativity and accounting is the possible convergence of accounting standards within the United States, with those used elsewhere around the world. The notion of convergence has been analyzed for over a decade. Many believe that it would improve financial reporting both in the United States and around the world (Garmon, 2012). Others fear that it could possibly make standards more vulnerable to creative abuse (FASB, 2002). Convergence efforts began in 2002 with the Norwalk agreement. In that agreement, the FASB and the IASB agreed to undertake a convergence process with the objective of resolving major differences between existing accounting standards (Tyson, 2011). The SEC concurred with this objective, and originally scheduled convergence of accounting standards for U. S. registrants to begin in

2014 (Carpenter & Mahoney, 2011). Convergence of accounting standards was believed to be important, given the rapid globalization of business and capital markets seen in the past decade (Moussa, 2010).

As background, IFRS is the required basis of accounting in over 120 countries worldwide. In the United States, GAAP is determined through a variety of processes, however it primarily is determined through the deliberations and pronouncements of the FASB. U. S. GAAP has come under a degree of criticism in recent years. Indeed, despite its rigor and complexity, many argue that it failed to prevent the Enron and other scandals (Tyson, 2011).

The benefits of convergence are thought to include better U. S. competitiveness in capital markets, lower capital costs, greater market efficiency, and ease for international investment analysis. Possible disadvantages of convergence include the loss of domestic control over accounting standard setting process, costs of IFRS implementation, some question as to whether IFRS is superior to U. S. GAAP, confusion over roles of the FASB and SEC post-convergence, and a lack of industry specific accounting standards under IFRS (Reilly, 2011; Tyson, 2011).

Much of the contention about the convergence question relates to the underlying character of accounting standards. In the U. S., accounting standards are rules-based in character. International accounting standards have a principles-based character. There is a significant debate whether the switch from a rules-based accounting principle regime, to a principles-based system would produce more reliable or higher quality financial reporting results. Hail, Leuz, and Wysocki note that (2010a), "... there is little

disagreement that current IFRS are less specific and provide less application guidance than U. S. GAAP” (p. 376).

There is great agreement that U. S. accounting standards are very complex. Due to their complexity, standard setters, the profession, and individual firms, have invested significant resources in detailed guidance for individual practitioners. This guidance does eliminate some of the need for individual interpretation of standard intent and meaning. Some scholars however, believe that the rules orientation encourages CPAs to seek loopholes in their application (Clay, 2007).

In other countries, the adoption of IFRS has generally been considered to have provided improvement in financial reporting practices. In most of those cases, however, the adopting country did not have the tradition of the detailed accounting standards prevalent in the U. S. Moreover, scholarship on the subject is generally inconclusive (Clay, 2007; Hail et al., 2010a). For example, in experiments with 98 experienced preparers of financial statements, those preparers exhibited less aggressive financial reporting behaviors under principles-, versus rules-based, set of standards. The researchers construed that this may be the result of some level of overconfidence by accountants in their ability to interpret and apply rules. They also suspected that the ability to creatively manipulate transactions in a manner to fit specific rules, could explain the findings. They concluded that “less guidance, in theory, increases the need to apply professional judgment consistent with the intent of the standards” (Agoglia, Douppnik, & Tsakumis, 2011, p. 750). Other scholars also argued that with one set of standards, CPAs will be better able to see to their consistent application in the case of

multi-national enterprise. While these claims may indeed be true, the matter cannot be resolved until convergence actually occurs (Reilly, 2011).

Convergence faces significant political opposition from within the U. S. American financial statement preparers are accustomed to the guidance underlying a system of detailed standards and disclosure requirements (Hail, Leuz, & Wysocki, 2010b). Many express concern that a switch to a principles-based system would lead to greater litigation. Others argue that principles-based accounting standards could be more prone to creative accounting abuse, given its lower level of specificity. Whether IFRS is adopted in the U. S. or not, global convergence will require substantial change in the training and practice of U. S. based CPAs, especially in firms who serve global clients. Critics speculate that convergence would be short-term in nature at best, noting that U. S. standards originally began as principles-based, and eventually evolved into their current rules-based state (Hail, Leuz, & Wysocki, 2010a). Regardless, the FASB has expressed concern that principles-focused accounting standards may lead to problems, as a lack of judgment or improper creativity in practice, may lead to abusive results (Agoglia, Douppnik, & Tsakumis, 2011; FASB, 2002).

While the SEC has yet to set a plan for convergence, the FASB and IASB continue to work on key elements of the convergence process (Garmong, 2012). In its July 2012 report, the SEC noted that it had not yet determined a specific timetable for the adoption of IFRS by public companies in the United States. Experts suggest that the SEC is unlikely to make such a decision until 2013 or later (Tysiac, 2012). The SEC remains supportive of the continued development of IFRS, but suggested that further work was necessary relative to adoption costs and standards development. The accounting

profession, through the AICPA, recommended that the SEC permit optional IFRS adoption by U. S. companies as soon as practicable (Tysiac, 2012).

The question over which financial reporting system (rules versus principles) will lead to better outcomes remains a matter of contentious debate. The issue for CPAs perhaps is as much about willingness or the commitment to enforce proper reporting outcomes, as opposed to the underlying nature of the standards themselves. The possible impact that CPA creative expression might have on the interpretation of accounting principles, is uncertain. Ultimately, the behaviors of individuals, firms, and standard setters will determine the quality of financial reporting in the future (Alles & Datar, 2004).

### **A Downside to Creativity**

The notion of the creative CPA is anathema with many observers. "There is a pervasive stereotype that people who are creative tend to be less ethical" (Bierly, Kolodinsky, & Charette, 2009, p. 101). The factors that cause such a stereotype are explored below.

Ford and Gioia (2000) have observed that, despite their potential for benefits, failed creative solutions are generally viewed more negatively than ordinary solutions which also fail. Even if the outcome of failure is the same (e.g. from conventional or creative actions), creative solutions may be perceived to be the result of excessive risk-taking, or poor individual judgment. For example, the benefit of creative solutions may be mitigated by otherwise uncontrollable circumstances, in a manner that exceeds that of routine decision making. Moreover, creativity in decision making, for creativity sake, is generally viewed as dangerous or inappropriate (Ford & Gioia, 2000).

As noted earlier, creativity may lead to unrealistic views of one's skills. Bandura (1989) notes that "...misjudgment produces dysfunction" (p. 1177). If CPAs overestimate their own personal abilities, they are more likely to make poor decisions which lead to outcomes that violate professional standards (AICPA, 2011). The same may be true to the extent individuals believe that by using their creative abilities, they may better cope through difficulties. To the extent they have overestimated their capabilities, outcomes will not be optimized (Bandura, 1989).

Moreover, excessive focus on creativity is often viewed as indicative of risky behavior, particularly by CPAs. For example, as noted earlier, creativity in the preparation of financial statements was specifically linked to recent accounting scandals (Clikeman, 2009; Gino & Ariely, 2012). Such creativity appears to help individuals exploit loopholes, eventually leading to fraud or misstatement whilst still acting within normally acceptable rules (Gino & Ariely, 2012). Gino and Ariely (2012) describe this as "...greater creativity helps individuals solve difficult tasks across many domains, but creative sparks may lead individuals to take unethical routes when searching for solutions to problems and tasks" (p. 454).

Aggressive tax shelters provide a useful example. In a recent study of tax practitioners, among other findings, it was determined that aggressive tax positions are often sought by clients. Given their complexity, and innovative features, the authors determined that such shelters may be viewed ambiguously, from an ethical standpoint, by the tax preparers (Cruz, Shafer, & Strawser, 2000).

In their study (of non-CPAs subjects), Gino and Ariely (2012) conducted five experiments. Subjects were selected from a diverse pool of individuals including

students, residents of two large eastern cities, and employees at an advertising agency. They found that greater individual creativity was linked to a heightened ability to rationalize individual behavior. This rationalization provided cover for unethical behavior within the context of the games in which the subjects were engaged. In essence, greater individual creativity led to behavioral justification of “minor cheating” (p. 446). Such behavior was directly linked to promotion of the individual subject’s self-interest. The authors observed that benefits to one’s self-interest generated through creative decision-making, may lead individuals to rationalize unethical behavior (Gino & Ariely, 2012).

Similar to that study, creativity has been observed as a personal characteristic that may increase dishonesty (Ariely, 2012). Furthermore, the research discussed above suggested that cheating by creative people is more likely to occur when incentives are present (Gino & Ariely, 2012). Moreover, it was observed that the ability to rationalize bad behavior, and having high levels of individual creativity, are related to one another. Gino and Ariely (2012) commented “... we found a robust relationship between creativity and dishonesty” (p. 456). Furthermore, recent research suggests that creativity may have an inverse relationship to the notion of personal integrity. In that research, experiments with college students suggested that despite self-ratings of integrity to the contrary, behavioral integrity was inversely related to self-assessments of creativity (Beaussart et al., 2012).

To summarize, creativity may be dangerous, if it promotes behavioral rationalization and ultimately, unethical behavior. Further, it may also be a predictor of possible CPA behavior, outside of the agency theory model. It may also inform the



nature of the terms and incentives which should underlie the agency theory-inspired rules of CPA practice. It may play an important role in understanding the unethical behavior observed by CPAs in a variety of accounting scandals (Aßländer, 2005; Gino & Ariely, 2012). The question remains, however, are creative CPAs prone to unethical conduct?

The phrase, creative accounting, itself introduces bias to that discussion (Bierly, Kolodinsky, & Charette, 2009). Not all creative individuals (or CPAs) will act unethically. Jensen and Meckling (1994) acknowledged that individuals use creativity to address environmental complexity. They further note that individuals adapt based upon the circumstances they encounter. They evaluate alternative courses of action. They consider the consequences of the decisions they make (Jensen & Meckling, 1994).

They also acknowledge the perils of creativity. They note that it sometimes prompts actions otherwise in conflict with professionally normative behaviors. They further acknowledge that creative impulses in individuals may cause behaviors that conflict with the predictive value of theory. In effect, they acknowledge that a theory, such as agency theory, may not account fully for the behavioral unpredictability that creativity may cause (Jensen & Meckling, 1994).

In a series of experiments with students, Gino and Bazerman (2009) concluded that individuals are more likely to accept the unethical behavior of others if it occurs slowly over time. They referred to this as the “slippery-slope effect” (p. 708). This leads one to reasonably consider that discreet, creative behavior need not directly cause unethical conduct. Rather, the unethical behavior may result from the gradual erosion in standards of conduct. That gradual erosion may relate to a pattern of ill-conceived, creative behavior over time (Gino & Bazerman, 2009). Indeed, in scandals such as

Enron, the associated destructive creative accounting began in a small way. It ultimately morphed into a huge accounting fraud at the time of the bankruptcy of the company (Clikeman, 2009).

The notion of the slippery slope into unethical behavior is relatively easy to understand from an outcome perspective. In effect, little bad acts eventually escalate into large ones (Gino & Bazerman, 2009). But what leads to the first little bad act? A possible explanation lies in the notion of ethical relativism (Forsyth, 1980; Huang & Chang, 2010).

### **Ethical relativism and idealism.**

In a general sense, notions of ethical relativism or idealism have been found to distort the agency effects that otherwise drive individual behavior. Ethical relativism represents individual behaviors which respond to the moral intensity of a given situation, differently than one might expect from a strict adherence to broader, societal ideals (Forsyth, 1980). Certainly, individuals react in different ways, to the same circumstances. First, they might react in a manner that honors a strict adherence to those societal ideals. Or they may react in a way that results in behaviors driven by situational context.

Moral intensity is a context specific phenomenon, in which individual behavior is affected by the magnitude and proximity of a variety of undesired effects. Those undesired effects include, the overriding social consensus as to the appropriateness of possible behaviors, and the possible concentration, probability, and immediacy of ill effects of those behaviors on individuals or society (Jones, 1991).

Ethical relativists may be divided into two sub-groups. The first group does not accept the ethical norms prevalent in society. They evaluate the unique circumstances of each situation they encounter, and apply their judgment accordingly, in determining the appropriate behavior. The second group favors their own personal values over the values of broader society. They apply their values to the circumstances they encounter, and make judgments about their behaviors based upon that analysis (Forsyth, 1980).

Ethical idealism, however, represents behaviors which are more likely to ignore situational factors, remaining true to societal principles (Huang & Chang, 2010). In effect, individual moral idealism has been observed to transcend traditional agency conflict in manner in keeping with the lofty aspirations of CPA fidelity to the greater public interest. Ethical relativism may not accomplish the same objective, however, especially over time (Huang & Chang, 2010).

Ethical idealists generally accept the ideals prevalent in society with little question. They also may be divided in two sub-groups. The behavior of the first group rarely strays from societal values in decision making. They believe that those values will typically yield the preferred outcome, regardless of the circumstances. The second group is arguably a bit more pragmatic. They generally accept the ethical ideals of broader society. They simply apply them to the circumstances they encounter in a manner which seeks the best possible outcome as a whole, in a given situation. They accept that some modest deviation from societal norms may be acceptable in individual circumstances, if that action produces better outcomes (Forsyth, 1980).

As Forsyth (1980) originally defined idealism and relativism, the notions are not mutually exclusive. His theory posits that individuals simultaneously exhibit both ideologies. He further claimed that they interact with one another in the determination of individual behavior. He later acknowledged, however, that scholars generally view them as separate variables to be observed empirically in research (Forsyth, n.d.).

While differences exist in individual ethical orientation, or personal morality, society has standards to which it demands general adherence. Forsyth (1992) notes that “ethical issues in business are intimately tied to more general moral values held by members of the community-at-large” (p. 461). Agency theory attempts to explain the honoring of those general moral values of society through the structuring of contracts, incentives, monitoring activities, and other regulation (Jensen & Meckling, 1976). The effectiveness of that approach, in light of the differences in individual moral orientation, has not been widely studied in accounting. Related to the concerns with individual creativity discussed above, in a study of 266 accountants working for the Army Corps of Engineers, Bryant et al. (2011) found no relationship between relativism in ethics, and higher self-assessed creativity. It should be noted, however, that many of the subjects in that study were not CPAs.

In another study, 360 practicing accountants at two large CPA firms were exposed to various vignettes which featured moral dilemmas. Their individual ethical relativism was measured. In this study, the authors found that ethical relativism and its effects on personal values, motivated behavior substantially in situations having high levels of moral intensity. The study also found that CPA firm standards affected the ethical idealism of individuals. Essentially, they found that firms may motivate their staff to

become more idealistic. But individual levels of ethical relativism did not appear to be affected by firm actions or practice standards. The authors surmised that ethical relativism was a behavior predicated upon individual psychology, rather than firm actions (Douglas, Davidson, & Schwartz, 2001).

### **Literature Review Summary**

The practice of accounting is premised on the notion of agency theory (Eisenhardt, 1989). Accepting that principals and agents have conflicting objectives, the theory seeks to inform the structuring of their relationship in such a manner, so as to mitigate the costs that such divergence of interests would ordinarily impose upon the owner-principal, as well as society at large (Eisenhardt, 1989; Jensen & Meckling, 1976). That relationship, in effect the terms and conditions under which CPAs serve their clients and the public interest, is codified in a variety of standards. Those include professional standards that are promulgated by the AICPA, and federal and state regulatory bodies (AICPA, 2011; Eisenhardt, 1989; Jensen, 1983; Jensen & Meckling, 1976). They also include standards adopted by CPA firms, as well as the behavioral standards of and commitment of individual CPAs (Bandura, 2002; Wood & Bandura, 1989). Indeed, compliance with all of these standards ultimately rests upon the intent and behaviors of individual CPAs (AICPA, 2011; Bandura, 2002).

Despite this agency theory-inspired body of practice standards, terms, and conditions, accounting scandals seem to reoccur (Clikeman, 2009). The underlying means for such scandal is frequently described as having been facilitated through the use of creative accounting (Clikeman, 2009; Sweeney, 2012; Zeff 2003a; Zeff, 2003b).

Commentators note that creative accounting is a phenomenon where accepted accounting practices are used to otherwise distort the true financial condition of an organization into a form desired by the perpetrator. CPAs have on many occasions been caught-up in this type of scandal (Ali Shah et al., 2011; Clikeman, 2009).

In searching for possible motives for such inappropriate CPA behavior, it was noted that individual psychology has the potential to defeat the terms and conditions which define the CPA-agent role to their clients and the public (Jensen, 1994). In particular, creative ability was discussed, as an element of such psychology warranting exploration. Creativity has long been considered a desirable characteristic to be possessed by professionals. While little research is available as to the level of creativity present in CPAs, it was noted as important quality for successful practice (Bryant et al., 2011). It was observed, however, that creativity has potential downsides, including leading individuals to overestimate their personal abilities, and possibly rationalizing improper conduct (Beaussart et al., 2012; Gino & Ariely, 2012). Finally, it was noted that, in recent experiments conducted with non-CPAs, creative individuals were more likely to be found cheating (a form of ethical failure), particularly if financial incentives were introduced (Gino & Ariely, 2012). Other experiments with non-CPAs, noted a negative relationship between creativity and integrity (Beaussart et al., 2012).

In other studies, a variety of individual CPA characteristics were identified as having a relationship to personal ethics. These included gender, experience, nature of practice, and firm size (Conroy et al., 2010; Gendron et al., 2006). Within that body of research, there are some inconsistencies in the findings, however (Karcher, 1996; Radtke, 2000).

The literature review also highlighted the issue of ethical relativism. It served as a possible explanation for the small, initial bad acts that lead to greater ethical failure, such as creative accounting (Gino & Bazerman, 2009; Huang & Chang, 2010). Little research exists in this area specific to CPAs, however. Accordingly, links between individual creativity of CPAs and their ethical relativism have yet to be established empirically (Bryant et al., 2011). Addressing this gap in the literature is the objective of this research.

### **Research Hypotheses**

In searching for an alternate or supplemental theory to that of agency theory, for explaining the behavior of CPAs, the following hypotheses emerged from the literature review (related to creativity):

H<sub>1</sub> – Highly creative CPAs are more likely to have a relativist individual ethical orientation, than CPAs with lower assessed individual levels of creativity (Gino & Ariely, 2012).

H<sub>2</sub> – CPAs who are less creative are more likely to have an idealist individual ethical orientation, than CPAs with higher assessed individual levels of creativity (Gino & Ariely, 2012).

As these hypotheses are structured, individual creativity is the independent variable, and ethical orientation is the dependent variable.

The literature also suggests that differences in ethical orientation may relate to other characteristics of individuals. Accordingly, the following additional hypotheses emerge.

Gender Related:

H<sub>3</sub> – Male CPAs are more likely to have a relativist (versus idealist) individual ethical orientation, than female CPAs (Conroy et al., 2010; Ibrahim & Angelidis, 2009).

H<sub>4</sub> – Female CPAs are more likely to have an idealist (versus relativist) individual ethical orientation, than male CPAs (Conroy et al., 2010; Ibrahim & Angelidis, 2009).

Experience Related:

H<sub>5</sub> – Less experienced CPAs are more likely to have a relativist (versus idealist) individual ethical orientation, than more experienced CPAs (Gendron et al., 2006).

H<sub>6</sub> – More experienced CPAs are more likely to have an idealist (versus relativist) individual ethical orientation, than less experienced CPAs (Gendron et al., 2006).

Practice Focus Related:

H<sub>7</sub> – CPAs who emphasize consulting or tax practice are more likely to have a relativist (versus idealist) individual ethical orientation, than CPAs who emphasize traditional accounting and auditing practice (Gendron et al., 2006).

H<sub>8</sub> – CPAs who emphasize traditional accounting or auditing practice are more likely to have an idealist (versus relativist) individual ethical orientation, than CPAs who emphasize consulting or tax practice (Gendron et al., 2006).

Firm Type Related:



H<sub>9</sub> – CPAs who work at large firms are more likely to have a relativist (versus idealist) individual ethical orientation, than CPAs who work at small firms (Gendron et al., 2006).

H<sub>10</sub> – CPAs who work at small firms are more likely to have an idealist (versus relativist) individual ethical orientation, than CPAs who work at small firms (Gendron et al., 2006).

In the case of these hypotheses, the nature of ethical orientation is the dependent variable, with gender, experience, nature of practice, or size of firm being the independent variable.

## **Chapter 3 - Research Methods**

### **Introduction**

The purpose of this research was to explore relationships between creativity and ethical disposition in Oregon CPAs. It also explored the relationships between other individual characteristics (e.g. gender), and ethical disposition. Accordingly, a quantitative research method was appropriate for exploring relationships between variables (Creswell, 2009; Rudestam & Newton, 2007). As Creswell (2009) observes, regarding the exploration of these types of relationships through quantitative research, "... in this scenario, the researcher tests a theory by specifying narrow hypotheses and the collection of data to support or refute the hypotheses" (p. 16). As noted in Chapter 2, hypotheses H<sub>1</sub> through H<sub>10</sub> have emerged from the literature review process. The balance of Chapter 3 discusses the data collection and analysis process employed to test each hypothesis.

### **Design of Study**

This research employed a cross-sectional survey design to assess the relationship between individual creativity, and other individual demographic characteristics (e.g. gender), and notions of individual ethical idealism or relativism. Isaac and Michael (1997) describe the use of survey research as being "to answer questions that have been raised...and generally, to describe what exists, in what amount, and in what context" (p.

136). In this research, surveys enabled the gathering of data which described the state of the variables as they existed in Oregon CPAs. Data collection occurred through the completion of participant surveys using [www.SurveyMonkey.com](http://www.SurveyMonkey.com) technology.

Based upon a review of other similar research and dissertations, the survey was made available on [www.SurveyMonkey.com](http://www.SurveyMonkey.com) for a period of two weeks. To address the risk of non-response bias (i.e. essentially that those who did not participate would respond significantly different than those who did respond), wave analysis was employed to assess whether the nature of the responses received in the second week, appear materially different than those received in the first week (Lindner, Murphy, & Briers, 2001). The next section discusses the survey participant selection process.

## **Participants**

The hypotheses drawn from the literature address specific personal characteristics of individual CPAs. These characteristics represent the independent variable in each hypothesis (Conroy et al., 2010; Gendron et al., 2006; Gino & Ariely, 2012; Ibrahim & Angelidis, 2009). Furthermore, the personal characteristics are contextualized within the CPA profession. As such, the appropriate unit of analysis was deemed to be the individual CPA (Rudestam & Newton, 2007). This research employed a delimited sample of CPAs, essentially surveying those who are members of the OSCPA.

The OSCPA was founded in 1908, as the primary trade association for CPA practitioners in Oregon. It is a voluntary, professional membership organization which represents the interests, and advocates on the behalf of its membership (OSCPA, 2012a). On May 2, 2013 the OSCPA's had 4,807 members (T. Hollis, personal communication, May 21, 2013). That included CPAs in active practice, as well as retirees, and a small

number of students (OSCPA, 2012c).

Among ways the OSCPAs seeks to add value to its members and the accounting profession is in “fostering a professional community with a commitment to the public interest” (OSCPA, 2012a, p. 1). This objective is consistent with the agency theory-inspired organization of the CPA profession discussed in Chapter 2 (AICPA, 2011; Eisenhardt, 1989; Jensen & Meckling, 1976). In light of that, the OSCPAs was deemed an appropriate, representative group from which to obtain data for purposes of this study (Rudestam & Newton, 2007). Figure 6 provides an overview of OSCPAs membership by general age grouping.

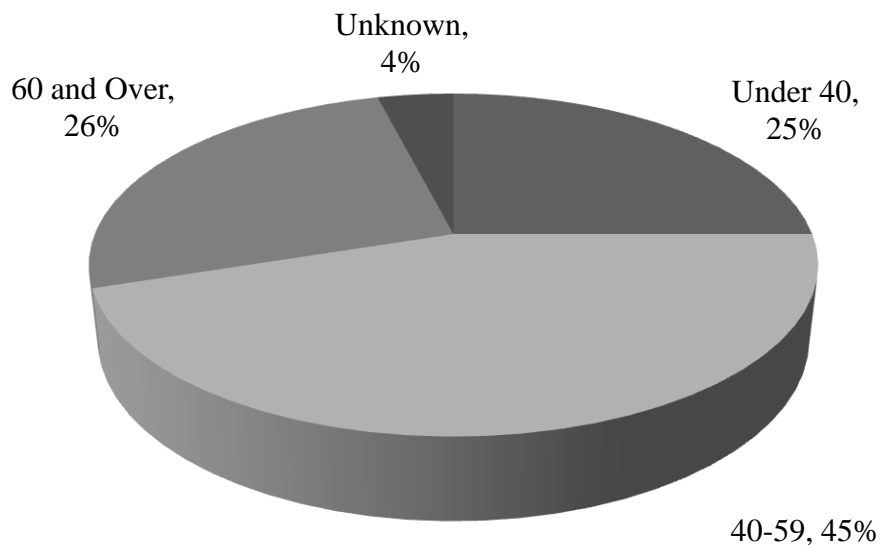


Figure 6. OSCPAs Membership by General Age Grouping.

In addition to the age break-down, it is notable that forty-seven percent of OSCPAs members work in active practice. Fifty-three percent work in business and industry. Sixty-seven percent of OSCPAs members reside in the Portland Metropolitan area. That is

followed by fourteen percent in the Eugene Empire/Benton Linn area, seven percent in the Central/Eastern/Mid-Columbia area, seven percent in the Southern Oregon/South Coast area, and five percent outside the boundaries of the State of Oregon (OSCPA, 2012b). The OSCPAs mission is defined as follows:

The Society's mission is to act in a representative capacity for the profession; encourage the maintenance of high professional standards; increase public awareness and understanding of CPAs and CPA services; support excellence in accounting education; assist members in professional and personal development; and enhance professional cooperation. (OSCPA, 2012a, p. 1)

Permission was obtained from the OSCPAs to invite its members to participate in this study. Such permission was obtained via a meeting with the OSCPAs Board of Directors on January 18, 2013, and through subsequent detailed review of the research design by OSCPAs Board members serving in academia (E. Almer, personal communication, January 31, 2013). All members having an email address on file with the OSCPAs were invited to participate, via a two-step series of direct, email communication (Israel, 1992a). These emails, totaling 3,953 or 82.2% of the membership on May 2, 2012, were sent by the OSCPAs directly to their membership (T. Hollis, personal communication, May 21, 2013). They explained the nature of the research and invited the recipient to participate by clicking on a link to the appropriate [www.SurveyMonkey.com](http://www.SurveyMonkey.com) URL. The first email communication was sent on May 2, 2013 (see Appendix F). A reminder email was sent on May 10, 2013.

It was suspected that large firm CPAs might be the least likely to respond to the email survey. This is due to their possible withdrawal from professional engagement in

light of their extreme size, litigation frequency, and other factors (E. Almer, personal communication, January 31, 2013; Gendron et al., 2006). Accordingly, a letter was sent to the Managing Partner of the office of each of the largest twenty CPA firms in the Portland, Oregon metropolitan area as identified by the Portland Business Journal newspaper, encouraging them to participate via the [www.SurveyMonkey.com](http://www.SurveyMonkey.com) link (Top Accounting Firms, 2012). That letter is illustrated at Appendix G. The list of firms is included at Appendix H.

OSCPA members without an email address on file were invited to participate in the research via messages placed online at the OSCP website. Individuals were required to affirm their consent prior to participation in the study. Appendix A depicts the consent document (Sydney Gestalt Institute, n. d.).

#### **Calculation of sample size.**

The sample size needed for this study was dependent on a number of factors. One is statistical power. Newton and Rudestam (1999) define statistical power as "... the ability of a statistical test to detect relationships between variables" (p. 70). In effect, statistical tests having low power run an increased risk of errors. As such, decisions made relative to those tests also run the risk of being in error. Power is operationalized in statistical analysis as a decimal. It is used as a factor in the determination of sample size. Having adequate power results in a sample size which is sufficient for the researcher to draw conclusions from the associated process of statistical inference with greater confidence that a Type II error (e.g. failure to reject an incorrect hypothesis) has been avoided (Boslaugh & Watters, 2008; Cohen, 1992; Newton & Rudestam, 1999).

Researchers must grapple with the appropriate level of power to build into sample

size determinations. To that end, Newton and Rudestam (1999) further note that "... in practice, 0.8 seems to be the minimum level of power that researchers deem acceptable to conduct meaningful statistical analysis" (p. 70). Other scholars, including Cohen (1992), agree with that finding. Accordingly, 0.8 will be used in this research to ensure adequate statistical power (Cohen, 1992).

Other factors which are relevant to a minimum sample size determination include alpha level and sample effect (Cohen, 1992; Newton & Rudestam, 1999). Alpha represents the likelihood of the researcher making a Type I error. This is an error where the research result suggests the existence of a relationship between variables, which does not in fact exist. Scholars generally agree that 0.05 is a reasonable level at which to assign alpha for purposes of sample size calculations (Cohen, 1992; Newton & Rudestam, 1999).

Sample effect size is arguably the most difficult determinant of sample size (Cohen, 1992). It refers to the expected strength of the relationships between variables in the study. Scholars generally classify the sample effect size as small, medium, or large. This classification relates to the scale of the underlying population. Cohen (1992) notes that "... medium ES (effect size) represent an effect likely to be visible to the naked eye of a careful observer" (p. 156). It essentially reflects the conclusion that the characteristics represented in the sample are neither strongly homogenous, nor strongly heterogeneous, in nature (Israel, 1992b). Accordingly, a medium sample effect size is recommended by most scholars as the proper determinant in sample size calculations. Medium sample effect size is operationalized by the nature of the statistical test involved, however. The decimal is lowest for regression analysis, and increases for other types of

statistical analysis. Reviewing suggested effect size quantification per the nature of statistical technique employed, provided in a table developed by Cohen (1992), suggests that 0.30 is a conservative quantification of sample effect. This conclusion is made in relation to the statistical techniques referred to later in this chapter. As such, 0.30 is deemed the appropriate measure for use in the determination of sample size for this study (Cohen, 1992; Newton & Rudestam, 1999).

As noted above, the sample size for this study will be determined based upon a statistical power level of 0.80, an alpha level of 0.05, and a sample effect size of 0.30 (Cohen, 1992; Newton & Rudestam, 1999). Using the tables in Watson (2001), and assuming a population of 5,000 (e.g. the next highest break in the table as compared to the estimated 4,807 total OSCP membership (T. Hollis, personal communication, May 21, 2013) results in a minimum sample size of 166.

Watson's (2001) tables, however, do not include statistical power as an input to the sample size determination per se. Rather, they assume adequate power will be achieved. To ensure that adequate statistical power will be achieved (e.g. 80% or greater) VanVoorhis and Morgan (2007) provide rules of thumb to guide the researcher. For example, they suggest that in analyses using ANOVA, thirty items are needed for each cell in the computation. Accordingly, per their rule of thumb, this research needs at least 210 items as a minimum sample. Furthermore, Cohen (1992) suggests a sample size of 85 to achieve adequate power (0.8) in correlation analysis.

As an alternative to a table or rule of thumb, Israel (1992b) suggests that the researcher also consider the sample size employed in similar research. Israel (1992b) notes "a review of literature... can provide guidance about 'typical' sample sizes" (p. 2).



The closest observed research design to what is proposed herein was conducted by Bryant, Stone, and Wier (2012). Their design included responses from 266 accountants (not necessarily CPAs) who were employed by the United States Army Corps of Engineers (Bryant et al., 2011).

Given these suggestions, this study targeted a sample size of 266 participants. It was deemed conservative to select the higher sample size observed in similar research (Israel, 1992b). This is in contrast to that calculated by rule of thumb or statistical table (Watson, 2001).

### **Data Collection/Instrumentation**

This study employed two previously developed research instruments for purposes of data collection. Various demographic data elements were also collected. That data was then analyzed to determine the relationships amongst variables. A discussion of those instruments and data collection practices, in relation to study variables, follows.

#### **Creativity.**

H<sub>1</sub> posits that higher levels of individual creativity will lead to greater ethical relativism in Oregon CPAs. H<sub>2</sub> posits that lower levels of individual creativity will lead to greater ethical idealism in Oregon CPAs. To test these hypotheses, individual creativity was measured using an existing instrument developed by Gough (1979). Many instruments exist which measure various aspects of the construct of creativity. There is a degree of controversy over the ability of researchers to measure creativity, however. For example, measuring current creative capacity is significantly different than predicting future creative behavior. Many of the underlying notions of creativity require significant

expertise and training to fully identify and describe them. In addition, many notions of creativity may only be assessed in a clinical setting. Moreover, many survey instruments available to measure notions of creativity, are often lengthy and therefore impractical to use in many research settings. Critics often lament these instruments' general complexity and difficulty in administration (Kerr & Gagliardi, 2003).

Conversely, Gough's (1979) creativity scale is quite simple to use. It has also been significantly and positively correlated with other, more complex, yet reliable measures of individual creativity (Gino & Ariely, 2012). It has also been successfully used in a variety of research scenarios (Kerr & Gagliardi, 2003). It is routinely used to gather data in scholarly research. It is also available for use in academic research (see Appendix D for discussion). It was developed in response to the concern that other existing measurements were not adequately correlated to one another (Cropley, 2000). Its primary drawback is the self-assessed nature of the outcome, as discussed in later paragraphs.

Gough's (1979) scale built on the work of Gough and Heilbrun (1980) with the adjective check list. The adjective check list is "an assessment device intended for appraising views of self" (Gough, 1979, p. 1399). Essentially, the adjective check list is a three hundred item listing of words and phrases that individuals pick from to describe themselves. Based upon their choices, a description of the individual's self-conception is generated (Waltz & Gough, 1984). The original adjective check list was developed in 1965 (Gough, 1979). It was revised in 1980 (Waltz & Gough, 1984).

Working from the basis of the adjective check list (Gough & Heilbrun, 1980), other scholars sought to identify sub-groupings from the checklist which could accurately

describe other characteristics. To this end, Gough (1979) developed the CPS as a sub-measure of individual, self-assessed creativity.

Gough's (1979) CPS consists of thirty descriptor words, eighteen of which are indicative of higher creativity, and twelve representing lower levels of creativity. Research participants are simply required to indicate which words best describe themselves. They may select all thirty words, or none of the words. The eighteen words are scored with a positive one point, and the twelve with a negative one point. This creates a possible scoring range of eighteen to minus twelve, representing a measure of relative, self-appraised creativity (Gough, 1979).

In a research context, self-assessments of creativity are often necessary (Ng & Feldman, 2012). This is due to the reality that self-assessed creativity may be the only practical means of data collection. Moreover, creativity is often viewed as a behavior of choice (e.g. individuals may or may not choose to act creatively). Individuals may not feel at liberty to act creatively, particularly in a research setting, making observation of their behavior difficult. Self-assessment allows research to move beyond the limitation of observed behavior (Ng & Feldman, 2012). This is noted as a possible limitation of the research, however.

In this research, individual creativity is a relevant independent variable. Measuring it via self-assessment is a useful technique to reduce bias. Indeed, reminding participants of their anonymity when completing the survey instrument is a useful technique to reduce biases, such as that associated with social desirability (Ng & Feldman, 2012). Accordingly, self-ratings of individual creativity such as Gough's (1979) have been found to possess adequate internal validity, and correlate well to the

results of other widely accepted measures of creativity (Gough, 1979; Ng & Feldman, 2012). Indeed, Gough's (1979) scale for measuring individual creativity is "one of the most widely used and respected of these measures" (Oldham & Cummings, 1996, p. 609). Moreover, other scholars have subsequently affirmed Gough's (1979) instrument, observing even stronger levels of validity in later research (Oldham & Cummings, 1996).

To document the validity and reliability of the CPS, Gough (1979) calculated its alpha coefficient. This statistic was developed by Cronbach (1951). Tavakol and Dennick (2011) note that it "...was developed... to provide a measure of the internal consistency of a test or scale" (p. 53). They further note that "internal consistency describes the extent to which all of the items in a test measure the same concept or construct" (p. 53).

In effect, the Cronbach (1951) alpha coefficient is designed to measure an instrument's ability to consistently measure, over time, items within a test (Boslaugh & Watters, 2008; Cronbach, 1951; Tavakol & Dennick, 2011). Gough (1979) calculated the alpha coefficient for the creative personality scale at 0.77 for men, and 0.81 for females. Amounts exceeding 0.70 are deemed adequate for research purposes (Santos, 1999; Tavakol, & Dennick, 2011).

The CPS has subsequently been used in a number of other research settings. It continues to be found to possess adequate validity and reliability (Cropley, 2000). For example, Oldham and Cummings (1996) calculated the alpha coefficient at 0.70. Moreover, in a survey of literature on creativity measures, Cropley (2000) observed a number of alpha coefficients on the CPS at 0.80 or above. As this suggests, the creative personality scale appears valid and reliable for use in this research. Moreover, the CPS

has also been found to correlate well with other reliable, more complex measures of creative personality. For example, the CPS was found to correlate closely to the well known, yet very complex, TCT-DP scale (Dollinger, Urban, & James, 2004).

As a final point on the issue of instrument validity, as noted in the literature, creativity is closely tied to professional expertise (Csikszentmihalyi, 1996). It is important to note that, despite this conclusion, few research instruments exist which are able to measure creativity by specific field or occupation (Zeng et al., 2011). Scholars faced with this dilemma, have noted that Gough's (1979) CPS has been shown effective at measuring creativity across a variety of professional domains (Carson, Peterson, & Higgins, 2005). Accordingly, despite its general format, the CPS was deemed sufficient for measuring the individual creativity of Oregon CPAs as planned in this study.

#### **Other demographic characteristics.**

H<sub>3</sub> through H<sub>10</sub> posit that certain demographic characteristics of individuals (e.g. gender) will lead to greater ethical relativism or idealism in Oregon CPAs. Accordingly, these characteristics take the role of the independent variable in these hypotheses. Such demographic information was gathered as a part of the survey process, and was available for use in this study. Scholars observe that the solicitation of such demographic information is common in survey research. Moreover, they note that such data gathering generally does not impair the reliability and validity of the accompanying survey questions or instruments in use (Rudestam & Newton, 2007).

In particular, hypothesis nine (H<sub>9</sub>) posits that CPAs who work in larger firms are more likely to have a relativist ethical orientation. Discussion with a scholar in the field of accounting ethics identified the potential of bias, or the loss of statistical power, in that

many CPAs at firms of varying sizes spend substantial portions of their career at Big Four firms (or their predecessors). This is due to the nature of the accounting recruitment, apprenticeship, and licensing processes in place in the United States (E. Almer, personal communication, January 31, 2013). It was also suspected that large firm CPAs might be the least likely to respond to the survey, given concerns surrounding their possible withdrawal from aspects of professional engagement (E. Almer, personal communication, January 31, 2013; Zeff, 2003b). Accordingly, the demographic information also included the notion of prior Big-Four firm experience, as well as current employment status.

#### **Ethical relativism and idealism.**

Each of the study hypotheses posit that their existence will lead to greater ethical relativism or idealism in Oregon CPAs. To that end, it should be noted that scholars have long concluded that various aspects of moral development may be measured through various instruments (Martynov, 2009). To test the hypotheses in this study, ethical relativism and idealism, the dependent variables, were measured using an existing instrument developed by Forsyth (1980). This instrument provides a useful scale for measuring relative ethical responses (Douglas et al., 2001).

Forsyth's (1980) instrument, the EPQ, uses the answers to a series of twenty questions designed to operationalize individual differences in moral reasoning. The data it collects serves as a reasonable proxy for ethical orientation (Bryant et al., 2011; Douglas et al., 2001). It is available for use in academic research (see Appendix D for discussion).

In effect, the EPQ assigns a value between one (complete disagreement) and nine

(complete agreement) in response to ten statements involving idealism in moral reasoning. A composite score, between ten and ninety, is calculated for idealism from those responses. The process then repeats with ten questions involving relativism in moral reasoning. A second composite score, between ten and ninety, is calculated for relativism. These scores are then used as a basis to evaluate relative idealism and relativism in moral reasoning. Forsyth (n.d.) notes that median scores of 66.06 and 54.54 for idealism and relativism, respectively, based upon a summary of samples from nearly thirty countries around the world ( $n > 30,000$ ).

Forsyth (1980) developed the EPQ based in part upon earlier work by Schlenker and Forsyth (1977). In that study, they asked participants for reactions to fifty concepts taken from a wide variety of works in ethics and philosophy. This work drew upon earlier work by Milgram (1963) related to individual respect for, and fidelity to, notions of authority (Forsyth, n. d.).

Schlenker and Forsyth (1977) discovered that participant responses to the fifty items could generally be organized into two broad themes. Those were the notions of the ultimate consequences of individual actions, as well as the universality of certain moral principles (Forsyth, n. d.).

From that data point, Forsyth (1980) designed the current twenty-question EPQ. He tested the idealism and relativism components extensively, finding it "... to have adequate internal consistency, were reliable over time, (and) were not correlated with social desirability" (p. 175). Forsyth (1980) calculated Cronbach's (1951) alpha coefficient to document the validity and reliability of the EPQ. As noted above, this statistic is designed to measure an instrument's ability to consistently measure, over time,

the attributes for which it was created (Boslaugh & Watters, 2008; Cronbach, 1951; Tavakol & Dennick, 2011). Forsyth (1980) determined the alpha coefficient for the idealism questions at 0.80, while he calculated the alpha coefficient for the relativism at 0.73. Amounts exceeding 0.70 are deemed adequate for research purposes (Santos, 1999; Tavakol & Dennick, 2011).

The EPQ has subsequently been used in a number of other research settings. It continues to be found to possess adequate validity and reliability (Bryant et al., 2011; Douglas et al., 2001). For example, Forsyth, Nye, and Kelley (1988) calculated the alpha coefficient for the idealism and relativism questions at 0.82 and 0.84, respectively. In addition, Bryant et al. (2011) calculated the alpha coefficient for the idealism and relativism questions at 0.79 and 0.83, respectively. Moreover, Douglas et al. (2001) calculated the alpha coefficient for the idealism and relativism questions at 0.84 and 0.81, respectively. As all these studies suggest, the EPQ appears valid and reliable for use in this research.

#### **Data collection.**

As noted above, the survey was made available on [www.SurveyMonkey.com](http://www.SurveyMonkey.com). In effect, the instruments developed by Forsyth (1980) and Gough (1979), were included together for participants to complete in one response process, along with the demographic questions. Participant response data were recorded and summarized by SurveyMonkey.com, and ultimately downloaded to a spreadsheet for further analysis purposes. Participant data were password protected on the researcher's computer throughout the process and will remain so in order to ensure participant security and anonymity.



While all members of the OSCPAs with email addresses on hand were directly invited to participate, it is assumed that many would not. This expected non-response was likely to occur for a variety of reasons, including inattention, lack of access to the internet, email filtering, time constraints, and others. It was also noted that response rates have been found to be higher from online, versus paper-based, survey formats (Sax, Gilmartin, Lee, & Hagedorn, 2003). Absent evidence to the contrary, the research assumed there was no response bias (Israel, 1992c). Responses were evaluated for the possibility of response bias by comparing, through wave analysis, the early results to the later results to determine if any significant differences exist (Lindner, Murphy, & Briers, 2001; Newton & Rudestam, 1999). If significant differences existed, it would be assumed some level of bias may exist (e.g. under the presumption that the later responses serve as a proxy for responses not received during the time frame where the survey is available for completion). Such possible bias, if noted, would be further analyzed for other remedial action. If such bias appeared significant, the research conclusions would be planned to stress that caution should be taken when interpreting the findings. In a case such as this, the findings might only be generalizable to the responses received (Israel, 1992c).

Once data was downloaded from [www.SurveyMonkey.com](http://www.SurveyMonkey.com), it was analyzed for completeness. Incomplete responses are a possible issue in individual cases. Such information was not discarded. Rather, it was used in the analysis to the maximum extent possible. Essentially, if the survey was incomplete (e.g. gender was not noted), the rest of the data were incorporated into the analysis. Judgments were made in each individual case, and noted in the reported findings (Israel, 1992c). When a response was virtually

unusable (e.g. no responses other than the consent to participate), the survey was excluded and not counted towards the planned sample size objective discussed above (Israel, 1992b; Watson, 2001).

### **Procedures/Data Analysis**

Data generated during this study was analyzed in a variety of ways. First, creativity, idealism, and relativism data were plotted on histograms as a means to assess normality. Normality refers to the shape of the curve representing the universe of data points. A lack of normality, essentially evidence of data skew, risks error in the computation of various statistical tests. This is due to the fact that parametric statistical validity is generally predicated on a reasonable level of normality in data patterns. This type of data review is also useful in catching errors or other data anomalies (Forsyth, 1980; Newton & Rudestam, 1999). Large minimum sample sizes, such as that used in this study, significantly mitigate much of the risk from data skew, however (Israel, 1992b; Newton & Rudestam, 1999).

Next, the relationships between the variables were analyzed for correlation. Correlation analysis provides insight as to the strength of the relationships between the variables. It does not, however, imply cause and effect (Boslaugh & Watters, 2008). Data generated from the survey instruments regarding creativity and ethical orientation is interval in nature. Essentially, such data defines differences as equal intervals between data points. As such, Pearson product-moment correlation was deemed the appropriate correlation technique to apply to assess this data (Boslaugh & Watters, 2008; Newton & Rudestam, 1999). Demographic data generated from the survey process is nominal in

nature, however, merely categorizing data points not expected to be normally distributed. As such, the researcher also applied Spearman's correlation to such data to compare correlation results. Spearman's is a correlation technique commonly used in nonparametric statistics, where the shape of data distributions are unknown (Newton & Rudestam, 1999).

Correlation analysis is useful for understanding the nature of relationships between variables. That nature is comprised of the direction (e.g. positive or negative), the magnitude of the relationship, and the statistical significance of the relationship (Pease & Bull, 2000; Taylor, 1990). After observing the levels of correlation (positive or negative, relative strength, statistical significance) from the previous analysis, additional statistical tests were performed, relative to those relationships which showed higher levels of correlation, or relationships, even weak ones, which were statistically significant. To further explore differences between variables, t-tests and analysis of variance (ANOVA) were used. These techniques are appropriate for use when dependent variable related data is interval in nature (Newton & Rudestam, 1999). Table 2, on the following page, summarizes the initially planned statistic tools for use in analyzing the data related to each research hypothesis.

Table 2.

*Planned Statistic Tool by Research Hypothesis*

Hypothesis	Independent Variable	Dependent Variable	Appropriate Statistical Test
H <sub>1</sub>	CPS Score	EPQ Relativist Score	T-Test
H <sub>2</sub>	CPS Score	EPQ Idealist Score	T-Test
H <sub>3</sub>	Male or Female	EPQ Relativist Score	T-Test
H <sub>4</sub>	Male or Female	EPQ Idealist Score	T-Test
H <sub>5</sub>	Higher, Middle, Lower, or Other	EPQ Relativist Score	ANOVA
H <sub>6</sub>	Higher, Middle, Lower, or Other	EPQ Idealist Score	ANOVA
H <sub>7</sub>	Accounting/Audit, Tax, Consulting, or Other	EPQ Relativist Score	ANOVA
H <sub>8</sub>	Accounting/Audit, Tax, Consulting, or Other	EPQ Idealist Score	ANOVA
H <sub>9</sub>	Big-Four, Medium, Small, Sole Practitioner, Industry, Government, or Other	EPQ Relativist Score	ANOVA
H <sub>10</sub>	Big-Four, Medium, Small, Sole Practitioner, Industry, Government, or Other	EPQ Idealist Score	ANOVA

Source: Derived from Newton, R. R., & Rudestam, K. E. (1999). *Your statistical consultant: Answers to your data analysis questions*. Thousand Oaks, CA: Sage Publications, Inc.

In this study, the first four hypotheses (e.g. H<sub>1</sub> to H<sub>4</sub>) include the CPS score or gender as the independent variable. The dependent variable in each case is either ethical relativism (H<sub>1</sub> & H<sub>3</sub>) or idealism (H<sub>2</sub> & H<sub>4</sub>). Given that each of these hypotheses contains only one categorization of the independent variable, t-tests were planned for use to analyze the differences between the variables (Newton & Rudestam, 1999). In particular, as it pertains to the CPS scores, Forsyth (n.d.) confirms that this is the

customary analytical approach used in research.

In the later hypotheses (e.g. H<sub>5</sub> to H<sub>10</sub>), the independent variables include demographic descriptors, excluding gender. The continuous dependent variable in each case is either ethical idealism (H<sub>6</sub>, H<sub>8</sub>, & H<sub>10</sub>) or relativism (H<sub>5</sub>, H<sub>7</sub>, & H<sub>9</sub>). Given that each of these hypotheses contains at least three possible categorizations of the independent variable, ANOVA were planned for use to analyze the differences between the variables (Boslaugh & Watters, 2008). Newton and Rudestam (1999) describe ANOVA as follows:

Analysis of variance is used for assessing the statistical significance of the relationship between categorical independent variables and a single continuous dependent variable. It evaluates experimental hypotheses by assessing treatment effects by comparing the means between two groups of subjects that are treated differently. (p. 202)

As discussed above, this research utilized one-way ANOVA. Boslaugh and Watters (2008) characterize this technique as the "... simplest form of ANOVA... where the intention is to determine whether there is an overall main effect of different levels of an independent variable on the dependent variable" (p. 232). Herein, the demographic variables (excluding gender) offered multiple levels of independent variable relationship to, or effect on, the continuous dependent variables of idealism or relativism (Boslaugh & Watters, 2008; Newton & Rudestam, 1999).

Data were captured by [www.SurveyMonkey.com](http://www.SurveyMonkey.com) technology as participants completed the survey. That technology then transferred the data into an excel spreadsheet for analysis purposes. Such data was then statistically analyzed using

SPSS® (Version 21), a statistical software package regularly used in the data analysis phase of social science research (Newton & Rudestam, 1999).

This analysis culminated in a discussion of statistical findings. Additional descriptive statistics were also analyzed and discussed to the extent appropriate. From this analysis, the study also provided various observations, as well as suggestions for future research, and the regulation of accounting practice.

## **Chapter 4 - Research Results**

### **Overview of Research Purpose**

As noted above, the purpose of this research was to explore the relationships between creativity and ethical disposition in Oregon CPAs. It also explored the relationship between other individual characteristics (e.g. gender), and ethical disposition. The research employed a survey, administered to members of the OSCP who voluntarily responded to an email invitation sent on May 2, 2013 by the OSCP, to its members having an email address. (A second follow-up email invitation was sent on May 10, 2013.) Also, as noted in Chapter 2, hypotheses H<sub>1</sub> through H<sub>10</sub> emerged from the literature review process. Data collection was focused on producing a data set that informed those hypotheses:

#### **Creativity Related:**

H<sub>1</sub> – Highly creative CPAs are more likely to have a relativist individual ethical orientation, than CPAs with lower assessed individual levels of creativity (Gino & Ariely, 2012).

H<sub>2</sub> – CPAs who are less creative are more likely to have an idealist individual ethical orientation, than CPAs with higher assessed individual levels of creativity (Gino & Ariely, 2012).

Gender Related:

H<sub>3</sub> – Male CPAs are more likely to have a relativist (versus idealist) individual ethical orientation, than female CPAs (Conroy et al., 2010; Ibrahim & Angelidis, 2009).

H<sub>4</sub> – Female CPAs are more likely to have an idealist (versus relativist) individual ethical orientation, than male CPAs (Conroy et al., 2010; Ibrahim & Angelidis, 2009).

Experience Related:

H<sub>5</sub> – Less experienced CPAs are more likely to have a relativist (versus idealist) individual ethical orientation, than more experienced CPAs (Gendron et al., 2006).

H<sub>6</sub> – More experienced CPAs are more likely to have an idealist (versus relativist) individual ethical orientation, than less experienced CPAs (Gendron et al., 2006).

Practice Focus Related:

H<sub>7</sub> – CPAs who emphasize consulting or tax practice are more likely to have a relativist (versus idealist) individual ethical orientation, than CPAs who emphasize traditional accounting and auditing practice (Gendron et al., 2006).

H<sub>8</sub> – CPAs who emphasize traditional accounting or auditing practice are more likely to have an idealist (versus relativist) individual ethical orientation, than CPAs who emphasize consulting or tax practice (Gendron et al., 2006).



Firm Type Related:

H<sub>9</sub> – CPAs who work at large firms are more likely to have a relativist (versus idealist) individual ethical orientation, than CPAs who work at small firms (Gendron et al., 2006).

H<sub>10</sub> – CPAs who work at small firms are more likely to have an idealist (versus relativist) individual ethical orientation, than CPAs who work at small firms (Gendron et al., 2006).

The constructs underlying these hypotheses were measured with various survey instruments (as discussed in Chapter 3) as a means to quantify the results. Accumulated data were then analyzed for correlation (to understand their relationship to one another), and then through other statistical tests (to understand their differences). Accordingly, this chapter is divided into various subsections including an overview of the data collected, related wave analysis, descriptive statistics about the data, correlation analysis, tests of differences, and the resultant disposition of the research hypotheses.

### **Results of Data Collection**

As noted in Chapter 3, invitations to participate in the research were sent to members of the OSCPA on May 2, 2013. A second invitation was sent on May 10, 2013. The survey was closed to participation on May 17, 2013. In all, 360 individuals consented to participate in the survey. Of those individuals, not all fully completed the survey. Table 3, on the following page, summarizes the completeness of surveys received during the two week survey period.

Table 3.

*Completeness of Surveys Received.*

<b>Status of Reply Completeness</b>	<b>Number</b>
Complete Replies	313
Partially Complete - Some Usability in Research	14
	<hr/> 327
Partially Complete - Unusable in Research	23
Consent Only - No Usable Data	10
Total File	<hr/> <hr/> 360

Complete surveys contained responses to all survey questions. Partially complete surveys which contained a complete reply to questions defining at least one of the independent and one of the dependent variables were deemed usable to the extent of those items with complete information. Likewise, partially complete surveys were deemed unusable if they did not contain replies to the questions defining at least one of the independent and one of the dependent variables. Replies indicating only consent were deemed unusable as they contained no responses to any of the questions defining the study variables.

Various demographic elements about participants were collected during the survey process. Table 4 depicts the gender of the survey responses:

Table 4.

*Gender of Survey Respondents.*

	<b>Frequency</b>	<b>Percent</b>
Female	153	48.9
Male	160	51.1
	<hr/> 313	<hr/> 100.0
Not completed	14	
Total	<hr/> <hr/> 327	

While specific gender data for Oregon CPAs was not available from the OSCPA or OBA, Moore, Mahler, and Ashton (2011) note that females constitute 45% of accounting employees at CPA firms across the United States. Given that, the gender proportions of the survey respondents herein do not appear so materially different from that national data as to suggest a concern that would require further follow-up with respect to the sample representativeness.

Likewise, Table 5 depicts the work experience of the survey respondents:

Table 5.

*Work Experience of Survey Respondents.*

	<b>Frequency</b>	<b>Percent</b>
High-level	215	68.7
Mid-level	68	21.7
Low-level	28	8.9
Other	2	0.6
	313	100.0
Not completed	14	
Total	327	

The apparent high level of experience present in the research sample, possibly relates to the large number of participants who work in sole proprietorships, small firms, industry, and government (see Table 7). CPA licensing generally requires two years of work experience. The frequency of staff accountants working while earning the required experience for licensure is generally higher in large firms (Moore et al., 2011).

Accordingly, as Big-Four firm CPAs constitute a small part of this sample, one could expect that sample experience levels may be higher than initially expected. The low level of Big-Four CPA participation is discussed later in this chapter.

Table 6 depicts the primary area of work focus for the survey respondents:

Table 6.

*Primary Area of Work Focus.*

	<b>Frequency</b>	<b>Percent</b>
Accounting & Auditing	142	45.4
Tax	131	41.9
Consulting	16	5.1
Other	24	7.7
	313	100.0
Not completed	14	
Total	327	

Moore et al. (2011) further note that 51% of CPAs specified accounting and auditing as their primary work assignment. Further they suggest that 25% work in tax practice. This sample would then appear to underweight accounting and auditing and overweight tax practice, as compared to national averages. Countering this however, is the high level of response rates from CPAs working in sole proprietorships, small firms, and industry. One could reasonably expect that in these cases roles would be less defined, and practitioners would act more as generalists (Gendron et al., 2006). While the effects are unknown, these observations were noted for their possible impact on the research findings.

On the following page, Table 7 depicts the type of firm in which the survey respondents were employed.

Table 7.

*Type of Firm*

	<b>Frequency</b>	<b>Percent</b>
Big-Four	7	2.2
Medium	65	20.8
Small	98	31.3
Sole Proprietor	42	13.4
Private Industry	64	20.4
Government	25	8.0
Other	12	3.8
	313	100.0
Not completed	14	
<b>Total</b>	<b>327</b>	

Reviewing this data, a low response level by CPAs employed in Big-Four firms was apparent. This result was realized despite a supplemental mailing to the Managing Partners of twenty large CPA firms in an attempt to encourage participation. That list included the Big-Four firms (see Appendix H). This low level of Big-Four CPA response is consistent with prior research which suggests that the largest firms have withdrawn from many broader professional activities (Gendron et al., 2006). It is also consistent with the expectation of other experienced accounting researchers (E. Almer, personal communication, January 31, 2013).

Finally, on the following page Table 8 depicts the status of each respondent relative to the Big-Four accounting firms. That status involved current employment at a Big-Four firm, employment that ended at a Big-Four firm within the past two years, employment that ended two to five years ago, employment that ended more than five years ago, and status reflecting that the participant had never been employed by a Big-

Four accounting firm. This data was gathered given the concern about low Big-Four participation noted above (Gendron et al., 2006).

Table 8.

*Big-Four Firm Status.*

	<b>Frequency</b>	<b>Percent</b>
Never employed by a Big-Four Firm	216	69.0
Current Big-Four Firm employee	4	1.3
Left a Big-Four Firm less than two years ago	3	1.0
Left a Big-Four Firm two to five years ago	5	1.6
Left a Big-Four Firm more than five years ago	85	27.2
	313	100.0
Not completed	14	
Total	327	

**Instrument Reliability**

Two existing survey instruments were used in this research: Gough's (1979) CPS and Forsyth's EPQ (1980). As noted in Chapter 3, both of these instruments have been deemed reliable and widely used in research by a variety of scholars (Bryant et al., 2011; Cropley, 2000). For purposes of this research, returned data were analyzed to confirm that notion of reliability. As noted earlier, to document the validity and reliability survey instruments, one should calculate its alpha coefficient (Cronbach, 1951). This statistic provides an assessment of the instruments internal consistency (Tavakol & Dennick, 2011).

Using SPSS® (Version 21), the researcher calculated the Cronbach (1951) alpha statistics as noted in Table 9 on the following page. It is important to note that the EPQ includes an alpha statistic for both its idealism and relativism components (Forsyth,

1980). As the table illustrates, all amounts exceed 0.70, which is the value generally deemed adequate for research purposes (Santos, 1999; Tavakol & Dennick, 2011). As a result, the instruments used herein appear reliable for purposes of this research.

Table 9.

*Alpha Statistics for Survey Instruments*

<b>Instrument</b>	<b>Calculated Alpha</b>	<b>Alpha Observed in Literature Review</b>
CPS	0.77	0.77 to 0.81
EPQ:		
Idealism	0.88	0.79 to 0.84
Relativism	0.85	0.72 to 0.84

Source: Literature references derived from Bryant, S. M., Stone, D., & Wier, B. (2011). An exploration of accountants, accounting work, and creativity. *Behavioral Research in Accounting*, 23(1), 45-64. doi:10.2308/bria.2011.23.1.45; Cropley, A. J. (2000). Defining and measuring creativity: Are creativity tests worth using? *Roeper Review*, 23(2), 72-92; Dollinger, S. J., Urban, K. K., & James, T. A. (2004). Creativity and openness: Further validation of two creative product measures. *Creativity Research Journal*, 16(1), 35-47; Douglas, P. C., Davidson, R. A., & Schwartz, B. N. (2001). The effect of organizational culture and ethical orientation on accountants' ethical judgments. *Journal of Business Ethics*, 34, 101-121; Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, 39(1), 175-184; Forsyth, D. R., Nye, J. L., & Kelley, K. (1988). Idealism, relativism, and the ethic of caring. *The Journal of Psychology*, 122(3), 243-248; Gough, H. G. (1979). A creative personality scale for the adjective check list. *Journal of Personality and Social Psychology*, 37(8), 1398-1405; and Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *The Academy of Management Journal*, 39(3), 607-634.

**Wave Analysis**

As noted earlier, all members of the OSCPA with email addresses on hand were directly invited to participate. Realistically, however, it was assumed that many would not. This expected non-response was likely to occur for a variety of reasons, including

inattention, email filtering, time constraints, and others.

In light of this expectation, responses were evaluated for the possibility of non-response bias by comparing, through wave analysis, the early results to the later results to determine if any significant differences exist (Lindner et al., 2001; Newton & Rudestam, 1999). Lindner et al. (2001) note that wave analysis measures the effect on survey responses from successive stimuli. In that case, the second email invitation served as that stimuli.

Wave analysis is primarily concerned with the differences between the early and late responses "... on primary variables of interest" (Lindner et al., 2001, p. 52).

Accordingly, mean scores for self-assessed creativity, ethical idealism and relativism, gender, firm size, and area of practice were compared. The results of that analysis are shown on the following page in Table 10.



Table 10.

*Descriptive Statistics by Week of Reply.*

<b>Week:</b>	<b>One</b>			<b>Two</b>		
<b>Variable</b>	<i>n</i>	<b>M</b>	<b>SD</b>	<i>n</i>	<b>M</b>	<b>SD</b>
Creativity	213	2.97	3.33	114	3.12	3.30
Idealism	213	59.65	14.60	114	60.68	16.25
Relativism	208	36.19	13.44	106	37.50	14.44
Gender	207	1.54	0.50	106	1.45	0.50
Experience	207	1.41	0.65	106	1.43	0.73
Focus of Work	207	1.79	0.92	106	1.68	0.76

Note: Gender: 1 = Female, 2 = Male; Experience: 1 = High-level, 2 = Mid-level, 3 = Lower-level, 4 = Other; Practice Focus: 1 = Accounting & auditing, 2 = Tax, 3 = Consulting; 4 = Other

Lindner et al. (2001) emphasize that the results of wave analysis be "...richly reported" (p. 52). The above descriptive statistics generally show only minor differences between the data accumulated in the first week, as opposed to that accumulated during the second week. If material differences had appeared to exist, it might have been assumed some level of bias may exist (e.g. under the presumption that the later responses serve as a proxy for responses not received during the time frame where the survey is available for completion). Such possible bias, if noted, would have been further analyzed for other remedial action.

As a further check, independent sample t-tests were completed by the researcher to evaluate the differences in the data from week to week. Such t-tests were completed by week for the variables of creativity, idealism, relativism, gender, experience, and work

focus. The results failed to suggest that any statistically significant differences existed which would suggest the need for further analysis. Given the foregoing, the possibility of non-response bias appears minimal (Lindner et al., 2001).

**Descriptive Statistics**

Table 11 provides descriptive statistics for the data collected in this study. In addition to the statistics noted in the table, creativity scores ranged from -6 to 12 (out of a possible -12 to 18), and idealism and relativism scores ranged from 10 to 89, and 10 to 81, respectively (out of a possible 10 to 90 in each case). Mean, median, and standard deviation statistics follow:

Table 11.

*Descriptive Statistics.*

	Creativity	Idealism	Relativism	Gender	Work Experience	Work Focus	Type of Firm	Status to Big-Four Firms
<i>n</i>	327	327	314	313	313	313	313	313
Mean	3.02	60.01	36.63	1.51	1.42	1.75	3.68	2.17
Median	3.00	61.00	36.00	2.00	1.00	2.00	3.00	1.00
Std. Deviation	3.31	15.17	13.78	0.50	0.68	0.87	1.46	1.79

Explanation of Scales: Creativity = -12 to 18; Idealism and Relativism = 10 to 90; Gender: 1 = Female, 2 = Male; Work Experience: 1 = High-level, 2 = Mid-level, 3 = Lower-level, 4 = Other; Work Focus: 1 = Accounting & Auditing, 2 = Tax, 3 = Consulting; 4 = Other; Type of Firm: 1 = Big-Four, 2 = Medium, 3 = Small, 4 = Sole Proprietor, 5 = Industry, 6 = Government, 7 = Other; Status to Big-Four Firms: 1 = Never Employed at Big-Four Firm, 2 = Currently Employed at Big-Four Firm, 3 = Left Big-Four Firm less than Two Years Ago, 4 = Left Big-Four Firm Two to Five Years Ago, 5 = Left Big-Four Firm More Than Five Years Ago.

With respect to ethical idealism and relativism, Forsyth (n. d.) noted the means and medians of subjects who had taken the EPQ. Specifically he noted that for over

30,000 respondents to the EPQ, from 29 countries accumulated through 139 samples, the mean and median for idealism were 65.52 and 66.06, respectively. Similarly, he noted a mean and median for relativism of 52.74 and 54.54, respectively. The results from this study suggest substantially lower means (8.4% and 44.6% for idealism and relativism, respectively) from that observed by Forsyth (n. d.). That finding is similar for medians. That is noted for further discussion in Chapter 5.

In addition to the descriptive statistics, data normality was assessed through the preparation of histograms via SPSS® (Version 21). Figure 7 depicts the dispersion of creativity data, overlaid with a curve depicting a perfectly normal distribution, as follows:

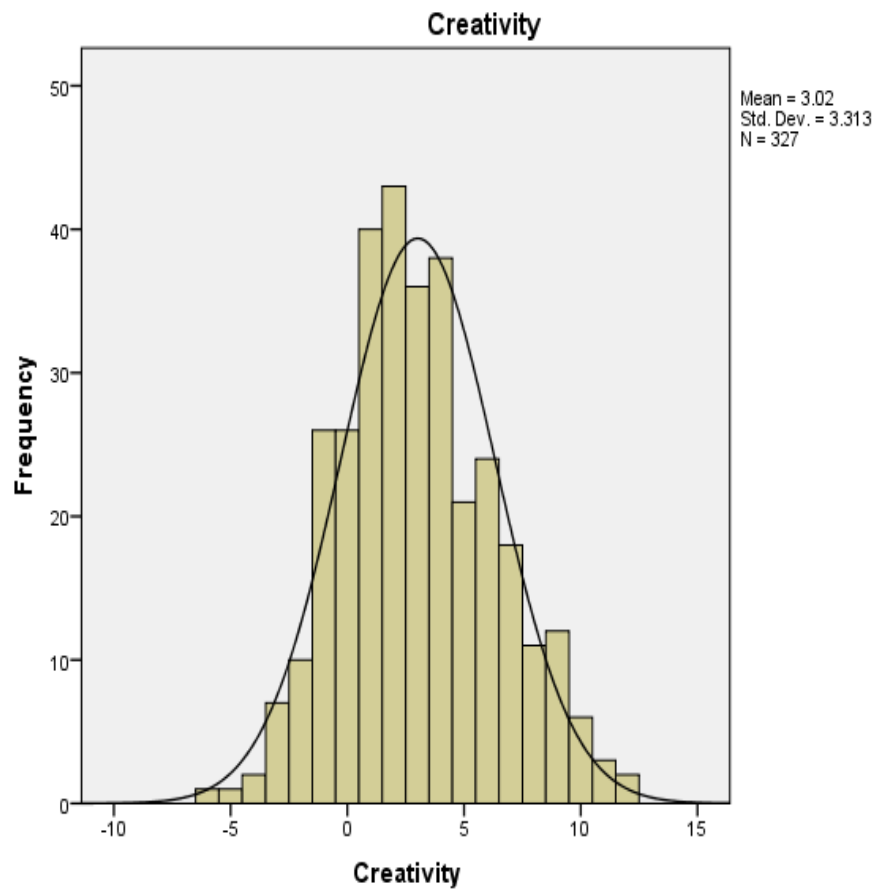


Figure 7. Histogram of Creativity Data.

Likewise, Figure 8 depicts the dispersion of idealism data, also overlaid with a curve depicting a perfectly normal distribution, as follows:

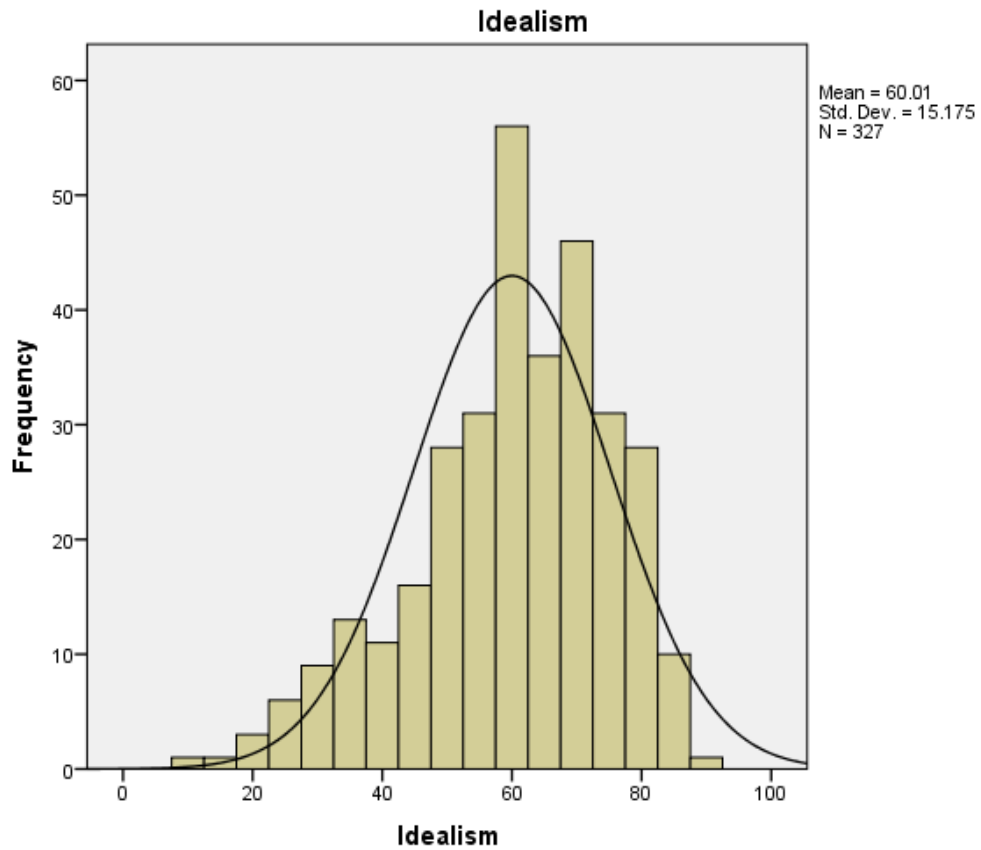


Figure 8. Histogram of Idealism Data.

Finally, Figure 9 depicts the dispersion of relativism data, also overlaid with a curve depicting a perfectly normal distribution, as follows:

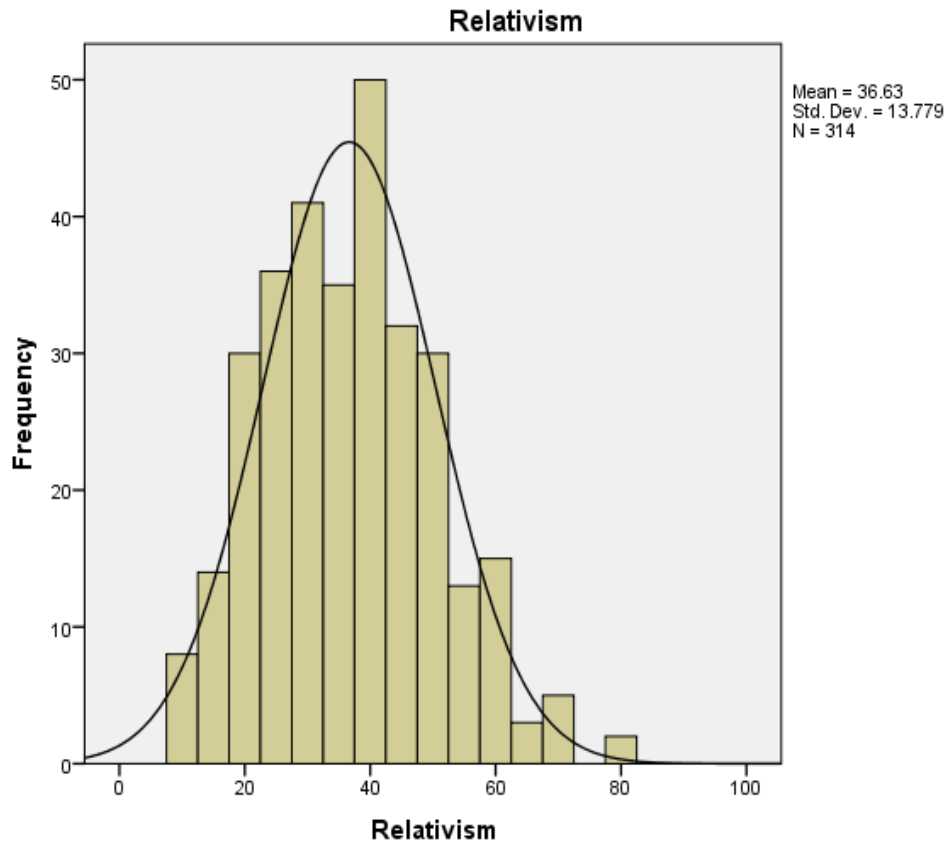


Figure 9. Histogram of Relativism Data.

Data dispersion as evidenced in the histograms was evaluated based upon a review of data skew. Morgan, Leech, Gloeckner, and Barrett (2004) posit that data skew which ranges between -1.00 and 1.00 is indicative of data that are normally distributed to a sufficient degree for statistical analysis. The data above represents data skew of 0.29, -0.66, and 0.35, for creativity, idealism, and relativism, respectively. Accordingly, the data is deemed normally distributed.

In addition to the assessment of data dispersion and distribution normality, the

histograms were visually reviewed to check for anomalies, errors, or other concerns with the data. None were discovered.

### **Correlation Analysis**

Using SPSS® (Version 21), correlation was calculated to determine the strength of the relationships between study variables. This analysis was separated into two parts. First, correlation was evaluated for variables which are normally distributed. This evaluation employed Pearson Product Moment correlation ( $r$ ) as the analysis technique (Newton & Rudestam, 1999). Next, correlation was evaluated for ethical idealism and relativism, and the demographic data, using both the  $r$  and Spearman's correlation ( $\rho$ ) technique. Spearman's correlation, a non-parametric statistical analysis technique, was added as an additional analysis method as demographic data such as gender is purely nominal in character and would not be expected to be normally distributed. Newton and Rudestam (1999) suggest this approach arguing that "... when in doubt, use both methods to the extent possible, and if the results are the same, report the parametric finding, which generally will be more powerful" (p. 184).

#### **Correlation between creativity, idealism, and relativism.**

On the following page, Table 12 depicts the calculated correlation between creativity, idealism, and relativism.

Table 12.

*Correlation Between Creativity, Idealism, and Relativism*

<b>Variable</b>	<b>Creativity</b>	<b>Idealism</b>	<b>Relativism</b>
Creativity (n = 327)	--	-.113*	.062
Idealism (n = 327)		--	-.016
Relativism (n = 314)			--

\*  $p < 0.05$ 

Based upon the above results ( $-.200 > r < .200$ ), one concludes that there were relatively weak relationships between creativity and both idealism and relativism (Newton & Rudestam, 1999). The direction of the relationships, negative for idealism and positive for relativism, were as expected, however. Moreover, the relationship between creativity and idealism, while weak, was statistically significant at  $p < 0.05$ . Finally, it appears that little correlation exists between idealism and relativism ( $r < .200$ ). This is not surprising given Forsyth's (n. d.) contention that idealism and relativism are not mutually exclusive.

**Correlation between idealism, relativism, and demographic data.**

On the following page, Table 13 depicts the correlation ( $r$ ) between idealism and the various demographic data collected.

Table 13.

*Pearson Correlation Between Idealism and Demographic Data*

<b>Variable</b>	<b>Idealism</b>	<b>Gender</b>	<b>Work Experience</b>	<b>Work Focus</b>	<b>Firm Type</b>	<b>Big-Four Status</b>
Idealism (n = 327)	--	-.049	-.003	-.084	.173**	-.075
Gender (n = 313)		--	-.042	.058	-.063	.066
Work Experience (n = 313)			--	-.145*	-.136*	-.260**
Work Focus (n = 313)				--	.003	.045
Firm Type (n = 313)					--	.110
Big-Four Status (n = 313)						--

\* p &lt; 0.05

\*\* p &lt; 0.01

Based upon the above results ( $-.200 > r < .260$ ), one concludes that there were relatively weak relationships between the various demographic variables (Newton & Rudestam, 1999). The relationship between firm type and idealism, while weak, was positive and statistically significant, however, at  $p < 0.01$ . In addition, the relationships between work experience and work focus and firm type were also moderate to weak. They were negative, but statistically significant at  $p < 0.05$ . Finally, the relationship between work experience and Big-Four status was also negative but statistically significant at  $p < 0.01$ .



Likewise, Table 14 depicts the correlation (*r*) between relativism and the various demographic data collected.

Table 14.

*Pearson Correlation Between Relativism and Demographic Data*

<b>Variable</b>	<b>Relativism</b>	<b>Gender</b>	<b>Work Experience</b>	<b>Work Focus</b>	<b>Firm Type</b>	<b>Big-Four Status</b>
Relativism (n = 314)	--	-.140*	.120*	.043	-.102	-.056
Gender (n = 313)		--	-.042	.058	-.063	.066
Work Experience (n = 313)			--	-.145*	-.136*	-.260**
Work Focus (n = 313)				--	.003	.045
Firm Type (n = 313)					--	.110
Big-Four Status (n = 313)						--

\*  $p < 0.05$

\*\*  $p < 0.01$

Based upon the above results ( $-.200 > r < .260$ ), one concludes that there were relatively weak relationships between relativism and the various demographic variables (Newton & Rudestam, 1999). The relationship between gender and relativism was weak, yet statistically significant, at  $p < 0.05$ . In addition, the relationship was negative. The relationship between work experience and relativism, also weak, was statistically significant at  $p < 0.05$ . It was also positive in direction. Moreover, the relationships between work experience and work focus and firm type were statistically significant at  $p$

< 0.05, and the relationship between work experience and Big-Four status was statistically significant at  $p < 0.01$ .

As an additional analysis step, idealism, relativism, and the demographic data were analyzed using Spearman's correlation technique. This was done, given the assumption that such demographic data is not expected to be normally distributed. Use of Spearman's was done to determine if any significant differences in correlation would be observed, from that using Pearson correlation. Researchers are encouraged to apply both correlation analysis methods in cases where some question might exist as to which method is appropriate (Newton & Rudestam, 1999). Accordingly, Table 15 depicts the correlation (*rho*) between idealism and the various demographic data collected.

Table 15.

*Spearman's Correlation Between Idealism and Demographic Data*

Variable	Idealism	Gender	Work Experience	Work Focus	Firm Type	Big-Four Status
Idealism (n = 327)	--	-.025	-.049	-.083	.164**	-.084
Gender (n = 313)		--	-.068	.055	-.036	.073
Work Experience (n = 313)			--	-.162**	-.176**	-.247**
Work Focus (n = 313)				--	-.109	.026
Firm Type (n = 313)					--	.111*
Big-Four Status (n = 313)						--

\*  $p < 0.05$

\*\*  $p < 0.01$

The results above are generally consistent with that garnered through the Pearson

correlation analysis. The relationship between idealism and firm type, while weak, was deemed statistically significant at  $p < 0.01$  under both methods.

Likewise, Table 16 depicts the correlation (*rho*) between relativism and the various demographic data collected.

Table 16.

*Spearman's Correlation Between Relativism and Demographic Data*

Variable	Relativism	Gender	Work Experience	Work Focus	Firm Type	Big-Four Status
Relativism (n = 314)	--	-.148**	.146**	.078	-.098	-.052
Gender (n = 313)		--	-.068	.055	-.036	.073
Work Experience (n = 313)			--	-.162**	-.176**	-.247**
Work Focus (n = 313)				--	-.109	.026
Firm Type (n = 313)					--	.111*
Big-Four Status (n = 313)						--

\*  $p < 0.05$

\*\*  $p < 0.01$

The results above are generally consistent with that garnered through the Pearson correlation analysis. The greatest differences noted are that the statistical significance of the relationships between relativism and gender, and relativism and work experience, appears stronger at  $p < 0.01$ . It is notable, however, that the power of the Spearman's technique is generally regarded as less than that of the Pearson's technique (Newton & Rudestam, 1999).

**Summary of correlation analysis.**

Correlation analysis led to the conclusion that relationships amongst the various independent variables and the dependent variables, idealism and relativism, were generally weak. Despite this observation, Table 17 summarizes the findings of the more powerful Pearson correlation analysis (Newton & Rudestam, 1999), which indicated a statistically significant ( $p < .05$  or  $p < .01$ ) relationship between variables.

Table 17.

*Statistically Significant Relationships Between Independent and Dependent Variables*

<b>Independent Variable</b>	<b>Dependent Variable</b>
Creativity	Idealism*
Gender	Relativism*
Work Experience	Relativism*
Firm Type	Idealism**

\*  $p < 0.05$

\*\*  $p < 0.01$

**Test of Differences**

Despite the relatively weak correlation results found in the study data, it was deemed appropriate to proceed with tests of differences where the relationship between the variables were statistically significant (Pease & Bull, 2000; Taylor, 1990). These tests were deemed an important means through which to confirm the correlation findings (Pease & Bull, 2000; Taylor, 1990).

**Creativity and idealism.**

A paired samples t-test was completed to assess the differences in the means

between the independent variable, creativity, and the dependent variable, idealism. This test suggested a statistically significant reliable difference between the mean of creativity ( $M = 3.02$ ,  $SD = 3.31$ ) and idealism ( $M = 36.65$ ,  $SD = 13.77$ ),  $t(313) = -44.81$ ,  $p < .001$ ,  $\alpha = .05$ . This results implies support for the correlation finding that creativity and idealism are inversely related to one another. In other words, higher levels of creativity appear to lead, in a some way, to lower levels of idealism.

### **Gender and relativism.**

A paired samples t-test was completed to assess the differences in the means between the independent variable, gender, and the dependent variable, relativism. This test suggested a statistically significant reliable difference between the mean of gender ( $M = 1.51$ ,  $SD = .050$ ) and relativism ( $M = 60.01$ ,  $SD = 15.18$ ),  $t(326) = -64.84$ ,  $p < .001$ ,  $\alpha = .05$ . This results implies support for the correlation finding that the gender and relativism are negatively related to one another. In other words, contrary to the original hypothesis, female CPAs appeared more likely to have a relativist ethical orientation than their male counterparts. This tendency, while statistically significant, was small, and the relativistic tendencies of both genders within the sample of Oregon CPAs were observed as lower than that noted in research with other subjects (Forsyth, n. d.).

### **Work experience and relativism.**

A one-way ANOVA test was completed to assess the difference in the means between the independent variable, work experience (e.g. higher, medium, lower, or other), and the dependent variable, relativism. The one-way, between work experience ANOVA suggested a statistically significant effect on relativism  $F(3, 309) = 3.39$ ,  $p = 0.018$ ,  $MS_{error} = 186.07$ ,  $\alpha = .05$ . A Tukey post-hoc test was then used to ascertain the location of significant differences. The Tukey method was selected as Newton and

Rudestam (1999) note that it is "robust with unequal Ns" (p. 233). This analysis found that within the groups of work experience (e.g. higher, medium, lower, or other), the only significant comparison found was between higher ( $n = 215$ ) and medium ( $n = 68$ ) level work experience,  $p = 0.24$ ,  $\alpha = .05$ . This suggested higher levels of relativism in participants with a medium level of work experience ( $M = 40.57$ ) than those with higher levels of work experience ( $M = 35.17$ ).

### **Firm type and idealism.**

A one-way ANOVA test was completed to assess the difference in the means between the independent variable, firm type (e.g. Big-Four, medium, small, sole proprietor, industry, government, or other), and the dependent variable, idealism. The one-way, between firm type ANOVA suggested a statistically significant effect on idealism  $F(6, 306) = 2.94$ ,  $p = 0.008$ ,  $MS_{error} = 219.98$ ,  $\alpha = .05$ . A Tukey post-hoc test was also then used to ascertain the location of significant differences (Newton & Rudestam, 1999). This analysis found that within the groups of firm type (e.g. Big-Four, medium, small, sole proprietor, industry, government, or other), significant comparisons were found between Big-Four and sole proprietor ( $p = 0.016$ ,  $\alpha = .05$ ), Big-Four and industry ( $p = 0.014$ ,  $\alpha = .05$ ), and Big-four and other ( $p = 0.011$ ,  $\alpha = .05$ ). These findings quite likely lack adequate statistical power, however, as the number of participants from designating Big-Four firm size ( $n = 7$ ) was extremely small (VanVoorhis & Morgan, 2007).

As an alternative, a one-way ANOVA test was completed to assess the difference in the means between participants' prior relationship to Big-Four firms (as a alternative to current firm type) and the dependent variable, idealism (E. Almer, personal

communication, January 31, 2013). The one-way, Big-Four status ANOVA suggested a statistically significant effect on idealism  $F(4, 308) = 3.32, p = 0.011, MS_{error} = 221.61, a = .05$ . Again, using a Tukey post-hoc test, within the groups of Big-Four status, the only significant comparison was found between current Big-Four status and never have held Big-Four status ( $p = 0.045, a = .05$ ). These findings are again mitigated substantially, however, by a likely lack of adequate statistical power, as the number of participants from designating current Big-Four firm size ( $n = 4$ ) was extremely small (VanVoorhis & Morgan, 2007).

### **Disposition of Research Hypotheses**

The analysis above does not provide persuasive support for any of the research hypotheses. These conclusions are based upon the finding of weak correlation among all of the independent variables, and the dependent variables of ethical idealism and relativism. While correlation was noted as weak, certain statistically significant relationships were noted amongst certain variables which suggested some limited support. Follow-up with tests of differences provided additional support for the reliability of those findings. On the following page, Table 18 provides a more detailed disposition of each research hypothesis.

Table 18.

*Disposition of Research Hypotheses*

Hypothesis	Independent Variable	Dependent Variable	Disposition
H <sub>1</sub>	Creativity	Relativism	Inconclusive
H <sub>2</sub>	Creativity	Idealism	Weak Support
H <sub>3</sub>	Gender	Relativism	Weak Support*
H <sub>4</sub>	Gender	Idealism	Inconclusive
H <sub>5</sub>	Work Experience	Relativism	Weak Support
H <sub>6</sub>	Work Experience	Idealism	Inconclusive
H <sub>7</sub>	Practice Focus	Relativism	Inconclusive
H <sub>8</sub>	Practice Focus	Idealism	Inconclusive
H <sub>9</sub>	Firm Type	Relativism	Inconclusive
H <sub>10</sub>	Firm Type	Idealism	Weak Support**

\* - Weak support for the opposite of hypothesis as stated

\*\* - Weak support, however, such support mitigated by suspected low statistical power



## **Chapter 5 – Discussion**

This research was conducted to explore the relationships between creativity and ethical disposition in Oregon CPAs. Its purpose also included exploring the relationship between other characteristics (e.g. gender) of Oregon CPAs and their ethical disposition. Ten hypotheses based upon the review of related literature suggested that both creativity and several individual demographic characteristics, as independent variables, would explain the ethical idealism or relativism (dependent variables) observed from study participants. To that end, the data generated in this research was not persuasive. Notwithstanding that fact, this study contributes to the understanding of the constructs surrounding the research hypotheses in several important ways.

### **Overview of Findings**

This research produced several important findings. They are discussed in the following sections.

#### **Creativity and ethical idealism or relativism.**

The practice of accounting, as explained by agency theory, is premised on an unwavering fidelity to the rules that define professional ethics (AICPA, 2011). Ethical idealism and relativism offered two possible constructs through which to measure such commitment. Idealism offered a construct related to one's commitment to honoring such rules. Relativism offered a construct for measuring one's willingness to substitute

individual values or norms of behavior in place of those rules (Forsyth, 1980).

This research provided important findings with respect to both constructs. First, while the relationships between creativity and both idealism and relativism were observed as being weak, the direction of such relationships, as evident in the data, were as hypothesized. For example, creativity correlated negatively with idealism. The inverse relationship between them was also statistically significant, meaning that the relationship observed was not likely a result of random error (Newton & Rudestam, 1999). Such a finding is important as it suggests that creativity may contribute in some meaningful way to the recent failings observed in CPAs. Creativity does not appear to be the sole, or even a major contributor to those ethical failings (at least as observed from the study data), but it does appear to be a factor at some level. Creativity, inversely related to idealism, also suggests that, at some level, creativity contributes to an individual CPA's willingness to deviate from professional rules. Any such deviation carries with it the potential to negatively impact the CPA's responsibility to the public interest (AICPA, 2011).

Next, the relationship between creativity and relativism was weak, yet positive. It was not statistically significant, however. Little in the way of conclusions can be inferred from these results. Alternatively, the data generated suggests that relativism is less of a concern with respect to Oregon CPAs than it may be for a large universe of individuals who have taken the EPQ and been tracked by Forsyth (n. d.). As noted earlier, the construct of relativism was developed by Forsyth (1980) more than thirty years ago. He noted mean and median idealism and relativism scores from over 30,000 participants who completed the instrument in the past (Forsyth, n. d.). The scores that Forsyth observed

were 8.4% higher for idealism than those observed herein. But they were 44.5% higher for relativism. This suggests that a relativist ethical orientation is far less likely in Oregon CPAs than in a broader range of people. It is also consistent with data generated by Bryant et al. (2011) from accountants working for the Army Corps of Engineers. One can speculate that this tendency of individuals with an accounting background to be less relativist in their ethical orientation, is material to an overall discussion of accounting ethics and the future of accounting training. It is also a relationship that merits further research.

As Forsyth (n. d.) notes, idealism and relativism are not mutually exclusive notions. Consistent with that contention, this research suggests that they do not appear to closely correlate to one another. Interestingly though, the idealism scores of individual Oregon CPAs observed herein ranged from 10 to 89 (out of a possible 10 to 90). Individual relativism scores herein ranged from 10 to 81 (out of a possible 10 to 90). These extensive ranges suggest significant diversity (within the confines of a normal distribution) in how individual Oregon CPAs approach ethical decision making. The design of training curriculum would appear to be something of a challenge given this reality. While mean relativism scores are significantly lower than those observed by Forsyth (n. d.) and others, individual CPAs exhibit high levels of relativism. Designers of training are advised to consider this diversity, and its possible implications, as they prepare training materials and instructional guides.

Finally, this research utilized the CPS as an instrument for measuring individual creativity. The CPS directs the participant to select words from a list of thirty possibilities. Such words correlate positively or negatively with the construct of

creativity. All or none may be chosen. Accordingly, the participant need not make decisions as to the relative degree a word applies. Nor are they subject to a word limit. Every word stands apart from ever other one in the process of completing the CPS (Gough, 1979).

As noted above, the CPS is comprised of thirty words (Gough, 1979). Honest is one of those words. Table 19 provides a summary of participant decisions, observed in this research, with respect to the selection of the word honest on the CPS.

Table 19.

*Selection of Honest as a Part of CPS (Gough, 1979) Completion.*

	<b>Number</b>	<b>Percent</b>
Participants who responded that the word Honest described them	309	94.5%
Participants who did not respond that the word Honest described them	18	5.5%
Total Responses	327	100.0%

The AICPA (2011) Code of Ethics and Oregon law (ORS673, 2011) demand honesty from CPAs. Honesty underlies the successful completion of duties owed by a CPA to both clients and the public at large. It is an essential ingredient of ethical CPA behavior. It is possible that participants in this research could have intended to select honest as an adjective describing themselves, and merely failed to do so. (It is also possible, however, that some who selected honest did so based upon the influence of social desirability or some other bias (Leary & Allen, 2011)). Also, a failure to select the word honest on a research instrument, does not confirm the likelihood of individual dishonesty. But to the extent that 5.5% of participants did not deem honesty an element of their individual self-image, several concerns arise. First, history clearly has shown that even one dishonest CPA can do serious damage to their clients and the public interest

(Clikeman, 2009). Observing such a high portion of study participants not selecting the word honest on an instrument such as the CPS, is therefore, alarming. Second, to the extent that honesty is not at the forefront of CPA images of self, one can imagine unintended outcomes harkening back to the notion of the slippery slope (Gino & Bazerman, 2009), or the notion of role morality (Applbaum, 1999; Radtke, 2008). Small malevolent actions related to the fact that honest behavior is not top-of-mind, or that are simply rationalized as doing one's job, may eventually lead to more substantial failings affecting the public interest. Finally, it is also worth noting that within the CPS, honest is an adjective which lowers an individual overall self-assessed creative potential score (Gough, 1979). When developing the scale, Gough (1979) validated it through a variety of means, including the use of experts, subject interviews, use of other research instruments, and other actions. That process involved an assessment of over 1,700 individuals. Their mean scores of self-assessed creativity, which ranged as high as 5.96 (SD = 3.86) for male graduate psychology students, were generally higher than the mean of 3.02 (SD = 3.31) observed in this study (Gough, 1979). Past research however, using a creativity assessment technique other than the CPS, would suggest that accountants are no less creative than members of other professions (Bryant et al., 2011). One may then speculate that the lower scores observed herein, reflect the majority inclusion of honest as an element of Oregon CPA self-image (with a resultant reduction in CPS score). Moreover, a universal assumption of honesty lies at the heart of the agency theory-inspired structure of CPA practice (AICPA, 2011; Jensen & Meckling, 1976). Accordingly, policymakers and regulators may not have adequately framed the risk of dishonesty in the profession, given the universal expectation that honest behavior by

individuals will be demonstrated. For example, it has been observed that people will cheat to realize a benefit for others (e.g. a client). They may rationalize such action as morally beneficial, even if it might be characterized by third parties as dishonest (Gino et al., 2012). If an individual sense of ethics is agnostic with respect to basic honesty, a code meant to regulate the behavior of honest individuals may fail in its intent, assuming honesty will be a default reaction in relation to that regulatory scheme.

### **Gender and ethical idealism or relativism.**

This research provided an important finding with respect to the relationship between gender and relativism. While the relationship between the two was observed as weak, it was statistically significant, meaning that the inverse relationship observed was not likely a result of random error (Newton & Rudestam, 1999). The direction of the relationship evident from the data was negative. To better understand this finding, it is useful to explore the means of the relativism scores. Female participants had a mean relativism score of 38.62, while male participants had a mean relativism score of 34.77. This accounts for the correlation finding. It is in opposition to the hypothesized relationship, however, that males would be more likely to have a higher relativism score than females. This data suggests that female Oregon CPAs are more likely to show a higher ethically relativist orientation than their male counterparts.

As noted earlier, however, care should be taken in interpreting this finding. The data generated through this research suggests that relativism is less of a concern with respect to Oregon CPAs than it may be for society at large. The relativism scores observed from the data herein are considerably lower than Forsyth (n. d.) documented. So while there does appear to be a statistically significant difference in the relativist ethical orientation of female Oregon CPAs, the relativism of both genders appears far

below broader societal levels.

As for the relationship between gender and idealism, the data generated through this study was not persuasive with respect to the hypothesized relationship that females would have a higher idealist ethical orientation than males. The means of the idealism scores for females and males were 60.63 and 59.14, respectively. While this provides limited support as to the direction of the hypothesis, the results could be the result of random occurrence (Newton & Rudestam, 1999).

### **Work experience and ethical idealism or relativism.**

This research provided an important finding with respect to the relationship between work experience and relativism. While the relationship between the two was observed as weak, it was statistically significant, meaning that the inverse relationship observed was not likely a result of random error (Newton & Rudestam, 1999). The direction of the relationship evident from the data was positive. To better understand this finding, it is useful to explore the means of the relativism scores. Participant mean relativism scores were 35.17, 40.57, 39.21, and 27.00, for individuals having high, medium, low, or other levels of work experience, respectively. The low and other categories had small samples sizes ( $n = 28$ ,  $n = 2$ , respectively) thus limiting significantly the statistical power of any findings with respect to them (VanVoorhis & Morgan, 2007). But with respect to high and medium experiences categories, the data suggests that Oregon CPAs reporting a medium level of experience also report a higher level of relativism than their highly experienced counterparts. This finding is consistent with the hypothesized nature of the relationship. As noted earlier, however, care should be taken in interpreting this finding. The data generated through this research suggests that

relativism is less of a concern with respect to Oregon CPAs than it may be for society at large. The relativism scores observed from the data herein are considerably lower than Forsyth (n. d.) documented. So while there does appear to be a statistically significant difference in the relativist ethical orientation of Oregon CPAs with medium work experience, as opposed to those highly experienced, the relativism of both categories appear far below broader societal levels.

As for the relationship between work experience and idealism, the data generated through this study was not persuasive with respect to the hypothesized relationship that Oregon CPAs with higher levels of work experience would have a higher idealist ethical orientation than those with less work experience.

#### **Work focus and ethical idealism or relativism.**

This research included hypotheses which posited how the work focus of Oregon CPAs (e.g. accounting and auditing, tax, consulting, or other) would relate to their levels of ethical idealism or relativism. In effect, those practicing in accounting and auditing were expected to show higher levels of idealism, and lower levels of relativism, than those practicing in tax and consulting. The data were not persuasive with respect to those hypothesized relationships, however. One could speculate that these findings may relate to the low level of Big-Four CPA participation. One would expect greater specialization in larger firms. In any event, observed relationships were weak. They were also not statistically significant. The means for accounting and auditing, and tax, work focus descriptors did suggest support for the direction of the hypotheses, however.

#### **Firm type and ethical idealism or relativism.**

This research provided an interesting finding with respect to firm type and



idealism. The research hypothesized that the size of the participants current firm would relate inversely to the level of observed idealism (e.g. smaller firm participants would have higher idealism scores). The data generally supported the direction of that hypothesis. While the relationship between the two was observed as weak, it was statistically significant, meaning that the inverse relationship observed was not likely a result of random error (Newton & Rudestam, 1999).

To better understand this finding, consider that Big-Four firm participants demonstrated considerably lower idealism scores than all other participants. This lends support to the hypothesized relationship. Lower idealism scores were again observed when participants were categorized by their past Big-Four employment status. Mitigating these findings, however, is the fact that the sample sizes of the Big-Four firm participants was extremely low ( $n = 7$ ). This limits significantly, the statistical power of the findings (VanVoorhis & Morgan, 2007).

As for the relationship between firm type and relativism, the data generated through this study was not persuasive with respect to the hypothesized relationship that Oregon CPAs with at larger firms would have a higher relativist ethical orientation than those with less experience. Observed relationships were weak. They were also not statistically significant.

### **Study Limitations**

This research was limited by four primary factors. First, test subjects were delimited to members of the OSCP who responded to the survey. Second, the limitations of the survey instruments, or participant reactions to them, introduced the

possibility of bias (Kerr & Gagliardi, 2003). Third, individual levels of creativity were determined through self-assessment. This contrasts to that which would be assessed by a third-party researcher or clinician (Ng & Feldman, 2012). Finally, the researcher is a licensed CPA in the State of Oregon.

The first limitation relates to study participants. This study sample included only CPAs who are members of the OSCPA. Accordingly, the study incurred the risk that CPAs in Oregon who are not members of the OSCPA, or CPAs who do not practice in Oregon, might offer responses that suggest different relationships amongst the variables, than those derived herein. The responses of Oregon CPAs may not be generalizable to CPAs in other states. Users of this research are advised to be mindful of this limitation when considering its findings (Creswell, 2009).

The second limitation relates to the study instruments and the participants responses to them. Despite the demonstrated validity and reliability of the survey instruments (Forsyth, 1980; Gough, 1979), participant reactions to them can be unpredictable. Social desirability, or other biases may impact participant response candor, and the reliability of the data collected. This concern is mitigated considerably by the anonymous nature of the response process. It is also mitigated by the rigor of the human subjects review process (Exhibit E), which further ensures the anonymity of the participants (Creswell, 2009). Nevertheless, study users are advised to be mindful of the possibility of social desirability or other bias when considering the study findings (Creswell, 2009).

Thirdly, the measure of individual creativity used herein is based upon a process of self-rating. Self-ratings of creativity may differ substantially from that determined by

a trained clinician or third-party observer (Ng & Feldman, 2012). While there exists substantial empirical justification for the use of self-ratings of creativity in research (Ng & Feldman, 2012), the user of this research is also advised to consider this limitation when evaluating its findings (Creswell, 2009).

Finally, this research was conducted by an individual who holds a CPA license in the State of Oregon, and is also a member of both the AICPA and OSCPA. Given that these facts, and the fact that research participants are also CPAs who belong to the OSCPA (many will undoubtedly also belong to the AICPA), unintended bias may be introduced into the research plan and analysis. The user of this research is advised to consider the researcher's status as a CPA and member of the AICPA and OSCPA, when evaluating its findings (Creswell, 2009).

### **Implications For Future Research and Practice**

This research sought to explore the role that individual creativity, and other demographic factors, might play in the ethical orientation of Oregon CPAs. While the findings were not entirely persuasive, evidence was generated to suggest that creativity plays at least a partial role in the ethical reasoning of CPAs in practice. The role of creativity also must likely be viewed in context with other, as yet fully undetermined, factors.

Therein lays a disconnection from the underlying theory of accounting practice. Agency theory posits that CPAs achieve ethical conduct through following rules and generally accepted standards of practice. Those rules are dependent in large part by voluntary cooperation of individuals (AICPA, 2011). They seek to ensure that CPAs

maintain a multi-agent focus, which is a deterrent to bad behavior (Gino et al., 2012).

Research suggests that the degree to which individuals identify with others, and adjust their behavior accordingly, they will respect and follow expected norms in their personal conduct (Cialdini, Reno, & Kallgren, 1990; Cialdini & Trost, 1998).

To the extent that creativity adversely impacts an individual's idealistic fidelity to those rules, however, an alternative framework may need to emerge to ensure CPA's continue to conduct themselves in a manner that protects the public interest. For example, this research suggested significantly lower levels of ethical relativism in Oregon CPAs than might generally be expected (Forsyth, 1980). This finding, something of a surprise, offers a glimpse at what is not known about the details of the psychological makeup of Oregon CPAs.

To that end, one can argue that research is needed to identify that new framework, or changes to the current framework, to better protect CPA multi-agent focus. Such a framework ought to include a stronger focus on individual learning and awareness of self, as opposed to a narrow focus on routine changes to rules of practice that ultimately have proven inadequate to prevent creative accounting or other unacceptable CPA behavior (Yuthas et al., 2004). Bazerman and Tenbrunsel (2011) note that "... people generally fail to recognize that their ethical judgments are biased in ways they would condemn with greater awareness" (p. 37). Such a new framework ought to also focus on informing CPAs how a host of factors, including creativity, interact together to potentially effect their behavior (Bandura, 1990; Wood & Bandura, 1989). As discussed extensively herein, history has shown that a singular focus on the strengthening of practice rules, in the name of ethical reform, has been proven inadequate as a means to protect the public

interest. This is evidenced by incidents of accounting failure, rapid business complexity exceeding standard setting capabilities, and other factors (Clikeman, 2009). Furthermore, more than five percent of the participants in this research did not select the word honest as a self-descriptor. That finding itself suggests the possible need for new frameworks for practice and/or training. Dostoyevsky (n. d.) pithily said “nothing in this world is harder than speaking the truth, nothing easier than flattery” (p. 1). To the extent the profession and policymakers cling to the status quo and ignore the reality that the current framework may not be adequate to manage psychological issues like individual practitioner creativity, suboptimal outcomes (e.g. scandal) should be expected to continue into the future.

Moreover, as discussed herein, CPAs are generally believed to require levels of creativity equivalent to that of other professionals (Bryant et al., 2011). If a new or modified framework of practice is considered, related training programs should be designed recognizing the influence of creativity on CPA decision processes. Training program developers should affirmatively recognize that creativity, and other psychological factors, are important elements in the design of continuing education programs (Al-Beraidi & Rickards, 2006). This is especially critical in light of the activity around global accounting standard convergence. Whether IFRS is adopted in the U.S. or not, global accounting convergence will likely require substantial change in the training and practice of U.S. based CPAs, especially in those firms who serve global clients (Hail et al., 2010a; Reilly, 2011; Tyson, 2011). Even gradual reversion to a more principles-based practitioner orientation warrants further exploration of the impact of creativity, shown herein as having a statistically significantly inverse relationship with ethical

idealism, on CPA behavior.

Finally, this research sought to explore the relationships between creativity and ethical orientation in Oregon CPAs. This was deemed important, in part, given the many observed accountings failures that served as evidence that individual CPAs were willing to compromise their responsibilities to the clients and the public interest. The findings herein suggest that creativity does play at least some small role in CPA decision processes, and that role reduces CPA idealism. Those results ought to be of interest to accounting regulators and policymakers, as well as behavioral experts. As noted earlier, future research should explore further the impact of creativity on decision processes. Other cognitive factors might also contribute to unacceptable CPA behaviors. They may do this by acting as a motivational catalyst, attaching them to CPA creative potential, in a manner that leads to a higher level of rationalization or other undesirable behavior (Rick & Lowenstein, 2008). These characteristics may also respond to other environmental or psychological phenomena in a way to produce other unexpected and undesirable actions by individual CPAs (Bandura, 1990). Accordingly, future research should begin to explore these other psychological factors, their relationship to creativity, and how they interact to influence CPA decision making and a tendency to act, or not act, honestly or ethically. Such research should seek to determine if other factors exist that might serve as a positive catalyst, essentially leveraging the creative potential of CPAs in ways to improve their service to their clients and the public interest.

References

- Aßländer, M. S. (2005). How could it happen? Enron and the architecture of wrongdoing. *EBS Review*, 2, 63-73.
- Agoglia, C. P., Douppnik, T. S., & Tsakumis, G. T. (2011). Principles-based versus rules-based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions. *The Accounting Review*, 86(3), 747-767. doi:10.2308/accr.00000045
- Al-Beraidi, A., & Rickards, T. (2006). Rethinking creativity in the accounting profession: To be professional and creative. *Journal of Accounting & Organizational Change*, 2(1), 25-41. doi:10.1108/18325910610654117
- Ali Shah, S. Z., Butt, S. A. and Tariq, Y. B. (2011). Use or abuse of creative accounting techniques. *International Journal of Trade, Economics and Finance*, 2(6), 531-536.
- Alles, M. G., & Datar, S. (2004). How do you stop the books being cooked? A management-control perspective on financial accounting standard setting and the Section 404 requirements of the Sarbanes-Oxley Act. *International Journal of Disclosure and Governance*, 1(2), 119-137.
- Almer, E. D., Higgs, J. L., & Hooks, K. L. (2005). A theoretical framework of the relationship between public accounting firms and their auditors. *Behavioral Research in Accounting*, 17, 1-22.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, 123-167). Greenwich, CT: JAI Press.

- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview Press.
- American Institute of Certified Public Accountants [AICPA] (2011). *Code of professional conduct and bylaws*. New York, NY: AICPA, Inc.
- American Institute of Certified Public Accountants [AICPA] (2011). *Code of professional conduct and bylaws*. New York, NY: AICPA, Inc.
- Amihud, Y., & Lev, B. (1981). Risk reduction as a managerial motive for conglomerate mergers. *Bell Journal of Economics*, 12(1), 605-617.
- Anderson, E. (2008). The salesperson as outside agent or employee: A transaction cost analysis. *Marketing Science*, 27(1), 70-84.
- Appelbaum, A. (1999). *Ethics for adversaries: The morality of roles in public and professional life*. Princeton, NJ: Princeton University Press.
- Argawal, A., & Mandelker, G. N. (1987). Managerial incentives and corporate financing decisions. *Journal of Finance*, 42(4), 823-837.
- Ariely, D. (2012, May 26). Why we lie. *Wall Street Journal*, pp. C1-2.
- Balaciu, D., Bogdan, V., & Vladu, A. B. (2009). A brief review of creative accounting literature and its consequences in practice. *Annales Universitatis Apulensis Series Oeconomica*, 11(1), 170-183.
- Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, 33(4), 344-358.
- Bandura, A. (1983). Temporal dynamics and decomposition of reciprocal determination: A reply to Phillips and Orton. *Psychological Review*, 90(2), 166-170.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175-1184.



- Bandura, A. (1990). Some reflections on reflections. *Psychological Inquiry*, 1(1), 101-105.
- Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31(2), 101-119.
- Bazerman, M. H., & Gino, F. (2012). Behavioral ethics: Toward a deeper understanding of moral judgment and dishonesty. *Harvard Business School Working Paper 12-054*. Boston, MA: Harvard Business School. Retrieved February 10, 2012 from <http://www.hbs.edu/research/pdf/12-054.pdf>.
- Bazerman, M. H., & Tenbrunsel, A. E. (2011). *Blind spots: Why we fail to do what's right and what to do about it*. Princeton, NJ: Princeton University Press.
- Beaussart, M. L., Andrews, M. L., & Kaufman, J. C. (2012). Creative liars: The relationship between creativity and integrity. Retrieved January 4, 2013 from <http://scottbarrykaufman.com/wp-content/uploads/2012/11/Beaussart-et-al.-in-press.pdf>.
- Bierly, P. E. III, Kolodinsky, R. M., & Charette, B. J. (2009). Understanding the complex relationship between creativity and ethical ideologies. *Journal of Business Ethics*, 86, 101-112. doi:10-1007/s10551-008-9837-6
- Bobek, D. D., & Radtke, R. R. (2007). An experiential investigation of tax professionals' ethical environment. *The Journal of the American Taxation Association*, 29(2), 63-84.
- Bolman, L. G., & Deal T. E. (2003). *Reframing organizations: Artistry, choice and leadership* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Boslaugh, S., & Watters, P. A. (2008). *Statistics in a nutshell*. Sebastopol, CA: O'Reilly

Media, Inc.

- Bryant, S. M., Stone, D., & Wier, B. (2011). An exploration of accountants, accounting work, and creativity. *Behavioral Research in Accounting*, 23(1), 45-64.  
doi:10.2308/bria.2011.23.1.45
- Buchan, H. F. (2005) Ethical decision making in the public accounting profession: An extension of Ajzen's theory of planned behavior. *Journal of Business Ethics*, 61(2), 165-181. doi:10.1007/s10551-005-0277-2
- Burger, E. S., Mayer, D., & Bowal, P. (2007). KPMG and "abusive" tax shelters: Key ethical implications for legal and accounting professionals. *Journal of the Legal Profession*, 31, 43-74.
- Carnegie, G. D., & Napier, C. J. (2010). Traditional accountants and business professionals: Portraying the accounting profession after Enron. *Accounting, Organizations and Society*, 35(3), 360-376.
- Carpenter, B. W., & Mahoney, D. P. (2011). The convergence project. *The CPA Journal*, 81(9), 14-21.
- Carson, S. H., Peterson, J. B., & Higgins, D. M. (2005). Reliability, validity, and factor structure of the creative achievement questionnaire. *Creativity Research Journal*, 17(1), 37-50. doi:10.1207/s15326934crj1701\_4
- Cialdini, R. B., Reno, R. R., & Kallgren, G. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58, 1015-1026.
- Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norm, conformity, and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of*

- social psychology* (Vol. 2, pp. 151-192). New York, NY: McGraw Hill.
- Clay, M. E. (2007). IASB and FASB working together to converge accounting standards. *Proceedings of the Northeast Business & Economics Association*, 268-272.
- Clikeman, P. M. (2009). *Called to account: Fourteen financial frauds that shaped the American accounting profession*. New York, NY: Routledge.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Cohen, J. R., & Holder-Webb, L. L. (2006). Rethinking the influence of agency theory in the accounting academy. *Issues in Accounting Education*, 21(1), 17-30.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (2000). Project earnings manipulation: An ethics case based on agency theory. *Issues in Accounting Education*, 15(1), 89-104.
- Conlon, E. I., & Parks, J. M.. (1988). The effects of monitoring and tradition on compensation arrangements: An experiment on principal/agent dyads. *Academy of Management Journal*, 33(3), 603-622.
- Conroy, S., Emerson, T., & Pons, F. (2010). Ethical attitudes of accounting practitioners: Are rank and ethical attitudes related? *Journal of Business Ethics*, 91(2), 183-194. doi:10.1007/s10551-009-0076-2
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Cropley, A. J. (2000). Defining and measuring creativity: Are creativity tests worth using? *Roepers Review*, 23(2), 72-92.
- Cruz, C. A., Shafer, W. E., & Strawser, J. R. (2000). A multidimensional analysis of tax

- practitioners' ethical judgments. *Journal of Business Ethics*, 24(3), 223-244.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York, NY: Harper-Collins.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures*. Reading, MA: Addison-Wesley.
- Demski, J. G., & Feltham, G. A. (1978). Economic incentives in budgetary control systems. *Accounting Review*, 53(2), 336-359.
- Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204- 223.
- Dobbin, F., & Jung, J. (2010). The misapplication of Mr. Michael Jensen: How agency theory brought down the economy and why it might again. *Research in the Sociology of Organizations*, 30(B), 29-64.
- Dollinger, S. J., Urban, K. K., & James, T. A. (2004). Creativity and openness: Further validation of two creative product measures. *Creativity Research Journal*, 16(1), 35-47.
- Domino, G., & Giuliani, I. (1997). Creativity in three samples of photography: A validation of the adjective check list creativity scale. *Creativity Research Journal*, 10(2-3), 193-200.
- Dostoyevsky, F. (n. d.). Quotes about honesty. *GoodReads.com*. Retrieved June 23, 2013 from <http://www.goodreads.com/quotes/tag/honesty>.
- Douglas, P. C., Davidson, R. A., & Schwartz, B. N. (2001). The effect of organizational culture and ethical orientation on accountants' ethical judgments. *Journal of Business Ethics*, 34, 101-121.

- Eisenhardt, K. M. (1985). Control: Organizational and economic approaches. *Management Science*, 31(2), 134-149.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics*, 26(2), 301-325.
- Ferraro, F., Pfeffer, J., & Sutton, R. I. (2005). Economics language and assumptions: How theories can become self-fulfilling. *Academy of Management Review*, 30(1), 8-24. doi:10.5465/AMR.2005.15281412
- Financial Accounting Standards Board [FASB] (2002). *Proposal: Principles-based approach to U. S. standards setting*. Norwalk, CT: FASB.
- Fong, E. A., & Tosi, H. L. Jr. (2007). Effort, performance, and conscientiousness: An agency theory perspective. *Journal of Management*, 33(2), 161-179.
- Ford, C. M., & Gioia, D. A. (2000). Factors influencing creativity in the domain of managerial decision making. *Journal of Management*, 26(4), 705-732.
- Forsyth, D. R. (n. d.). *The EPQ*. Retrieved June 11, 2012 from <http://donforsyth.wordpress.com/ethics/ethics-position-questionnaire>.
- Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, 39(1), 175-184.
- Forsyth, D. R. (1992). Judging the morality of business practices: The influence of personal moral philosophies. *Journal of Business Ethics*, 11, 461-470.
- Forsyth, D. R., Nye, J. L., & Kelley, K. (1988). Idealism, relativism, and the ethic of caring. *The Journal of Psychology*, 122(3), 243-248.

- Garmong, S. K. (2012). The state of FASB-IASB convergence projects. *Financial Executive*, 28(7), 24-27.
- Gendron, Y., Suddaby, R., & Lam, H. (2006). An examination of the ethical commitment of professional accountants to auditor independence. *Journal of Business Ethics*, 64(2), 169-193. doi:10.1007/s10551-005-3095-7
- Ghoshal, S. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4(1), 75-91.
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal of Personality & Social Psychology*, 102(3), 445-459. doi:10.1037/a0026406
- Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and determination in unethical behavior. *Psychological Science*, 20(3), 393-398.
- Gino, F., Ayal, S., & Ariely, D. (2012). Self-serving altruism? When unethical actions that benefit others do not trigger guilt. *Harvard Business School Working Paper 13-028*. Boston, MA: Harvard Business School. Retrieved October 8, 2012 from <http://www.hbs.edu/research/pdf/13-028.pdf>.
- Gino, F., & Bazerman, M. H. (2009). When misconduct goes unnoticed: The acceptability of gradual erosion in others' unethical behavior. *Journal of Experimental Social Psychology*, 45(4), 708-719. doi:10.1016/j.jesp.2009.03.013
- Gino, F., Krupka, E. L., & Weber, R. A. (2012). License to cheat: Voluntary regulation and ethical behavior. *Harvard Business School Working Paper 13-029*. Boston, MA: Harvard Business School. Retrieved September 26, 2012 from <http://www.hbs.edu/research/pdf/13-029.pdf>.

- Gough, H. G. (1979). A creative personality scale for the adjective check list. *Journal of Personality and Social Psychology*, 37(8), 1398-1405.
- Gough, H. G., & Heilbrun, A. B. Jr. (1980). *The adjective check list manual - 1980 edition*. Palo Alto, CA: Consulting Psychologists Press.
- Gowthorpe, C., & Amat, O. (2005). Creative accounting: Some ethical issues of macro- and micro-manipulation. *Journal of Business Ethics*, 57, 55-64.
- Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, 49(1), 27-48.
- Hail, L., Leuz, C., & Wysocki, P. (2010a). Global accounting convergence and the potential adoption of IFRS by U.S. (Part I): Conceptual underpinnings and economic analysis. *Accounting Horizons*, 24(3), 355-394.  
doi:10.2308/acch.2010.24.3.355
- Hail, L., Leuz, C., & Wysocki, P. (2010b). Global accounting convergence and the potential adoption of IFRS by the U.S. (Part II): Political factors and future scenarios for U.S. accounting standards. *Accounting Horizons*, 24(4), 567-588.  
doi:10.2308/acch.2010.24.4.567
- Haugh, H., & McKee, L. (2004). The cultural paradigm of the smaller firm. *Journal of Small Business Management*, 42(4), 377-394. doi:10.1111/j.1540-627X.2004.00118.x
- Hood, J. N., & Koberg, C. S. (1991). Accounting firm cultures and creativity among accountants. *Accounting Horizons*, 5(3), 12-19.
- Hooker, J. (2003). *Working across cultures*. Stanford, CA: Stanford University Press.
- Huang, C., & Chang, B. (2010). The effects of managers' moral philosophy on project

decision under agency problem conditions. *Journal of Business Ethics*, 94(4), 595-611. doi:10.1007/s10551-009-0340-5

Hunsberger, B. (2013, January 24). Online check on CPAs still not possible. *The Oregonian*, pp. B-8, B-10.

Ibrahim, N., & Angelidis, J. (2009). The relative importance of ethics as a selection criterion for entry-level accountants: Does gender make a difference? *Journal of Business Ethics*, 85, 49-58. doi:10.1001/s10551-008-9946-2

Isaac, S., & Michael, W. B. (1997). *Handbook in research and evaluation: A collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioral science* (3rd ed.). San Diego, CA: Educational and Industrial Testing Services.

Israel, G. (1992a). Sampling the evidence of extension program impact. *University of Florida IFAS Extension PEOD-5*. Gainesville, FL: University of Florida. Retrieved November 3, 2012 from <http://edis.ifas.ufl.edu/pd005>.

Israel, G. (1992b). Determining sample size. *University of Florida IFAS Extension PEOD-6*. Gainesville, FL: University of Florida. Retrieved November 2, 2012 from <http://edis.ifas.ufl.edu/pdf/PD/PD00600.pdf>.

Israel, G. (1992c). Sampling issues: Nonresponse. *University of Florida IFAS Extension PEOD-9*. Gainesville, FL: University of Florida. Retrieved November 2, 2012 from <http://www.webcitation.org/66kKUIzIN>.

Jensen, M. (1983). Organization theory and methodology. *Accounting Review*, 56, 319-339.

Jensen, M. C. (1994). Self-interest, altruism, incentives, & agency theory. *Journal of*



*Applied Corporate Finance*, 7(2), 40-45.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

Jensen, M. C., & Meckling, W. H. (1994). The nature of man. *Journal of Applied Corporate Finance*, 7(2), 4-19.

Jones, M. J. (2011a). Introduction – Setting the scene. In M. Jones (Ed.), *Creative accounting, fraud and international accounting scandals* (pp. 3-19), Chichester, UK: John Wiley & Sons, Ltd.

Jones, M. J. (2011b). The impact of accounting scandals and creative accounting. In M. Jones (Ed.), *Creative accounting, fraud and international scandals* (pp. 479-491). Chichester, U.K.: John Wiley & Sons, Ltd.

Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue contingent model. *Academy of Management Review*, 16(2), 366-395.

Karcher, J. N. (1996). Auditors' ability to discern the presence of ethical problems. *Journal of Business Ethics*, 15(10), 1033-1050.

Kerr, B., & Gagliardi, C. (2003). Measuring creativity in research and practice. In S. J. Lopez, & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 155-169). Washington, DC: American Psychological Association.

Kirton, M. (1976). Adaptors and innovators: A description and measure. *Journal of Applied Psychology*, 61, 622-629.

Kulik, B. K. (2005). Agency theory, reasoning and culture at Enron: In search for a

solution. *Journal of Business Ethics*, 59, 347-360.

Leary, M. R., & Allen, A. (2011). Personality and persona: Personality processes in self-presentation. *Journal of Personality*, 79(6), 889-916. doi:10.1111/j.1467-6494.2010.00704.x

Lindner, J. R., Murphy, T. M., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agriculture Education*, 42(4), 43-53. doi: 10.5032/jae.2001.04043

Martin, J. M. (2002). *Organization culture: Mapping the terrain*. Thousand Oaks, CA: Sage Publishing, Inc.

Martin, J. M. (2004). *Organizational culture* (SGSB Research Paper No. 1847). Palo Alto, CA: Stanford University, Graduate School of Business. Retrieved July 11, 2012 from <http://gsbapps.stanford.edu/researchpapers/library/RP1847.pdf>.

Martynov, A. (2009). Agents or stewards? Linking managerial behavior and moral development. *Journal of Business Ethics*, 90(2), 239-249. doi:10.1007/s10551-009-0039-7

McCrae, R. R., Terracciano, A., Realo, A., & Allik, J. (2008). Interpreting GLOBE societal practices scales. *Journal of Cross-Cultural Psychology*, 39(6), 805-810.

Meneely, J., & Portillo, M. (2005). The adaptable mind in design: Relating personality, cognitive style, and creative performance. *Creativity Research Journal*, 17(2/3), 155-166.

Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal and Social Psychology*, 67(4), 371-378. doi:10.1037/h0040525

- Mitnick, B. M. (2006). *Origin of agency theory: An account by one of the theory's originators*. Pittsburgh, PA: Katz Graduate School of Business, University of Pittsburgh. Retrieved August 30, 2012 from <http://www.pitt.edu/~mitnick/agencytheory/agencytheoryoriginrev11806r.htm>.
- Mole, K. (2002). Business advisers' impact on SMEs. *International Small Business Journal*, 20(2), 139-162. doi:10.1177/0266422602202002
- Moore, S., Mahler, R., & Ashton, R. (2011). *2011 trends in the supply of accounting graduates and the demand for public accounting recruits*. Durham, NC: AICPA. Retrieved July 13, 2013 from <http://www.aicpa.org/InterestAreas/AccountingEducation/NewsAndPublications/DownloadableDocuments/2011TrendsReport.pdf>.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for introductory statistics: Use and interpretation*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Moussa, B. (2010). On the international convergence of accounting standards. *International Journal of Business and Management*, 5(4), 89-92.
- Muhr, S. L. (2010). Ethical interruption and the creative process: A reflection on the new. *Culture and Organization*, 16(1), 73-86. doi:10.1080/14759550903558110
- Mulford, C. W., & Comiskey, E. E. (2002). *The financial numbers game: Detecting creative accounting practices*. New York, NY: John Wiley & Sons, Inc.
- Mumford, M. D., Waples, E. P., Antes, A. L., Brown, R. P., Connelly, S., Murphy, S. T., & Devenport, L. D. (2010). Creativity and ethics: The relationship of creative and ethical problem-solving. *Creativity Research Journal*, 22(1), 74-89.

doi:10.1080/104004109035796619

Newton, R. R., & Rudestam, K. E. (1999). *Your statistical consultant: Answers to your data analysis questions*. Thousand Oaks, CA: Sage Publications, Inc.

Ng, T. W. H., & Feldman, D. C. (2012). A comparison of self-ratings and non-self-report measures of employee creativity. *Human Relations*, 65(8), 1021-1047.

doi:10.1177/0018726712446015

Noreen, E. (1988). The economics of ethics: A new perspective on agency theory. *Accounting, Organizations, and Society*, 13, 359-369.

Norris, F. (2011, June 9). Troubled audit opinions. *New York Times*. Retrieved August 22, 2012 from

<http://www.nytimes.com/2011/06/10/business/10norris.html?pagewanted=all>.

Ogilvie, D. T., & Simms, S. (2009). The impact of creativity training on an accounting negotiation. *Group Decision and Negotiation*, 18, 75-87. doi:10.107/s10726-008-9124-2

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *The Academy of Management Journal*, 39(3), 607-634.

Oregon Administrative Rules [OAR] 30-801 (2011). *Board of Accountancy - Code of professional conduct*. Salem, OR: OAR. Retrieved August 29, 2012 from [http://arcweb.sos.state.or.us/pages/rules/oars\\_800/ar\\_\\_801/801\\_030.html](http://arcweb.sos.state.or.us/pages/rules/oars_800/ar__801/801_030.html).

Oregon Board of Accountancy [OBOA] (2012). *About us*. Salem, OR: OBOA. Retrieved August 29, 2012 from [http://cms.oregon.gov/BOA/Pages/about\\_us.aspx](http://cms.oregon.gov/BOA/Pages/about_us.aspx).

Oregon Revised Statutes 673 [ORS673] (2011). Accountants, tax consultants and preparers. Salem, OR: Oregon Revised Statutes. Retrieved August 29, 2012 from

<http://www.leg.state.or.us/ors/673.html>.

- Oregon Society of Certified Public Accountants [OSCPA] (2012a). *About: OSCP A Mission and Purpose*. Beaverton, OR: OSCP A. Retrieved October 23, 2012 from <https://secure.orcpa.org/about/>.
- Oregon Society of Certified Public Accountants [OSCPA] (2012b). *Demographics*. Beaverton, OR: OSCP A. Retrieved October 23, 2012 from [https://secure.orcpa.org/writable/files/demographics\\_2012.pdf](https://secure.orcpa.org/writable/files/demographics_2012.pdf).
- Oregon Society of Certified Public Accountants [OSCPA] (2012c). *2013-2013 OSCP A White Pages Membership Directory*. Beaverton, OR: OSCP A. Retrieved October 23, 2012 from [https://secure.orcpa.org/sup/documents/whitepages\\_12-13.pdf](https://secure.orcpa.org/sup/documents/whitepages_12-13.pdf).
- Pease, C. A., & Bull, J. J. (2000). Correlations are hard to interpret. In *Scientific decision-making* (18). Retrieved July 5, 2013 from <http://www.utexas.edu/courses/bio301d/SDM.pdf>.
- Ponemon, L. A. (1990). Ethical judgments in accounting: A cognitive-developmental perspective. *Critical Perspectives on Accounting*, 1(2), 191-215.
- Ponemon, L. A. (1992). Auditor underreporting of time and moral reasoning: An experimental lab study. *Contemporary Accounting Research*, 9, 171-189.
- Ponemon, L. A., & Gabhart, D. R. L. (1994). Ethical reasoning research in the accounting and auditing professions. In J. R. Rest and D. Narvaez (Eds.), *Moral development in the professions: Psychology and applied ethics* (pp. 101-119), Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.
- Public Company Accounting Oversight Board [PCAOB] (2012a). *About the PCAOB*. Washington, DC: PCAOB. Retrieved August 29, 2012 from

<http://pcaobus.org/About/Pages/default.ASPX>.

Public Company Accounting Oversight Board [PCAOB] (2012b). *Mission, structure &*

*history*. Washington, DC: PCAOB. Retrieved August 29, 2012 from

<http://pcaobus.org/About/History/Pages/default.ASPX>.

Quinn, D. P., & Jones, T. M. (1995). An agent morality view of business policy.

*Academy of Management Review*, 20(1), 22-42.

Radtke, R. R. (2000). The effects of gender and setting on accountants' ethically sensitive

decisions. *Journal of Business Ethics*, 24, 299-312.

Radtke, R. R. (2008). Role morality in the accounting profession: How do we compare to

physicians and attorneys? *Journal of Business Ethics*, 79, 279-297.

doi:10.1007/s10551-007-9380-x

Reilly, D. (2011). Convergence flaws. *Accounting Horizons*, 25(4), 873-877.

Rick, S., & Loewenstein, G.(2008). Commentaries and rejoinder to "The dishonesty of

honest people": Hypermotivation. *Journal of Marketing Research*, XLV, 645-648.

doi:10.1509/jmkr.45.6.645.

Ross, S. A. (1973). Economic theory of agency: Principal's problem. *American Economic*

*Review*, 63, 134-139.

Rudestam, K. E., & Newton, R. R. (2007). *Surviving your dissertation: A comprehensive*

*guide to content and process*. Thousand Oaks, CA: Sage Publications, Inc.

Santos, J. R. A. (1999). Cronbach's alpha: A tool for assessing the reliability of scales.

*Journal of Extension*, 37(2), 1-4.

Sax, L. J., Gilmartin, S. K., Lee, J. J., & Hagedorn, L. S. (2003). *Using web surveys to*

*reach community college students: An analysis of response rates and response bias.* Paper presented at the meeting of the Association of Institution Research, San Antonio, TX. Retrieved May 20, 2013 from [http://www.heri.ucla.edu/PDFs/Using\\_Web\\_Surveys.pdf](http://www.heri.ucla.edu/PDFs/Using_Web_Surveys.pdf).

Schein, E. H. (1993). *Organizational culture and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.

Schlenker, B. R., & Forsythe, D. R. (1977). On the ethics of psychological research. *Journal of Experimental Social Psychology, 13*, 369-396.

Sen, D. K., & Inanga, E. (n.d.). *Creative accounting in Bangladesh and global perspectives.* Maastricht, NL: Maastricht School of Management. Retrieved September 9, 2012 from [http://web2.msm.nl/news/articles/050707papers/0206\\_Sen\\_Inanga.PDF](http://web2.msm.nl/news/articles/050707papers/0206_Sen_Inanga.PDF).

Shafritz, J. M., Ott, J. S., & Jang, Y. S. (2005). *Classics of organization theory* (6th ed.). Belmont, CA: Wadsworth.

Shapiro, S. P. (2005). Agency theory. *Annual Review of Sociology, 31*, 263-284.  
doi:10.1146/annurev.soc.31.041304.122159

Shaub, M. K., Collins, F., Holzmann, O., & Lowensohn, S. H. (2005). Self-interest vs. concern for others. *Strategic Finance, 86*(9), 41-45.

Shaub, M. K., & Fisher, D. G. (2008). Beyond agency theory: Common values for accounting ethics education. In D. L. Swanson, & D. G. Fisher (Eds.), *Advancing business ethics education* (pp. 305-328). Charlotte, NC: Information Age Publishing, Inc.

- Sørensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47, 70-91.
- Sweeney, J. (1995). The moral expertise of auditors: An exploratory analysis. *Research on Accounting Ethics*, 1, 213-234.
- Sweeney, P. (2012). Sarbanes-Oxley: A decade later. *Financial Executive*, 28(6), 36-41.
- Sydney Gestalt Institute (n. d.). *Case study consent form*. Mosman, AU: Sydney Gestalt Institute. Retrieved October 31, 2010 from <http://www.gestaltsydney.com/policies/Case%20Study%20Form.pdf>.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd
- Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. *Journal of Diagnostic Medical Sonography*, 1, 35-39.
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17(2), 223-236.6
- Teodora, C., & Nicolae, B. (2009). Study regarding the ethics and creativity in the financial-accounting activity. *Annals of the University of Oradea, Economic Science Series*, 18(3), 844-849.
- Top Accounting Firms (2012). *The list*. Portland, OR: Portland Business Journal.
- Tysiac, K. (2012). Still in flux. *Journal of Accountancy*, 214(3), 28-36.
- Tyson, T. (2011). The convergence of IFRS and U.S. GAAP. *The CPA Journal*, 81(6), 26-31.
- Unsworth, K. L., Wall, T. D., & Carter, A. (2005). Creative requirement: A neglected



- construct in the study of employee creativity. *Group & Organization Management*, 30(5), 541-560. doi:10.1177/1059601104267607
- VanVoorhis, C. R., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample size. *Tutorials in Quantitative Methods for Psychology*, 3(2), 43-50.
- Walking, R. A., & Long, M. S. (1984). Agency theory, managerial welfare, and takeover bid resistance. *The Rand Journal of Economics*, 15(1), 54-68.
- Waltz, S. E., & Gough, H. G. (1984). External evaluation of efficacy by means of an adjective check list scale for observers. *Journal of Personality and Social Psychology*, 46(3), 697-704.
- Watson, J. (2001). How to determine a sample size. *Penn State Cooperative Extension Tipsheet #60*. University Park, PA: Penn State University, College of Agriculture. Retrieved November 2, 2012 from <http://extension.psu.edu/evaluation/pdf/TS60.pdf>.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14(3), 361-384.
- Yuthas, K., Dillard, J. F., & Rogers, R. K. (2004). Beyond agency and structure: Triple-loop learning. *Journal of Business Ethics*, 51, 229-243.
- Zeff, S. A. (2003a). How the U.S. accounting profession got where it is today: Part I. *Accounting Horizons*, 17(3), 189-205.
- Zeff, S. A. (2003b). How the U.S. accounting profession got where it is today: Part II. *Accounting Horizons*, 17(4), 267-286.

Zeng, L., Proctor, R. W., & Salvendy, G. (2011). Can traditional divergent thinking tests be trusted in measuring and predicting real-world creativity? *Creativity Research Journal*, 23(1), 24-37. doi:10.1080/10400419.2011.545713

Zhang, Y. (2008). The effects of perceived fairness and communication on honesty and collusion in a multi-agent setting. *The Accounting Review*, 83(4), 1125-1146. doi:10.2308/accr.2008.83.4.1125

Appendix A

**Consent Form for Inclusion on www.SurveyMonkey.com**

**Background:** This research is being prepared by John Porter, a Doctor of Business Administration student at George Fox University, Newberg, Oregon.

**Purpose:** The purpose of this research is to assess links between various individual characteristics, including creativity, and the ethical idealism and relativism of Oregon CPAs. The OSCPAs has agreed to facilitate the survey process for this research.

**Protection:** The information obtained from this research, including that provided by you on www.SurveyMonkey.com, will be used solely to complete the purposes discussed above. All of the information you provide will be confidential with respect to your identity. No names will be used. If you wish to cease your involvement in the study at any time, you are free to stop. You will only be asked to participate if you are a member of the OSCPAs. If you have inquiries regarding the conduct of this study, please contact the supervising faculty member for this research, Dr. Tim Rahschulte at George Fox University.

**Consent** (check the box indicating consent):

I understand that the information collected will be used for the purpose

described above. I consent for information I provide to be used in that manner.

Note: Adapted from Case Study Consent Form, Sydney Gestalt Institute (n. d.). *Case study consent form*. Mosman, AU: Sydney Gestalt Institute. Retrieved October 31, 2010 from <http://www.gestaltsydney.com/policies/Case%20Study%20Form.pdf>.

Appendix B

**Gough Creative Personality Scale**

Please indicate which of the following adjectives best describe yourself.

Check all that apply. You may check as many, or few, of the adjectives as you wish.

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Capable       | <input type="checkbox"/> Honest*           | <input type="checkbox"/> Artificial*     | <input type="checkbox"/> Intelligent    |
| <input type="checkbox"/> Clever        | <input type="checkbox"/> Well-mannered*    | <input type="checkbox"/> Cautious*       | <input type="checkbox"/> Wide interests |
| <input type="checkbox"/> Confident     | <input type="checkbox"/> Inventive         | <input type="checkbox"/> Egotistical     | <input type="checkbox"/> Original       |
| <input type="checkbox"/> Commonplace*  | <input type="checkbox"/> Narrow interests* | <input type="checkbox"/> Humorous        | <input type="checkbox"/> Reflective     |
| <input type="checkbox"/> Conservative* | <input type="checkbox"/> Sincere*          | <input type="checkbox"/> Individualistic | <input type="checkbox"/> Resourceful    |
| <input type="checkbox"/> Conventional* | <input type="checkbox"/> Self-confident    | <input type="checkbox"/> Informal        | <input type="checkbox"/> Sexy           |
| <input type="checkbox"/> Dissatisfied* | <input type="checkbox"/> Submissive*       | <input type="checkbox"/> Insightful      | <input type="checkbox"/> Snobbish       |
| <input type="checkbox"/> Suspicious*   | <input type="checkbox"/> Unconventional    |  |   |

\* These items are scored as -1. All others are scored as 1.

Note: Adapted from Gough, H. G. (1979). A creative personality scale for the Adjective Check List. *Journal of Personality and Social Psychology*, 37, 1398-1405. Downloaded December 10, 2012 from <http://www.indiana.edu/~bobweb/Handout/d19.gough.htm>.

Appendix C

**The Ethics Position Questionnaire**

Please indicate if you agree or disagree with the following items. Each represents a commonly held opinion and there are no right or wrong answers. We are interested in your reaction to such matters of opinion. Rate your reaction to each statement by writing a number to the left of each statement where:

- |                                |                      |
|--------------------------------|----------------------|
| 1 = Completely disagree        | 6 = Slightly agree   |
| 2 = Largely disagree           | 7 = Moderately agree |
| 3 = Moderately disagree        | 8 = Largely agree    |
| 4 = Slightly disagree          | 9 = Completely agree |
| 5 = Neither agree nor disagree |                      |

1. People should make certain that their actions never intentionally harm another even to a small degree.
2. Risks to another should never be tolerated, irrespective of how small the risks might be.
3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.
4. One should never psychologically or physically harm another person.
5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.
6. If an action could harm an innocent other, then it should not be done.
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.

Appendix C, continued

**The Ethics Position Questionnaire, continued**

8. The dignity and welfare of the people should be the most important concern in any society.
9. It is never necessary to sacrifice the welfare of others.
10. Moral behaviors are actions that closely match ideals of the most “perfect” action.
11. There are no ethical principles that are so important that they should be a part of any code of ethics.
12. What is ethical varies from one situation and society to another.
13. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.
14. Different types of morality cannot be compared as to “rightness.”
15. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.
16. Moral standards are simply personal rules that indicate how a person should behave, and are not to be applied in making judgments of others.
17. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.
18. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustment.
19. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.

Appendix C, continued

**The Ethics Position Questionnaire, continued**

20. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.

Note: Adapted from Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, 39(1), 175-184. Downloaded December 10, 2012 from <http://donforsyth.wordpress.com/ethics/ethics-position-questionnaire>.

Appendix D

**Consent for Use of Instruments**

**Gough (1979) Creative Personality Scale**

Several attempts were made to contact Dr. Gough to obtain consent to use the CPS in this research. These included both telephone and email contacts through the University of California-Berkeley, where he is an emeritus faculty member (he has no other published contact information). All efforts were unsuccessful.

Unable to contact Dr. Gough, the researcher contacted other scholars, via email, who were observed to have used the CPS in their research, or for other academic purposes. Those contacts included Dr. F. Gino (fgino@hbs.edu) at the Harvard Business School (F. Gino, personal communication, December 17, 2012), Dr. G. Oldham (goldham@tulane.edu) at Tulane University (G. Oldham, personal communication, December 23, 2012), Dr. G. Dow (gayle.dow@cnu.edu) at Christopher Newport University and the University of Indiana (G. Dow, personal communication, December 18, 2012), and Dr. S. Carson (carson@wjh.harvard.edu) at Harvard University (S. Carson, personal communication, January 12, 2013). All confirmed that the CPS is available for use in academic research.

On January 10, 2013, I spoke via telephone (614-607-3529) with Dr. C. Charyton at Ohio State University. Dr. Charyton has also used the CPS in her research. She explained that the CPS is it an academic scale made available for research purposes through the American Psychological Association website (www.APA.org). I went to that site and found a link titled "Resources". Clicking on that, I found another link titled "Creative Measures" ([http://www.apa.org/divisions/div10/resources.html#creative\\_meas](http://www.apa.org/divisions/div10/resources.html#creative_meas)). This linked to a website sponsored by the University of Indiana. At this website I found a



Appendix D, continued

**Consent for Use of Instruments, continued**

link titled "Creativity Tests" ([http://www.indiana.edu/~bobweb/Handout/cretv\\_6.html](http://www.indiana.edu/~bobweb/Handout/cretv_6.html)).

Clicking on that, I was taken to a link to the CPS. At the CPS, under the section

"Administration", I downloaded the statement "Anyone can administer the Gough"

(Retrieved January 10, 2013 from

<http://www.indiana.edu/~bobweb/Handout/d19.gough.htm>).

Given the information provided by Dr. Charyton, as well as the contacts made with Drs. Gino, Dow (coincidentally, the Administrator of the University of Indiana site noted above), Oldham, and Carson, I conclude that the CPS is available for use in my dissertation.

**The Ethics Position Questionnaire (Forsyth (1980))**

Dr. Forsyth (n. d.) made the EPQ freely available for use in academic research.

The statement below, confirming this fact, was downloaded on June 11, 2012 from

<http://donforsyth.wordpress.com/ethics/ethics-position-questionnaire/>.

**"Permission:** Permission is granted for use of the scale for research purposes, including theses and dissertations" (Forsyth, n. d., p. 5).

Appendix E

Human Subjects Review Questionnaire



HUMAN SUBJECTS REVIEW COMMITTEE  
PROTECTION OF HUMAN SUBJECTS INITIAL REVIEW QUESTIONNAIRE

[**Note:** Dissertation, or other formal research proposal, need not be submitted with this form. However, relevant section(s) may need to be attached in some cases, in addition to filling out this form completely, but only when it is not possible to answer these questions adequately in this format. Do not submit a proposal in lieu of filling out this form. In addition, review carefully the full text of the Human Subjects Research Committee Policies and Procedures on page 4 of the Research Manual.]

Date submitted:

Date received:

Title of Proposed Research:

The Role of Creativity in the Ethical Orientation of Oregon CPAs

Principal Researcher(s):

John D. Porter

Degree Program Doctor of Business Administration

Rank/Academic Standing Doctoral Candidate

Other Responsible Parties (if a student, include faculty sponsor; list other involved parties and their role)

Faculty Sponsor - Tim Rahschulte, Ph.D.

**(\*\*Please include identifying information on page 6 also.)**

(1) Characteristics of Subjects (including age range, status, how obtained, etc):

Study participants are members of the Oregon Society of Certified Public Accountants (OSCPA). They range in age from 20 to over 70. Participants will be invited to participate in the research through direct email solicitation, as well as through advertisements or other mentions in OSCPAs publications. Participants are primarily active or retired CPAs, with the exception of a few college students who have joined the OSCPAs through their student program.

Appendix E, continued

**Human Subjects Review Questionnaire, continued**

**GEORGE FOX UNIVERSITY  
HSRC INITIAL REVIEW QUESTIONNAIRE  
Page 2**

(2) Describe any risks to the subjects (physical, psychological, social, economic, or discomfort/ inconvenience):

Risk to the participants is minimal (only minor inconvenience in completing the survey instruments).

(3) Are the risks to subjects minimized (a) by using procedures which are consistent with sound research design and which do not unnecessarily expose subjects to risk, and (b) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes?

**Degree of risk:** 1 2 3 4 5 6 7  
low high

1

(4) Briefly describe the objectives, methods and procedures used:

This research will employ a cross-sectional survey design to assess the relationship between individual creativity, and other individual demographic characteristics (e. g. gender), and notions of individual ethical idealism or relativism. Data collection will occur through the completion of participant surveys using [www.SurveyMonkey.com](http://www.SurveyMonkey.com) technology. A variety of prizes will be offered as an enticement to encourage participation. Those are planned to include gift cards from the Apple Store and several restaurants. Winners of those prizes will be selected randomly based upon the timing of survey completion.

It is initially planned that the survey will be available on [www.SurveyMonkey.com](http://www.SurveyMonkey.com) for a minimum period of four weeks, or longer as necessary to achieve the needed set for analysis.

Appendix E, continued

**Human Subjects Review Questionnaire, continued**

**GEORGE FOX UNIVERSITY  
HSRC INITIAL REVIEW QUESTIONNAIRE**

Page 3

(5) Briefly describe any instruments used in the study (**attach a copy of each**).

Individual creativity will be measured using an instrument developed by Gough (1979). It consists of thirty descriptor words, eighteen of which are indicative of higher creativity, and twelve representing lower levels of creativity. Research participants are simply required to indicate which words best describe themselves. They may select all thirty words, or none of the words.

Ethical relativism or idealism will be measured by Forsyth's (1980) instrument, the EPQ. It uses the responses to a series of twenty questions designed to operationalize individual differences in moral reasoning. It assigns a value between one (complete disagreement) and nine (complete agreement) in response to ten statements involving idealism in moral reasoning. The process then repeats with ten questions involving relativism in moral reasoning.

(6) How does the research plan make adequate provision for monitoring the data collected so as to insure the safety, privacy and confidentiality of subjects?

All data will be collected on [www.SurveyMonkey.com](http://www.SurveyMonkey.com)'s secure server. It will then be downloaded to the researcher's secure computer. Data files will be password protected. Individuals names will not be gathered. Email addresses will be retained to the extent needed for the distribution of incentives offered to encourage participation. These will be stored in the same password protected files.

(7) Briefly describe the benefits that may be reasonably expected from the proposed study, both to the subject and to the advancement of scientific knowledge – are the risks to subjects reasonable in relation to anticipated benefits?

Agency theory is the theoretical foundation for the practice of accounting. Recent accounting scandals suggest, however, that it alone is not an adequate predictor of the behavior of CPAs. Research has identified instances where the terms of principal/agent relationship do not appear to be universally effective to promote ethical behavior. The loss of public confidence in the accounting profession, caused by scandals, has taken a significant toll on market institutions and investor beliefs as to the usefulness and reliability of CPA work product. This research plans to explore other characteristics of individual CPAs, particularly individual creativity, to assess if such characteristics appear to affect ethical conduct. This research has the potential to provide findings to inform CPA training, accounting practice, and regulation. It has the potential to offer insights which may improve the CPA profession, and is therefore worthwhile in relation to the minor risk involved.

Appendix E, continued

**Human Subjects Review Questionnaire, continued**

**GEORGE FOX UNIVERSITY  
HSRC INITIAL REVIEW QUESTIONNAIRE**

Page 4

(8) Where some or all of the subjects are likely to be vulnerable to coercion or undue influence (such as children, persons with acute or severe physical or mental illness, or persons who are economically or educationally disadvantaged), what appropriate additional safeguards are included in the study to protect the rights and welfare of these individuals?

Not applicable.

(9) Does the research place participants "at risk"? Yes If so, describe the procedures employed for obtaining **informed consent** (*in every case, attach copy of informed consent form; if none, explain*).

The risks inherent to participants are deemed minor. Despite this, all participants will be required to acknowledge such risks through affirmative acceptance of the following informed consent:

**Background:** This research is being conducted by John Porter, a Doctor of Business Administration student at George Fox University, Newberg, Oregon.

**Purpose:** The purpose of this research is to assess links between various individual characteristics, including creativity, and the ethical idealism and relativism of Oregon CPAs. The OSCPA has agreed to facilitate the survey process for this study.

**Protection:** The information obtained from this study, including that provided by you on [www.SurveyMonkey.com](http://www.SurveyMonkey.com), will be used solely to complete the purposes described above. All of the information you provide will be confidential with respect to your identity. No names will be used. If you wish to cease your involvement in the study at any time, you are free to stop. You will only be asked to participate if you are a member of the the OSCPA. If you have any inquiries regarding the conduct of this study, please contact the supervising faculty member for this research, Dr. Tim Raeschulte at George Fox University.

Appendix E, continued

**Human Subjects Review Questionnaire, continued**

**GEORGE FOX UNIVERSITY  
HSRC INITIAL REVIEW QUESTIONNAIRE  
Page 5**

**COMMITTEE REVIEW**

**Committee Use ONLY**

Signature	Recommend Approval	Recommend Conditional Approval	Not Recommended
Chair _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____

Comments (continue on back if necessary, use asterisk to identify):

Appendix E, continued

Human Subjects Review Questionnaire, continued

GEORGE FOX UNIVERSITY  
HSRC INITIAL REVIEW QUESTIONNAIRE  
Page 6

Title:

\_\_\_\_\_  
\_\_\_\_\_

Principal

Researcher(s): \_\_\_\_\_

Date application completed: \_\_\_\_\_

COMMITTEE FINDING:

1) The proposed research makes adequate provision for safeguarding the health and dignity of the subjects and is therefore approved.

\_\_\_\_ 2) Due to the assessment of risk being questionable or being subject to change, the research must be periodically reviewed by the HRSC on a \_\_\_\_\_ basis throughout the course of the research or until otherwise notified. This requires resubmission of this form, with updated information, for each periodic review.

\_\_\_\_ 3) The proposed research evidences some unnecessary risk to participants and therefore must be revised to remedy the following specific area(s) of non-compliance:

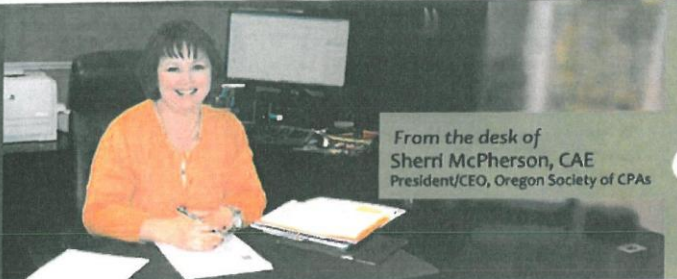
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ 4) The proposed research contains serious and potentially damaging risks to subjects and is therefore not approved.

Chair or designated member Gay Kise Date 12/11/2012

Appendix F

**Invitation from OSCPA Seeking Participation**



From the desk of  
Sherri McPherson, CAE  
President/CEO, Oregon Society of CPAs

View this email in your browser.

### We Need Your Help!

The OSCPA invites you to participate in research being conducted by a member and fellow CPA, John Porter. John, while currently working in industry, is also a Doctoral student at George Fox University. He is in the process of completing his dissertation, which looks at the relationship between various individual characteristics of CPAs, and their ethical orientation.

The purpose of this research is to assess links between various individual characteristics, including creativity, and the ethical idealism and relativism of Oregon CPAs. The desired outcome of this study is the generation of data that support or fail to support a series of hypotheses related to those relationships. It is further hoped that this research will result in insights useful for ethics training and future accounting practice.


We encourage you to participate in this research effort by completing a brief survey related to that research. The URL for the survey is:


[https://www.surveymonkey.com/s/Oregon\\_CPA\\_Research](https://www.surveymonkey.com/s/Oregon_CPA_Research)

The OSCPA Board of Directors supports John's research as it is in line with the OSCPA's mission to represent the profession, encourage high professional standards, and advocate for an accounting community responsive to the public interest. The information obtained from this research will be used solely to complete the purposes discussed above. All of the information you provide will be confidential with respect to your identity. No names will be collected.

**Questions?** Contact Sherri McPherson, President/CEO, at 503-597-5480 / 1-800-255-1470, ext. 20, or email [smcpherson@orcpa.org](mailto:smcpherson@orcpa.org).

Thank you for your help in this effort.



 Oregon Society of Certified Public Accountants  
503-641-7200 / 1-800-255-1470  
[membership@orcpa.org](mailto:membership@orcpa.org) / [www.orcpa.org](http://www.orcpa.org)



Appendix G

**Letter to Large Accounting Firms Encouraging Participation**

May 1, 2013

[Recipient Name]

[Title]

[Company Name]

[Street Address]

[City, ST ZIP Code]

Dear [Recipient Name]:

I am writing to invite you, and the other CPAs in your firm, to participate in academic research about the profession!

I am a fellow CPA, currently working in industry. I also happen to be a Doctoral student at George Fox University, in the process of completing my dissertation. It looks at the relationship between various individual characteristics of CPAs, and their ethical orientation.

The purpose of this research is to assess links between various individual characteristics, including creativity, and the ethical idealism and relativism of Oregon CPAs. The desired outcome of this study is the generation of data that support or fail to support a series of hypotheses related to those relationships. It is further hoped that this research will result in insights useful for ethics training and future accounting practice.

You may have seen a similar invitation sent recently via e-mail by the OSCPA. They are assisting me in contacting members of the profession. I am sending this letter as a supplemental means to encourage you and your colleagues to participate in this effort. It is my hope that responses will be well distributed across CPAs practicing in firms of all sizes. Your firm is among Oregon's largest, and accordingly, I welcome your participation.

Participation is easy! Simply complete a brief electronic survey. The URL for that survey is:

[https://www.surveymonkey.com/s/Oregon\\_CPA\\_Research](https://www.surveymonkey.com/s/Oregon_CPA_Research)

The information obtained from this research will be used solely to complete the purposes discussed above. All of the information you provide will be confidential. No names will be collected. Thank you in advance for your help in this effort.

Sincerely,

John D. Porter, CPA

Appendix H

**Twenty Large Accounting Firms Receiving Letter of Encouragement**

Moss Adams, LLP	805 SW Broadway, Suite 1200	Portland, OR 97205
KPMG LLP	1300 SW Fifth Avenue, Suite 3800	Portland, OR 97201
PwC	1300 SW Fifth Avenue, Suite 3100	Portland, OR 97201
Perkins & Company	1211 SW Fifth Avenue, Suite 1000	Portland, OR 97204
Deloitte	111 SW Fifth Avenue, Suite 3900	Portland, OR 97204
AKT LLP	5665 SW Meadows Road, Ste. 200	Lake Oswego, OR 97035
Geffen Mesher & Co.	888 SW Fifth Avenue, Suite 800	Portland, OR 97204
DeLap LLP	5885 Meadows Road, Suite 200	Lake Oswego, OR 97035
Ernst & Young LLP	1120 NW Couch St., Suite 425	Portland, OR 97209
Talbot, Korvola & Warwick LLP	4800 Meadows Road, Suite 200	Lake Oswego, OR 97035
Hoffman, Stewart & Schmidt PC	4900 Meadows Road, Suite 200	Lake Oswego, OR 97035
Grant Thornton LLP	111 SW Columbia St., Suite 800	Portland, OR 97201
Maginnis & Carey LLP	220 NW Second Ave., Suite 1000	Portland, OR 97209
McDonald Jacobs PC	520 SW Yamhill St., Suite 500	Portland, OR 97204
Hanson Hunter, PC	8930 SW Gemini Drive	Portland, OR 97223
Alten Sakai & Co., LLP	10260 SW Greenburg Rd., #300	Portland, OR 97223
Mack Roberts & Co., LLC	111 SW Columbia St., Suite 700	Portland, OR 97201
Thompson, Kessler, Wiest & Borquist	111 SW Columbia St., Suite 750	Portland, OR 97201
Klieckhafer, Schiffer & Co., LLP	111 SW Fifth Ave., Suite 1850	Portland, OR 97204
Fordham Goodfellow LLP	233 SE Second Avenue	Hillsboro, OR 97123

Note: Adapted from Top Accounting Firms (2012). *The list*. Portland, OR: Portland Business Journal.