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THE CONTRIBUTION OF PROFESSIONAL SCHOOL COUNSELORS' SOCIAL-
COGNITIVE DEVELOPMENT TO THEIR LEVELS OF ETHICAL AND LEGAL
KNOWLEDGE, AND LOCUS-OF-CONTROL ORIENTATION

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the College of Education
at the University of Central Florida
Orlando, Florida

Spring Term
2010
Major Professor: Glenn W. Lambie

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ABSTRACT

Professional School Counselors (PSCs) are to serve as advocates for all students and promote systemic change (American School Counselor Association, 2008) while navigating complex work environments. The primary purpose of this study was to investigate the contribution of PSCs' social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. The three constructs and instruments investigated in this study were: (a) social-cognitive development (ego development; the *Washington University Sentence Completion Test* [WUSCT]; Hy & Loevinger 1996), (b) Ethical and Legal Knowledge (the *Ethical and Legal Knowledge in Counseling Questionnaire-Revised* [ELICQ-R]; Lambie, Ieva, Gill, & Hagedorn, 2010), and (c) Locus of Control (the *Adult Nowicki-Strickland Internal External Scale- College* [ANSIE-C]; Nowicki & Duke, 1974; the *Work Locus of Control Scale* [WLCS]; Spector, 1988). The findings from this investigation contribute to the school counseling and counselor education literature.

The sample size for this study was 301 certified, practicing school counselors (elementary school, middle school, high school, and multi-level) in five states (Colorado, Florida, Maine, Maryland, and New Mexico) across the country. The participants completed data collection packets including a general demographic questionnaire, the WUSCT (Hy & Loevinger 1996), the ANSIE-C (Nowicki & Duke, 1974), the WLCS (Spector, 1988), and the ELICQ-R (Lambie, et al., 2010). The statistical procedures used to analyze the data included (a) structural equation modeling (path Analysis), (b) simultaneous multiple regression, (c) Pearson product-moment (2-tailed), and (d) Analysis of variance (ANOVA).

The primary research hypothesis was that practicing school counselors' social-cognitive development scores would contribute to their locus of control orientation and their levels of

ethical and legal knowledge. The statistical analyses identified several significant findings. First, the path analysis model testing the contribution of school counselors' social-cognitive development to locus of control and ethical and legal knowledge did fit for these data. Specifically, the results indicated that school counselors' social-cognitive development contributed to their ethical and legal knowledge (less than 1% of the variance explained) and to locus of control (14% of the variance explained) in the model fit for these data. In addition, locus of control contributed to school counselors' ethical and legal knowledge (2% of the variance explained). Implications for professional school counseling and counselor education are presented, along with areas for future investigation.

DEDICATION

This dissertation is dedicated in loving memory of Maria T. Zezima (#5) and the Zezima Family.

*“Every step I take, every move I make, Every single day, every time I pray, I'll be missing you
Thinking of the day, when you went away, what a life to take, what a bond to break, I'll be
missing you!”* Sean Puffy Combs

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CHAPTER ONE: INTRODUCTION

Professional school counselors (PSCs) are called upon to be leaders for systemic change through the delivery of a developmental school counseling program (American School Counselor Association [ASCA], 2008). While implementing school counseling programs, PSCs contend with diverse challenges such as the significant achievement gap, economic recession, limited family engagement, cultural inequities, bullying, substance abuse, large caseloads, and increasing non-counseling related responsibility (Erford, 2007; Lambie & Williamson, 2004; Sink, 2005). In addition, school counselors work to meet the academic, personal/social, and vocational needs of all their students (ASCA, 2005), while receiving limited to no clinical supervision (Page, Pietrzak, & Sutton, 2001). Furthermore, state boards of education that certified/credential school counselors do not have consistent requirements throughout the United States relating to school counselor preparation. For example, in one state a school counselor may have had to complete a 60 credit graduate school counseling preparation program with a 600 internship in a school, while a counselor in another state may have only complete a 33 credit preparation program with no school-based internship. Therefore, school counselors work in systems that are complex and demanding; however, their preparation is often inconsistent and the services they provide diverse. For these reasons, school counselors need to be adaptive, flexible, and possess the ability to multi-task; which has been associated with counselors' level of social-cognitive development (Borders, 1998; Lambie, 2007; Lambie & Sias, 2009; Lawson & Foster, 2005).

School counselors also work primary with minors and in systems where multiple ethical and legal standards dictate practice (Stone, 2005). For example, PSCs work with students regarding issues such as suicidal ideations (Gibbon & Studer, 2008), child abuse and neglect

(Lambie, 2005), bullying (Carney, 2008), and students diagnosed with exceptionalities (Lambie & Milsom, 2010). Therefore, for counselors to provide ethical services to their students and stakeholder; they necessitate sound knowledge relating to ethical and legal principles within a school setting (Lambie, Ieva, Mullen, & Hayes, 2010). School counselors scoring at higher level of ethical and legal knowledge have been found to function at higher levels of social-cognitive development (Lambie, Hagedorn, & Ieva, 2010).

School counselors are called to be agent for systemic change and advocate for all of their students (ASCA, 2005; Erford, 2007). To promote systemic change, counselors work with all diverse stakeholders (e.g., students, parents, teachers, administration, and the community) and therefore possess the necessary interpersonal skills to collaborate and communicate on behalf of all students. Additionally, PSCs need to possess the ability to challenge systemic homostasis, and manage stressful situations (e.g., crisis, children in anger outbursts, and conflict between faculty and administration) in order to effectively advocate. Counselors scoring at greater internal levels of the locus of control continuum are more effective in counseling, relating to others, and serving a diverse population of clients than those scoring at greater external levels of locus of control (Carlozzi, Campbell, & Ward, 1982; Majudmer, McDonald, & Greever, 1977). Therefore, PSCs need to function at a more internal level in order to ensure the delivery of an effective school counseling program meeting the needs of all students.

Further, a more internal locus of control (Rotter, 1966) has also been associated with other desirable counselor qualities. Research supports a more internal locus of control orientation is related to counselor effectiveness, the ability to maintain emotional well being, and the ability to relate to others (Caple, 1987; Carlozzi, Campbell, & Ward, 1982; Deysach, Ross, & Hiers, 1977; Martin and Shepel, 1974; McIntyre, 1984; Salkind, 1987). Additionally, in the work

setting, an internal locus of control has been related to a number of organizationally variables, including: (a) increased job satisfaction; (b) report less role stress; (c) perceive more autonomy than control; and (d) a higher level of organizational commitment, and look within themselves to determine courses of action (Judge, Erez, Bono, Thoresen, 2003; O'Brien, 1984; Spector, 1982; Spector, 1988). Therefore, since higher levels of social-cognitive development and a more internal locus of control orientation are associated with essential counselor qualities like handling and adapting to stress and the environment, theoretically social-cognitive development should contribute to a PSCs' locus of control orientation.

Since school counselors are charged with advocating on the behalf of all students, working and collaborating with all stakeholders, and encountering numerous ethical dilemmas, PSC necessitate higher levels of social-cognitive development, ethical and legal knowledge, and a more internal locus of control in order to manage their roles and responsibilities and effectively serve their students. The review of the topics suggest that although there has been research involving counselors and have examined the concepts independently; ego development, ethical and legal knowledge, and locus of control, there is a paucity of knowledge regarding the link between all three constructs, and specifically with a population of practicing school counselors. Thus, the present study examined the contribution of social-cognitive development to PSCs' levels of ethical and legal knowledge and locus of control orientation in an effort to identify potential implications for supporting school counselors' continued development.

Statement of the Problem

The experience of Professional School Counselors (PSCs) in public school settings are shaped by many complex factors, such as (a) their previous education and experiences; (b)

physical environment; (c) school managerial staff; (d) national, state, and district policies; (e) staff culture; and (f) the interaction between these factors (Stone, 2005). Despite the interactions between these interpersonal and systemic factors, PSCs are called to be leaders for systemic change through the delivery of a developmental school counseling program in order to contribute to an increase in student outcomes and decrease the achievement gap (ASCA, 2008). The *ASCA National Model*® (2005) delineates the diverse responsibilities of PSCs to: (a) have a clear understanding of personal beliefs about meeting the needs of all students; (b) provide services to all students through curriculum development, planning, and related services; (c) develop tools and processes to ensure the program is reflective of the schools' needs; and (d) demonstrate of the effectiveness of the school counseling program. Thus, although PSCs confront an array of complexities, they must possess qualities to work through and manage the complexities, so they are able to deliver a comprehensive school counseling program that addresses the schools' needs.

While performing professional duties outlined by ASCA (2005), PSCs are often confronted with role ambiguity, due to the management of many distinct roles (e.g., counselor, educator, mentor, collaborator, family facilitator, consultant, etc.; Lambie & Williamson, 2004) primarily shaped by the views of parents, school board policy-setting body, the school administrators, the teachers, and students' needs (Henderson, 2007). In addition, PSCs are inundated with diverse problems as students encounter increasing social problems such as economic recessions, changes in family structures, racial and ethnic tensions, gang culture, drug and alcohol abuse, and increasingly amount of computer bullying (Shulte & Cochran, 1995). Moreover, PSCs contend with the rise of school crises, including shootings, stabbings, bullying, and physical altercations (National School Safety Center; [NSSC], 2006). They further contend with a myriad of some of the most challenging and ethical dilemmas facing most counselors

(Remley, Hermann, & Huey, 2003) where multiple ethical standards, legal statutes, and educational policies exist and sometimes conflict (Stone, 2005). Thus, PSCs work in challenging systems and are often confronted with diverse ethical dilemmas; therefore they require the necessary skills and legal and ethical knowledge.

Since PSCs work in challenging systems, the potential to experience high levels of stress and burnout exist (Butler & Constantine, 2006; Lambie, 2007; Paige, et al. 2001). To effectively negotiate the personal and systemic factors, PSCs must maintain the ability to be adaptive, flexible, and self-regulate their wellness, and maintain an ethical and legal knowledge base in order to meet the needs of all stakeholders. Higher levels of social-cognitive functioning exhibit desirable counseling qualities such as increased empathy, flexibility, perspective-taking, self-care, and wellness, and increased levels of ethical and legal knowledge (Lambie et al., 2010a; Lambie, et al., 2010b; Borders, 1998). Although, a more internal locus of control it has been associated with counselor effectiveness, the ability to maintain emotional well-being, and the ability to relate to others (Caple, 1987; Carlozzi, Campbell, & Ward, 1982; Deysach, Ross, & Hiers, 1977; Martin and Shepel, 1974; McIntyre, 1984; Salkind, 1987); research is lacking in regards to the contribution that social-cognitive development has on locus of control.

Research has indicated a need to understand the contribution that social-cognitive development can have on a PSCs' levels of ethical and legal knowledge and locus of control orientation. Although research studies have examined the three constructs individually, no research studies were found including all three constructs within a sample of PSCs. Thus, an empirical investigation of the contribution of PSCs' social cognitive development to their levels of ethical and legal knowledge, and locus of control can provide PSCs, counselor educators, and

other related professionals a clearer understanding, and the potential significance of promoting developmental growth in current and future school counselors.

Significance of the Study

The findings from this study have many implications for both current PSCs and counselor educators. First, the results contribute to the counseling literature by providing a baseline of a national sample of PSCs' levels of social-cognitive development, locus of control, and ethical and legal knowledge. Additionally, the findings offer insight on the influence of social-cognitive development to PSC's level of ethical and legal knowledge, and locus of control orientation which may facilitate the evaluation of PSCs current personal and professional development practices as well as current graduate school counselor preparation programs.

Counselor educators and supervisors may be encouraged to foster growth and development of social-cognitive, ethical and legal knowledge, and locus of control orientation in counselors-in-training in order to advance the education and supervision to improve the provision of counseling services (Association for Counselor Education and Supervision; ACES; 2005). Research supports that higher social-cognitive maturity is related to higher levels of empathy, adaptivity, wellness, and self-care (Borders, 1998; Lambie, Smith, & Ieva, 2009; Sheaffer et al., 2008). Therefore, the findings from this study suggest the promotion of social-cognitive development can significantly impact a counselors' locus of control orientation and development in ethical and legal knowledge. Thus, it may be necessary for counselor preparation programs to include classroom, supervisory, and clinical opportunities that allow students to experience cognitive dissonance, and reflect on those experiences to further facilitate social-cognitive developmental growth.

Further, ASCA (2005) has charged PSCs to be advocates and leaders of systemic change. As noted, PSCs need to be equipped to contend with complex and systemic issues related to their role as a school counselor to be an advocate and leader of change. PSCs can benefit from further understanding the significance of continued development through avenues such as professional membership and conference attendance. Thus, an empirical investigation of the contributions of social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation may provide school counselors with insight regarding the importance of promoting their own social-cognitive developmental growth.

Theoretical Framework

Social Cognitive Development

Social-cognitive theory incorporates a complex, dynamic, and reciprocal interaction between personal factors, the environment, and self-regulating processes and behaviors (Bandura, 1977; 1986; Swenson, 1977). Ego development (Loevinger, 1976), a derivative of social-cognitive development, draws from earlier models of human development (e.g., Freud, 1954; Kohlberg, 1964; Piaget, 1932; Sullivan, 1953). Fundamental to Loevinger's theory (1976, 1998) are the ego levels, which are hierarchical and sequential, and represent a progression toward total personality growth from immature (E2, Impulsive) to mature (E9, Integrative and Self-actualized) as listed in Table 2. Progression in ego levels is seen through a series of changes encompassing a greater self and interpersonal awareness, cognitive and conceptual complexity, flexibility, personal autonomy, and comfortableness with ambiguity, and personal responsibility (Lambie, 2007; Manners & Durkin, 2000; Walters, 2009). Developmental advances in these domains have been depicted in terms of "levels," a term that implies an underlying coherence

and structure to personality. Moreover, each level of ego development is characterized by a particular way of perceiving, interpreting, and reacting to the people, objects, and events in the environment (Loevinger, 1979). Therefore, as counselors progress through the levels, they are better able to perceive their clients' perspective.

Table 1: Ego Development Stages and Features

Level	Code	Main Features
Pre-social/Symbiotic	E1	Preverbal; exclusive gratification of immediate needs
Impulsive	E2	No sense of psychological causation; dependent; dichotomous (i.e., good/bad; nice/mean); demanding; concerned with bodily feelings; sexual and aggressive
Self-Protective	E3	Hedonistic; exploitive; externalizes blame; wary; complaining; concerned with staying out of trouble
Conformist	E4	Conventional; moralistic; stereotyped; conceptually simple; 'black and white' thinking
Self-Aware	E5	Increased appreciations of multiple possibilities, explanations, or alternatives; emerging awareness of inner feelings of self and others; concerned with God, death, relationships, health
Conscientious	E6	Reflective; responsible; empathetic; conceptual complexity; self critical; self-evaluated standards; able to see broad perspectives; concerned with values achievement
Individualistic	E7	Heightened sense of individuality; tolerant of self and others; appreciation of inner conflicts and personal paradoxes; values relationships over achievement; rich ability to express self
Autonomous	E8	High tolerance for ambiguity; respectful of autonomy of self and others; cherishes individuality; appreciates conflict as an expression of the multifaceted nature of life; relationships are seen as interdependent; concerned with self-actualization
Integrated	E9	Best described as Maslow's self-actualizing person; this level is attained by very few individuals

Taken with adaptation from Hy and Loevinger (1996) and Manners and Durkin (2000)

Higher levels of ego development (Loevinger, 1976; 1998) are necessary in the development of well-rounded individuals (Watt, Robinson, & Lupton-Smith, 2002). Loevinger further describes ego development as the “master” personality trait, organizing and integrating all other aspects of personality (Swenson, 1990). Consistent with Loevinger description, Swenson asserted that the ego is the central variable in interpersonal relations, and conceptualized the ego as a unifying frame of reference that underlies all of a person’s thoughts and actions; a process of gaining psychological maturity (Bursik & Martin, 2006). The ego maturation process encompasses changes in impulse control, character, and is an essential component to self-awareness (Loevinger, 1976). Self-awareness is a desirable counselor quality (American Counseling Association; ACA; 2005). As counselors-in-training are more self-aware, it is postulated that their levels of ego development are higher (Loevinger, 1976; Smith, 2005; Cannon, 2006).

Further related to self-awareness and counselor development, “the levels of ego development mark important distinctions in the ways and degrees of complexity with which individuals understand the self, others, and social situations” (Bauer & McAdams, 2004, p.155). As counselors’ level of ego development mature, they become increasingly flexible and adaptable to their environment and interpersonal interactions (Cook-Grieter & Soulen, 2007). Therefore, as counselors progress through Loevinger’s (1998) levels in an invariant hierarchical sequence, they progress to increased personal and interpersonal awareness, autonomy, ability to think complexly, and an enhanced capacity to self-regulate through accommodation and assimilation (Manner, Durkin, & Nesdale, 2004).

The theoretical framework of ego development (Loevinger, 1998) has been applied to research involving counselors because “high levels of conceptual and ego development are the

desired outcomes of counselor training and supervised clinical experiences” (Borders, 1998, p. 334). Research supports the relationship between ego development and desirable counselor qualities, such as (a) counselor effectiveness and skill acquisition (Borders & Fong, 1989; Borders, Fong, & Neimeyer, 1986; Zinn, 1995); (b) counselors’ expressed levels of empathy with clients (e.g., including those with disabilities; Carlozzi, Gaa, & Liberman, 1983; McIntyre, 1985; Sheaffer, Sias, Toriello, and Cubero, 2008); (c) counseling students’ abilities to cope with stress and overall wellness (Lambie, et al., 2009; Walter, 2009); (d) school counselors ability to cope with dimensions of burnout (Lambie, 2007); and (e) counseling students’ and PSCs’ levels of ethical and legal knowledge (Lambie, et al., 2010b; Lambie, et al., 2010a). Therefore, research suggests that counselors at higher levels of ego development possess the qualities to provide more effective service delivery than those that score at lower levels of ego development (Holloway & Wampold, 1986; Lambie & Sias, 2009).

Locus of Control

Social learning theory (SLT; Rotter, 1954, 1955, 1960) was developed in search for explanations of human behavior; to account how people use complex behavior in relatively complex social environments (Rotter, Chance, Phares, 1972). Locus of control (LOC) refers to the main construct that is a derivative of Rotter’s SLT which explains individuals’ perceived control over behaviors (Rotter, et al., 1972). Thus, together SLT with the construct LOC, attempted to integrate cognitive, behavior, and social learning theories to illustrate personality and personality change, and the desire to predict and change the behavior of others more effectively (Rotter, 1954).

The term *locus of control* suggests that behavior is determined by two major types of "expectancy" (p. 47): the expected outcome of a behavior and the value a person places on that outcome. Rotter, in collaboration with Chance and Phares (1972) described a general theory of personality with variables based on the ways that different individuals habitually think about their experiences. According to SLT, locus of control is a generalized expectancy pertaining to the connection between personal characteristics and actions or experienced outcomes (Rotter, 1955). Specifically, LOC is how a person accumulates development over specific encounters in which persons perceive the causal sequences that occur in their lives (Rotter, 1954) and the extent to which a person perceives events in one's life are consequences of one's behavior (Rotter, 1966). Further, LOC is a personality construct which encompasses the various aspects of attitudes, opinions, and values (Rotter, 1966). Therefore, LOC describes how one perceives causes of events and experiences and consequently determines how one forms opinions and goes about responding to events to alleviate problems or situations (Abdul-Kadir, 1994). Thus, similarly to social-cognitive development, LOC is a motivational variable that allows individuals to actively participate, regulate, and dictate events in their lives that facilitate independence and responsibility (Wallhagen, 1998).

In contrast to social-cognitive development levels (ego development, Loevinger, 1976; 1998), the construct of LOC specifies that individuals fall along a continuum from internal (lower score on locus of control scales) to external (higher scores on locus of control scales; Rotter, 1982). There are certain characteristics and qualities defined for both an internal and external locus of control individual. Internal LOC has many beneficial qualities; people with an internal LOC experience more control over their behaviors (i.e., they act in ways that are aligned with their beliefs), as opposed to what others say to do, and more likely to believe that they can

and will succeed. Consequently, people with external LOC believe that their lives are predestined leading them to feel helpless and less motivated to work hard or follow through on an activity in which they have not initially succeeded, as well believe what they are told to do at face value. Further, research has supported that internal control beliefs are an important component of emotional adjustment and ability to handle stress in general (Kobasa, Maddim Kahn, 1982; Lefcourt, 1982) and at work (Spector, 1988).

LOC has been identified as a personality construct that can predict or explain others beliefs and potential behaviors (Rotter, 1982). Research suggests the importance of internal LOC in individuals (Hill, 1978). In addition, researchers and theorists have posited that individuals characterized as more internal has a greater impact on (a) personal well-being (Denny & Steiner, 2009; McLeod, 1982; Pannells, & Claxton, 2008); (b) greater academic achievement (Duke & Nowicki, 1974; Gifford, Periott, & Mianzo, 2006, Hall, Smith & Chia, 2007; Rouche & Mink, 1976), and (c) contain greater job satisfaction (Judge & Bono, 2001). Further, a more internal LOC orientation has demonstrated desirable counselor qualities regarding (a) counselor effectiveness (Carlozzi, Campbell, & Ward, 1982; Martin & Shepel, 1974; Deysach, Ross, & Hiers, 1977); (b) emotional well-being (Caple, 1987; McIntyre, 1984; Salkind, Newman, & Perkins, 1987; and (c) relating to others (Majudmer, et al., 1977). Therefore, counselors scoring higher along the internal end of the continuum of LOC are more effective in counseling and serving a diverse population of clients (Majudmer, McDonald, Greever, 1977). Although limited research exists investigating social-cognitive development (Loevinger, 1976; 1998) and LOC (Rotter, 1954), specifically with practicing counselors, there is sufficient support that the more internal LOC orientation held by a counselor, the higher the social-cognitive functioning; therefore, may possess desirable counselor qualities to effectively serve clients.

Work Locus of Control

Work locus of control (WLOC) is an extension of Rotter's (1966) concept of LOC which asserts that individuals differ in terms of their beliefs about whether they control the outcomes in their lives (i.e., internal locus of control) or the outcomes are controlled by factors such as luck and other people (i.e., external locus of control). Paulhus and Christie (1981) posited that there might be a generalized perception of control for various spheres of an individual's life. Therefore, Spector (1988) formulated the work locus of control scale (WLCS) to assess LOC specific to the work environment. WLOC, is a contextualized form of LOC, and refers to the perception of being in control of the workplace. In organizational settings, rewards or outcomes may include; promotions, favorable circumstances, salary increases, and general career advancement (Spector, 1982). Because employees spend a substantial part of their lives at work, and are dependent on their job to meet several personal needs, their work and personal lives are intertwined. As a result, stressors may originate from the conflict between work roles and that conflict may affect the overall well-being of an employee (Danna & Griffin, 1999). Further, Locke (1983) suggested that a person's perception of work can affect his or her attitude toward life, toward his or her family, and toward himself or herself. WLOC may also affect his or her physical self and possibly how long he or she lives, and may be related (indirectly) to "mental health and adjustment, and plays a causal role in absenteeism and turnover" (p. 1334).

WLOC may act as a mediating variable in job stress and strain (Spector & O'Connell, 1994). Therefore, WLOC has been linked with increased job satisfaction and psychological well-being (Karasek, 1979; Spector, 1986; Spector et al., 2002). As summarized in his review, Spector described WLOC being related to a number of organizationally variables; internals tend to be more satisfied with their jobs than externals, report less role stress, perceive more autonomy than

control, enjoy longer job tenure, report a higher level of organizational commitment, and look within themselves to determine courses of action (Judge, Erez, Bono, Thorensen, 2003; O'Brien, 1984; Spector, 1982; Spector, 1988). Consequently, individuals with an external LOC may underestimate the degree to which they are able to take action or handle situations, relying on company policies and procedures (Siu, Spector, Cooper, Lu, & Yu, 2002; Spector, 1982; Spector 1996), resulting in job stress, job dissatisfaction, and potential counterproductive behavior (Fox & Spector, 1999).

Thus, WLOC (Spector, 1988) is related to overall wellness, and employees' functionality. Since research has consistently supported that overall well-being correlates with both a general internal expectancy of LOC (Rotter, 1966), internal WLOC (Spector, 1988), and ego development (Loevinger, 1976; 1998); there seems to be sufficient support to assert that the more internal LOC orientation (personally and professionally) held by a practicing school counselor, the higher the social-cognitive functioning, and the greater the effective service delivery to all clients and stakeholders.

Ethical and Legal Knowledge

The experience of PSCs in public school settings are shaped by many complex factors, such as: (a) role ambiguity (Henderson, 2007); (b) national, state, and district standards, legal statutes, and educational policies that sometimes conflict (Stone, 2005); and (c) an obligation to meet the mental health needs of their students, while simultaneously have advocating for students while interacting with all stakeholders (e.g., students, parents, teachers, administrators, staff, and the community) (Meyer, 1999). Moreover, PSCs contend with the management of many distinct roles (e.g., counselor, educator, mentor, collaborator, family facilitator, consultant,

etc.) in which the conflicting nature of these relationships has the potential for many ethical dilemmas to occur. Further, PSCs encounter students' ever increasing social problems (e.g., computer bullying, alcohol abuse computer bullying (Shulte & Cochran, 1995). Despite the interactions between these interpersonal, social and systemic factors, PSCs contend with some of the most challenging ethical dilemmas facing counselors (Remley, Hermann, & Huey, 2003). Thus, PSCs work in challenging systems and are often confronted with diverse ethical challenges. Collectively, the complex attributes and systemic challenges necessitate PSCs to possess sound ethical and legal knowledge and decision-making skills in order to provide ethical and effective services to their stakeholders (Davis & Mickelson, 1994).

Ethical and legal knowledge may be initially obtained at the preparation level. As defined by Council for Accreditation for Counseling and Related Educational Programs standards (CACREP, 2009), ethical and legal knowledge encompasses information that counselors may be exposed to based on: (a) professional identity; (b) ethical and legal terms; (c) ethical decision-making principles; (d) confidentiality; (e) suicide and client violence; (f) abuse, neglect, and negligence; (g) counseling and educational records, (h) educational and civil right laws, (i) counselor development and wellness; and (j) discrimination laws and ethics (CACREP, 2009). Although, CACREP (2009) and professional standards (ACA, 2005; ASCA, 2004) delineate what counselors should know, discrepancies exist across the country in graduate programs who are not CACREP accredited (Martin, 2002). Therefore, it may not be assumed that all PSCs have received the same training in ethical and legal knowledge.

Research supports significant difference in ethical and legal knowledge in relation to work settings. Zibert, Engels, Kern, and Durdoye (1998) examined the ethical and legal knowledge held by members of a state counseling association in the United States. The findings

suggested that counselors in community mental health settings have more ethical and legal knowledge than K-12 PSCs; indicating that PSCs had a lower level of ethical and legal knowledge, which the researchers suggest could be explained by the nature and dynamics of the educational work setting. Further, counselors-in-training and PSCs scoring at higher levels of social-cognitive development were predictive of higher ethical and legal knowledge (Lambie, et al., 2010a; 2010b), supporting that individuals with higher social-cognitive developmental levels, acquire higher levels of knowledge (Cannon, 2005; McDonald 2005; Slomowitz 1981; in this particular case, ethical and legal knowledge).

As previously noted, LOC refers to perceived control over one's environment (Rotter, 1966). Developmentally, ego development relates to how a person's ability to cope with perceived stress within the environment; the higher an individual matures through the levels, the higher the ability to cope and adapt to the environment (Lambie, 2007; Lambie, et al., 2009). Hence, effective coping and adaptability encompasses a more internal LOC and higher levels of ego development, and potentially acquiring and retaining of ethical and legal knowledge.

Definition of Terms

Social-Cognitive Development: also referred to as ego development (Loevinger, 1976; 1998), is a “holistic construct representing the fundamental structural unity of personality organization” (Manner & Durkin, 2002, p. 542), which “incorporates cognitive, moral, self, interpersonal, and character development” (Lambie & Sias, 2009).

Ethical and Legal Knowledge: Ethical and legal knowledge encompasses information that counselors should know based on Council for Accreditation for Counseling and Related Educational Programs standards (CACREP, 2009): (a) professional identity; (b) ethical and legal

terms; (c) ethical decision-making principles; (d) confidentiality; (e) suicide and client violence; (f) abuse, neglect, and negligence; (g) counseling and educational records, (h) educational and civil right laws, (i) counselor development and wellness; and (j) discrimination laws and ethics (CACREP, 2009).

Ethics: Moral principles adopted by individual or group to provide guidance and rules for right conduct (Corey, Corey, & Callahan, 2007)

Ethical Dilemma: A situation which an individual is faced with a choice between two rationally defensible and mutually exclusive course of action; wither action can be supported by ethical principles and either course of action can have sufficient significant consequences (Wong, Rubin, & Millard, 1991).

Locus of Control: The degree to which the individual perceives that the reward follows from , or is contingent upon, his own behavior or attributes versus the degree to which he feels the reward is controlled by forces outside of his/ or herself and may occur independently of his or her own action” (Rotter, 1966, p.1).

External Locus of Control/ Externally oriented/ Externals: The tendency to attribute causes of events to factors outside oneself or beyond one’s control (Rotter, 1966).

Internal Locus of Control/ Internally oriented/ Internals: The tendency to see oneself as responsible to what happens; to think that one’s actions determine the events (Rotter, 1966).

Work Locus of Control: same definition as Rotter’s locus of control (1966); however specific perceptions in organizational settings (Spector, 1988)

Professional School Counselor: A master's level professional who is certified or licensed as a professional school counselor (PSC). PSCs deliver a developmental appropriate school counseling program, promoting and developing the academic, personal/social and career development for all students in the educational setting through individual, group, and development guidance services. PSCs also work as advocates for all students and collaborators with all stakeholders (e.g., parents, students, teachers, administrators) (ASCA, 2005).

Research Hypotheses

The purpose of this research study was to explore the contribution of practicing school counselors' social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. The following section described the two research hypotheses and four exploratory research questions.

Research Hypothesis One

School counselors' social-cognitive development (as measured by the *Washington University Sentence Completion Test* [WUSCT; Hy & Loevinger, 1996]) will contribute to their levels of ethical and legal knowledge (as measured by the *Ethical and Legal Issues in Counseling Questionnaire- Revised* [ELICQ-R; Lambie, Ieva, Gill, & Hagedorn, 2010]) and locus of control orientation (as measured by *Nowicki-Strickland Adult Locus of Control Scale* [ANSIE-C; Nowicki & Duke, 1974]; and the *Work Locus of Control Scale* [WLCS; Spector, 1988]). See Figure 1 below.

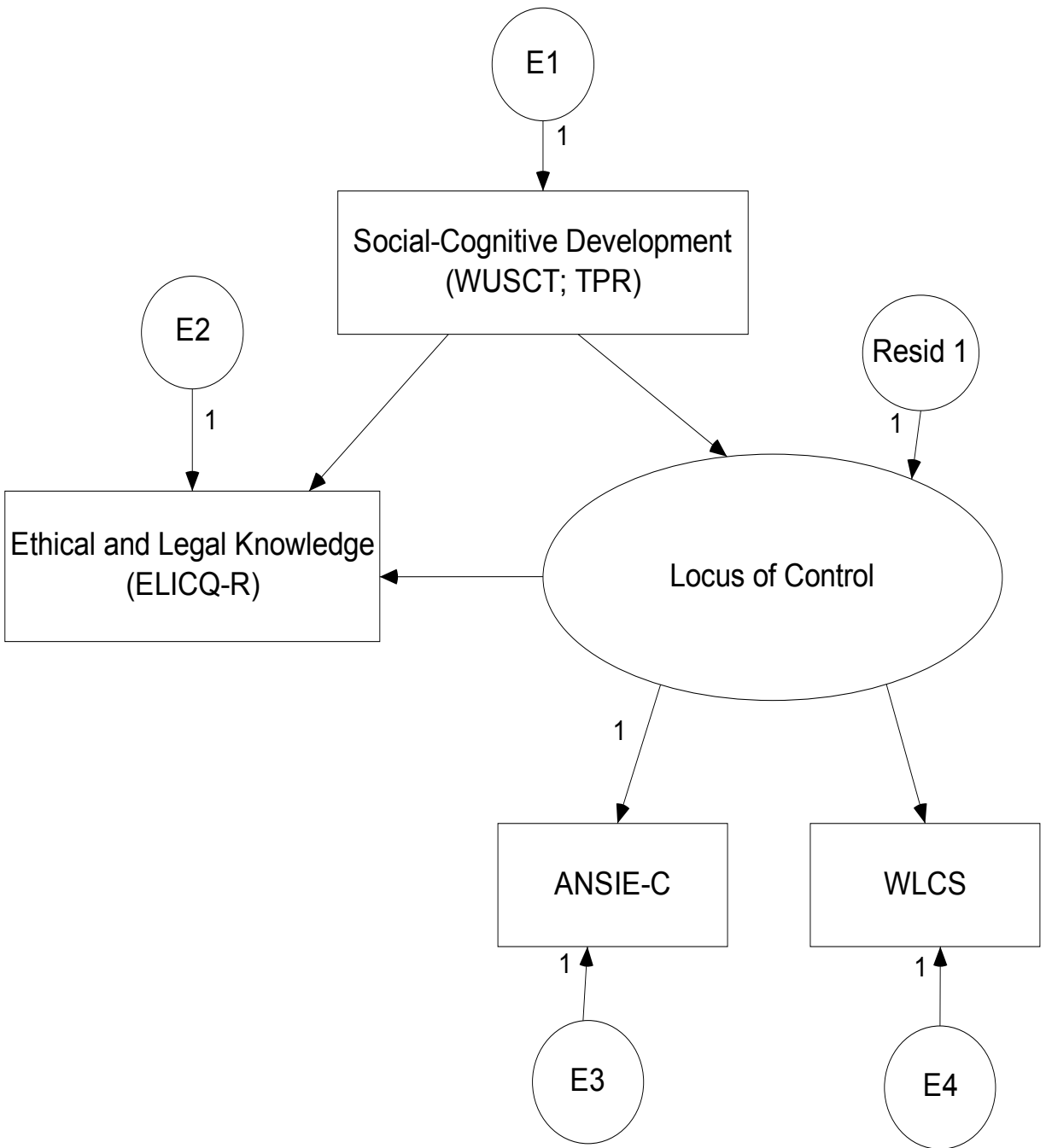


Figure 1: Path Diagram: Contribution of Social-Cognitive Development to Ethical and Legal Knowledge, and Locus of Control

Research Hypothesis Two

School counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) and work locus of control (as measured by the WLCS; Spector, 1988) will contribute to their ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010c). See Figure 2 below.

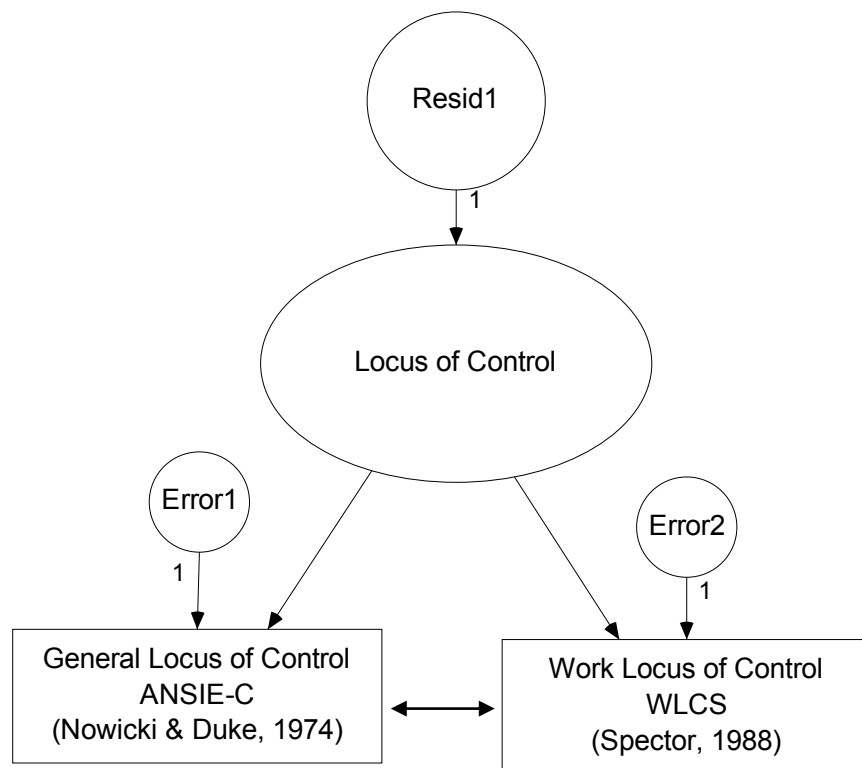


Figure 2: Path Diagram Locus of Control

Exploratory Research Questions

1. Is professional school counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) significantly related to their work locus of control (as measured by the WLCS; Spector, 1988)? Represented in Figure 2.

2. Is there a statistically significant relationship between practicing schools counselors' levels of social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?
3. Is there a statistically significant relationship between practicing schools counselors' their levels of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and the WLCS, Spector, 1988) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?
4. Is there a statistically significant relationship between practicing schools counselors' levels of ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010c) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?

Research Design

The research design for this study was descriptive correlational, in which the three constructs (four variables) were investigated. A descriptive study may be used to, develop theory, identify problems with current practice, justify current practice, make judgements or identify what others in similar situations may be doing. Correlational research examines the relationships between the variables (Frankel & Wallen, 2009). More specifically, correlational research was appropriate for this research study because the use is two-fold; (a) to help explain

important human behaviors and (b) to predict likely outcomes (Creswell, 2005; Frankel & Wallen; Gall, Gall, & Borg, 2005), both of which were examined in this study. Additionally, correlational research was used to determine the relationship and directionality between the three variables (e.g., social-cognitive development, locus of control, and ethical and legal knowledge). While correlational research provides strengths of relationships between variables, a noted limitation is the inability to explain the causality of the variables (Frankel & Wallen, 2009). Another limitation of correlational research is potential threat to internal validity, in which the relationships found may have alternative explanations, including extraneous variables that may influence the correlations (e.g., age, reading ability, intelligence). Nevertheless, it was the first study to examine the relationships between the three constructs; social-cognitive development, ethical and legal knowledge, and locus of control with the practicing school counselor population.

Research Methodology

Population and Sample

The target population for this study was school counselors across the United States. According to the United States Department of Education (2008), there are approximately 103,823 practicing school counselors. Purposive sampling was used to have one or more specific predefined groups (Fraenkel & Wallen, 2009), as was employed in this study of PSCs in five different school districts located in five states across the country (with institutional review board [IRB] permission). Additionally, the PSCs in each school district represented all levels (e.g., elementary, middle, and high school) as well as districts geographic location (e.g., rural, suburban, and urban) with a sample size of 301 participants. Kerlinger (1986) further explained

purposive sampling as a form of non-probability sampling, which is characterized by the use of deliberate effort to obtain representative samples by including typical areas or groups in the sample (e.g., level of work setting and geographic representation). According to Cohen (1992), a sample of 383 PSCs were needed in order to generalize to the United States population of PSCs at the 95% confidence level. The researcher contacted 31 district school counseling coordinators in 22 different states. Of the 23 coordinators that responded (74% response rate from 22 states), 19 referred the researcher to their local departments of Evaluation and Research, to complete a formal district application to conduct research, while the other four coordinators declined the invitation. Only five districts in the following states agreed to participate in the data collection process: (a) Colorado; (b) Florida; (c) Maine; (d) Maryland; and (e) New Mexico.

Data Collection

Prior to data collection, the researcher received permission from the University of Central Florida's Institutional Review Board (IRB) to conduct the study. Simultaneously, the researcher completed all formal applications for the individual districts' Offices of Evaluation and Research and received permission to conduct the study. Additionally, permission was granted to use the instruments from the corresponding authors; (a) *Ethical and Legal Issues in Counseling Questionnaire-Revised* (ELICQ-R; Lambie, et al., 2010c); (b) *Adult Nowicki- Strickland Internal External Scale* (ANSIE-C; Nowicki & Duke, 1974; personal communication, April 30, 2009); and (c) *Work Locus of Control Scale* (WLCS; Spector, 1988; personal communication April 22, 2009). Permission to use the *Washington University Sentence Completion Test* (WUSCT; Hy & Loevinger, 1996) was not needed from the author as the instrument and training and scoring manual are available to purchase.

Data collection was scheduled by the researcher, the school counseling district coordinators, and district personnel contacts and took place from October 15, 2010 through December 15, 2010. Participants attended a scheduled school counselor meeting in their districts. The study was introduced to all PSCs at their meetings and each attendee received a research packet that included (a) a general demographic information sheet (Ieva, 2009; Appendix B), (b) the WUSCT (Hy & Loevinger, 1996; Appendix C), (c) the ELICQ-R (Lambie, et al., 2010c; Appendix D), (d) the ANSIE-C (Nowicki & Duke, 1974; Appendix E), and (e) the WLCS (Spector, 1988; Appendix F). To increase the response rate and reduce sampling, the researcher utilized aspects of Dillman's (2007) *Tailored Design* method. All the practicing school counselors that attended the district meetings completed all the data collection instruments ($N = 301$), yielding a 100% response rate. Participants were able to withdraw from completing the data collection packets at any time. Each participant received an envelope with a corresponding number, when the participant completed the instrument packet the envelope was sealed and kept anonymous.

Following administration and collection of the data in each school district, participants received answers to the ELICQ-R questions. After all data was scored and analyzed, the county school board contact received a compact disk (CD) with aggregate results. School districts individually had the option of receiving a professional development module created by the researcher to either place the module on line, present the information themselves, or have the researcher return to present professional development information. Two districts chose for the researcher to return for professional development as an option, while the other three declined. Professional development was given at the school districts in Florida and Colorado.

Instrumentation

General Demographic Survey

The General Demographics Survey is a two-page questionnaire created by the researcher, which asks the practicing school counselors to report their basic demographic information (i.e., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, program certified by CACREP, geographic location, etc.). More specifically, the demographic information included three areas relating to whether the PSCs: (a) were certified educators, (b) were members of professional organizations, and (c) how frequently the PSCs met with other counselors in their districts. Further, the General Demographic Survey (Ieva, 2009) included 10 Likert scaled questions that asked participants to rank from 1-5 (1 = low frequency; 5 = high frequency) regarding professional activities and systemic school attributes. Prior to using the General Demographic Survey in this study, it was reviewed by a panel of experts (committee members, counselor education faculty) as well as administered to a group of doctoral level counseling students for review of readability and clarity.

Washington University Sentence Completion Test (WUSCT)

The *Washington University Sentence Completion Test* (WUSCT; Hy & Loevinger, 1996) is a semi-projective inventory consisting of 18 to 36 sentence stems which relates to one of Loevinger's levels of ego development. The respondents complete the sentence stem in any way he or she chooses, thus the responses represent a projection of the participants' schema of meaning-making (Loevinger, 1998; Walter, 2009). As a result, each sentence stem response is rated as a whole by its level of meaning or what the person is saying, and is not conceptualized in relation to the other 17 or 35 responses (Hy & Loevinger, 1996). A total protocol rating (TPR) is

then calculated using “an algorithm reflecting the respondent’s assessed place on Loevinger’s ego development scheme” (Loevinger, 1998, p. 78). Loevinger (1998) created a *Technical Foundations Manual* that includes previous forms of the test, a history of the development of the WUSCT, the theoretical basis, an extensive explanation of how to score the WUSCT, and a detailed description of the reliability and validity of the instrument. Additionally, the WUSCT can be scored by any rater who completes the written scoring exercises found in the test manual (Hy & Loevinger, 1996). Therefore, it is feasible to conduct inter-rater reliability on this specific instrument. For this study, the two raters were the researcher and another rater, both of which had experience scoring WUSCT for over two years. Prior to rating the WUSCT for this study, both raters completed the trained scores with an inter-rater reliability of .97

Considerable research has been examined using the WUSCT, and as a result, the test has undergone numerous revisions to strengthen the application across different genders and cultures, as well as with adolescents and adults (Hy & Loevinger, 1996). The latest revision, the WUSCT short forms (81-1; Hy & Loevinger, 1996) were used (18 sentence stems) for this study. There are two forms of the WUSCT (Hy & Loevinger, 1996) one for men and women; however, the only difference is a change in a personal pronoun to make the sentence stems personally relevant. For example, item 15 on the women’s form, “A wife should” is altered to “A husband should” on the men’s form. The WUSCT Form 81-1 contains 18 sentence stems, rather than 36 items, but has been found to produce nearly as reliable results as the full, 36-item form through the split-half method of reliability testing (Novy & Francis, 1992). Through the use in multiple studies, the WUSCT is widely regarded as one of the most psychometrically sound measures of maturity and personality development (Blumentritt, Novy, Gaa, & Liberman, 1996; Cohn & Westenberg, 2004; Cook-Greuter & Soulen, 2007; Lilienfeld et al., 2000; Manner & Durkin,

2001; Noam et al., 2006). Therefore, the WUSCT was an appropriate for measuring practicing school counselors' level of social-cognitive development.

Adult Nowicki-Strickland Internal External Scale (ANSIE-C)

Several instruments measuring LOC have been developed and identified in the past 30 years (Lefcourt, 1982). Rotter (1975) and Lefcourt, confirm that maximum predictions on the LOC construct were best obtained if the researcher tailors his or her instrument or measure to specific populations and their concerns rather than relying upon a more global measure (i.e., *Rotter Internal- External Scale* [Rotter I-E Scale]; Rotter, 1966). Thus, the researcher chose the *Nowicki-Strickland Locus of Control Scale-College Form* (ANSIE-C; Nowicki & Duke, 1974) in order to capture the general LOC with this specific population; college graduate adults in a professional field. The ANSIE-C (Nowicki & Duke, 1974) was derived from the *Nowicki-Strickland Internal-External Control Scale for Children* (CNSIE; Nowicki & Strickland, 1973), designed to measure general expectancy for internal versus external control of reinforcement among children, as defined by Rotter. The ANSIE was designed to measure internal and external LOC of non-college adults. Thus, the reading level is less demanding and the simple 40 questions “yes” and “no” format makes it easier to understand the task in completing the ANSIE questionnaire (Lefcourt, 1991).

The reliability of the ANSIE-C, designed to assess college students' LOC (Nowicki & Duke, 1974) has been strong (Lefcourt, 1991). Internal consistency yields a split-half reliability indexes to vary from .74 and .86. It is suggested that alpha values should be at least .70 (Nunally, 1978). Further, test-retest reliability figures have varied from .65 with a seven-week interval, to .83 with a six-week interval. Thus, it may be concluded that the reliability for the ANSIE-C is

moderate to strong (Nowicki & Duke, 1983). A limitation of the ANSIE-C is the manner in which items were selected, which were not systematic or in a balanced way; however, since research has confirmed its validity and strong to moderate reliability, for the purposes of this study, the scale was used to assess a general expectancy (personal) measure that differs from the specific expectancy related to the work environment (professional). Therefore, the ANSIE-C is an appropriate instrument to measure the level of general expectancy of school counselors.

Work Locus of Control (WLCS)

As previously noted, maximum predictions on LOC are best obtained if the researcher tailors his or her instrument or measure to specific populations (Lefcourt, 1982; Phares, 1976; Rotter, 1975). Therefore, Spector (1988) created the *Work Locus of Control Scale (WLCS)* in order to measure contextualized control beliefs in work settings. The WLCS (Spector, 1988) is a measure of an individual's beliefs of internal or external control in relation to the work setting. Additionally, research indicates that the WLCS is a better predictor of work behaviors and work outcomes (e.g., job satisfaction) than the Rotter's general LOC scale (Blau, 1993; Coleman, Irving, & Cooper, 1999; Macan, Trusty, & Trimble, 1996; Orphen, 1992; Spector, 1988).

The WLCS consists of 16 Likert scale items, with responses ranging from "disagree very much" (1) to "agree very much" (6). Some sample items from the WLCS are "Getting the job you want is mostly a matter of luck," and "People who do perform their jobs well generally get rewarded for it." The scale contains an equal number of internally and externally worded items, whereas half of the items are written in an internal direction, representing a belief that individual control their own rewards. The remaining WLCS items are written in an external direction,

representing the belief that others or luck controls rewards (Spector & O'Connell, 1994). Higher scores indicate greater externality, which is consistent with the ANSIE-C (Nowicki & Strickland, 1983) and the Rotter I-E Scale (Rotter, 1966).

Results of independent studies suggest that the WLCS is a viable scale (Spector, 1988). Internal consistency is adequate and early investigations provided solid validation evidence. Alpha internal consistency reliability coefficients were in the acceptable range from .75 to .85 across the six samples (Spector, 1988). In addition, “validity has been demonstrated with the WLCS and organizational variables (i.e., job satisfaction, commitment, intention, autonomy, influence, role-stress, consideration, and initiating structure) as well as other LOC measures (e.g., Rotter’s I-E Scale)” (Strauser & Ketz, 2002, p.23). Thus, the findings support the psychometric soundness of the WLCS with diverse populations. In this investigation the WLCS was compared with the ANSIE-C (another measurement of locus of control) for correlational results. The necessity of both loci of control instruments is warranted to get a clear picture PSCs’ generalized expectancy of LOC on a personal nature as measured by the ANSIE-C, and a more accurate contextualized LOC orientation, specifically related to the work setting as measured by the WLCS.

Ethical and Legal Issues in Counseling Questionnaire-Revised (ELICQ-R)

The *Ethical and Legal Issues in Counseling Questionnaire- Revised* (ELICQ-R; Lambie, et al., 2010c) is a 35-item multiple choice assessment designed to measure counselors’ ethical and legal knowledge. A sample question from the ELICQ-R is: “To be eligible to receive services under *Section 504 of the Rehabilitation Act of 1973*, an individual must: (a) Have a low socioeconomic status, (b) Be diagnosed with a specific learning disability, (c) Have a physical or

mental impairment that limits one or more of his or her major life activities, or (d) Be diagnosed with a psychological and/or interpersonal disorder.”

The ELICQ-R (Lambie, et al., 2010c) is a revised version of the *Ethical and Legal Knowledge in Counseling Questionnaire* (ELICQ; Lambie, Hagedorn, & Ieva, 2008). To begin, the ELICQ was grounded in an extensive literature review of counseling ethics and laws (e.g., Corey et al., 2007; Cottone & Tarvydas, 2006; Cottone & Tarvydas, 2007; Pope & Vasquez, 2007; Remley & Herlihy, 2009; Stone, 2005; Welfel, 2009). Next, the development of the ELICQ followed the suggested eight steps for scale construction (DeVellis, 2003): (a) determine what to measure, (b) generate an item pool, (c) establish the format for measurement, (d) have the initial item pool reviewed by experts, (e) judge inclusion of validation items, (f) administer items to a developmental sample, (g) evaluate the items, and (h) optimize scale length. The preliminary construction of the ELICQ was comprised of 10 factors or subscales ([a] professional identity; [b] ethical and legal terms; [c] ethical decision-making principles; [d] confidentiality; [e] suicide and client violence; [f] abuse, neglect, and negligence; [g] counseling and educational records, [h] educational and civil right laws, [i] counselor development and wellness; and [j] discrimination laws and ethics). The ELICQ was developed for a previous study to measure the effects of an ethics course on 64 counselors-in-training levels of social-cognitive development, ethical and legal knowledge, and ethical decision-making (Lambie, et al., 2010b).

To assess the face validity of the ELICQ prior to the initial use, 10 experts (counselor educators employed at different universities throughout the United States) examined the content of the ELICQ (Lambie, et al., 2010b) to determine the degree to which the instrument measured counselors’ levels of ethical and legal knowledge. Reliability of the ELICQ with that data was analyzed for measurement consistency using Cronbach’s reliability scaling; the overall alpha

coefficient for the ELICQ on the initial study (Lambie, et al., 2010b) was acceptable with an overall reliability score of .70. Additionally, the ELICQ was further used with 229 professional school counselors (Lambie, et al., 2010a) in an investigation of their current ethical and legal knowledge with an overall reliability score of .74.

To further strengthen the psychometric properties of the ELICQ, a reliability analysis was conducted with the each of the norming populations, 128 counselors-in-training (Lambie, et al., 2010b), and 229 practicing school counselors (Lambie, et al., 2010a) to ensure a sound instrument. A factor analysis was not used since all subscales are a general factor of ethical and legal knowledge (Gill, personal communication, July 12, 2009). The reliability analysis yielded the potential removal of 19 items, with a reliability of .79; however prior to the official removal of the items, a secondary review panel of experts comprised of counselor educators was conducted in the Summer and Fall of 2009. After the expert panel review, it was determined to remove the same 19 items, and resulted with a .79 reliability, and has been renamed the ELICQ-R (Lambie, et al., 2010c). Overall, the ELICQ-R has yielded consistent results and seems an appropriate fit to use with this specific population (e.g., PSCs) and has been shown to correlated with the WUSCT (Hy & Loevinger, 1998) with counselors-in training ($r = .449, p < .001$; Lambie, et al., 2010b) and with PSCs ($r = .227, p < .001$; Lambie, et al., 2010a). However, since this is a revised version of the instrument, expected results may be different from previous comparisons with social-cognitive development.

Ethical Considerations

Ethical considerations were considered by Institutional Review Board (IRB) committee and dissertation committee at the University of Central Florida. Some of these considerations include, but were not limited to:

1. The identity and all data collected were anonymous.
2. Participation in this research project was entirely voluntary.
3. All respondents were informed of their rights and the above mentioned information through an approved *Informed Consent* form pre-approved by the IRB at the University of Central Florida. Participants had the opportunity to withdraw from the study at any time without consequence.
4. Permission to use the instruments were granted by the authors and developers of each instrument; (a) ELICQ-R (Lambie, et al., 2010c); (b) ANSIE (Nowicki & Duke, 1974); and (c) WLCS, Spector, 1988).
5. The study was conducted with the permission and approval by the dissertation chair, committee members, and IRB of the University of Central Florida.

Limitations of the Study

Several potential limitations were associated with this study.

1. While correlational research provides strengths of relationships between variables, it is unable to explain the causality of the variables (Frankel & Wallen, 2009).
2. Correlational research may also contain threats to internal validity, in which the relationships found may have alternative explanations, including extraneous variables that may influence the correlations (e.g., age, reading ability, intelligence).

3. Locations may vary in correlational research when administering instruments, in which the conditions can alter or even effect participants' responses.
4. The potential exists for inadequate responses due to the social-desirability of self report measures.
5. Since purposive sampling is a deliberate effort to obtain representative samples by including subgroups within the population (e.g., level of school setting and geographic representation), the probability exists that those who participated in the study may be different from the actual population, introducing a potential of source bias (Gall, et al., 2005).
6. All of the participants who completed research packets volunteered, which may denote that the PSCs in the sample were more likely to already have increased levels of social-cognitive development and possess internal tendencies, potentially limiting the range in scores.
7. The number and length of instruments may have affected the response rate of those who did not complete the research packets, limiting the number of participants.
8. The ELICQ-R (Lambie, et al., 2010a) is a fairly new instrument and the psychometric properties of the ELICQ-R had not been established beyond what was noted.
9. Lastly, any data collection instrument, even though may have acceptable psychometric qualities, (i.e., validity and reliability measures) have some measurement error.

Summary

This chapter introduced the myriad of complexities that PSCs encounter on a daily basis. It has been demonstrated that social-cognitive (ego) development, a sound level of ethical and

legal knowledge, and an internal locus of control can equip PSCs with the proper abilities to navigate through the complex and ambiguous educational system. The review of the topics suggest that although there has been research involving counselors and have examined the concepts independently; ego development, ethical and legal knowledge, and locus of control, there is a lack of knowledge regarding the link between all three constructs. Thus, there is a need to conduct a research study to connect professional school counselors' contribution of social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation.

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

This chapter presents the theoretical framework and context of the potential contribution of Professional School Counselors' (PSCs) social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. A thorough review of the literature is presented with supporting empirical research on the constructs investigated in this study. The literature review begins with cognitive development theory and social-cognitive development theory, laying the framework for Loevinger's (1976) theory of ego development. The discussion continues with a review of pertinent research involving ego development and counselors. Next, social-learning theory (Rotter, 1954) is outlined, along with a description of the general expectancy of locus of control (LOC) construct, as well as research on the relationship of LOC with ego development and other desired counselor qualities. Work locus of control (WLOC; Spector, 1988) is reviewed next as well as research as related to the helping professions. The chapter concludes with a review of the historical and professional standards related to PSCs' ethical and legal knowledge, along with research of ethical and legal knowledge of counselors, and ego development.

Cognitive Development Theory

Cognitive developmental theory offers a framework for understanding the development and growth in individuals (Lambie, 2002). Cognitive developmental theorists (e.g., Dewey, 1963; Kohlberg, 1981; Lewin, 1935; Piaget, 1955) analyze how a person perceives, thinks, and gains understanding of his or her world through the interaction of genetic and learned factors and the construction of thought processes (e.g., remembering, problem solving, and decision-making)

from childhood through adolescence to adulthood (Fischer, 1980). Cognitive development theories originated from the expectations of logical operations, and the principle of equilibrium that explains the development of the personality of social and interpersonal behavior, of interest and values, and of self-control (Blasi, 1998). Additionally, cognitive development addresses perspective-taking, critical thinking, and openness to conflicting perspectives; all of which are necessary for sensitivity of issues of diversity and culturally sensitive counseling (Vogt, 1997). Thus, in relation to the counseling profession, the higher counselors are developmentally, the better able they are to provide ethical and effective counseling to their specific client populations (Lambie & Sias, 2009).

Cognitive developmental theories have at their core, the concept of stages which are grounded in several primary tenets: (a) stages that consist of distinct, qualitative differences in modes of thinking, reasoning, interacting with others and the environment, and perceiving the world; (b) stages that are organized in a constant, hierarchical succession; and, (c) stages that represent an underlying organization of thought (scheme; Kohlberg & Mayer, 1972; Rest & Narvaez, 1994). The stages in cognitive developmental theories present a developmental sequence in which the person progresses through hierarchical and sequential stages, building on the development from the preceding stage to the next stage. Converse to other stage theories (e.g., Freud, 1923; Erickson, 1968), the stages within cognitive development are theoretically independent of age. Although there is a loose correlation to earlier stages of development with age, particularly early childhood, the primary emphasis through progression through the stages is based on experience and milestones, not attainment of age level (Piaget, 1963). High levels of stimulation combines with genetic, biological factors, rather than chronological age, provide for a faster advancement through the series of stages. Thus, the experiences one encounters during

one's lifespan helps foster developmental maturation, and failure to have these significant experiences can delay the potential for development (Sprinthall & Mosher, 1978). To provide a conceptualization of cognitive developmental theory, an introduction to the three founding cognitive developmental theorists follows (Dewey, 1938; Piaget, 1952; Kohlberg, 1968) as well as an education model for training helping professionals (e.g., teachers, counselors, and social workers; Hunt, 1964) that are charged with fostering the environmental conditions to promote developmental growth of others.

John Dewey

John Dewey (1938; 1963) made seminal contributions in philosophy, psychology, and education. One of his greatest contributions is the originator of the developmental construct that people move through specific stages of development (Johnson, Dupuis, Musial, & Hall, 1994). Like cognitive development theories, Dewey held that development is observed in a progression through hierarchal and sequential stages, qualitatively distinct, with each stage being unique and separate (Lambie, 2002). Dewey is further credited with the progressive movement in education, viewing the primary goal of education to promote growth and development of an individual through the stages of development (Armstrong, Henson, & Savage, 1997). Maturation through the stages is related to the quality of significant interactions that a person has with his or her environment. Therefore, developmental growth is viewed through appropriately challenging conflict or dissonance within the context of interaction between a person and his or her environment. In order for an individual to develop, these significant experiences (e.g., interactions with the environment) must challenge the individual to shift from his or her current stage of development to the subsequent higher stage (Dewey, 1938). Failure to have these

significant experiences may delay development, or cause an individual to stabilize at a stage below his or her level (Sprinthall & Mosher, 1978). Hence, education involves creating the conditions which allow for the maturation of psychological factors within a student and for the progression of the student toward more complex levels of development and overall functioning (Kohlberg & Mayer, 1972). Thus, Dewey believed the urgency for schools to provide these significant experiences by challenging and teaching students how to be problem-solvers by helping students learn how to think rather than simply learning rote lessons about large amounts of information. Concluding, that education should focus on students' analytic and judgment abilities rather than just content and knowledge (Campbell, 1995).

Piaget

Piaget (1952, 1985) expanded on the cognitive developmental framework of Dewey (1938). In Piaget's early work he explored knowledge acquisition, primarily in early childhood and school-aged children. Piaget used genetic epistemology to develop criteria for judging growth and progress in the construction and formalization of knowledge and values, including moral values (Lapsley, 1996). Piaget is credited with the first construction of hierarchical stages; a cognitive structure of developmental stages that children pass through (Loevinger, 1987; Rest & Navarez, 1994). Piaget postulated that developmental stages are unique, distinct, and contain a consistent system of cognitive structures where the processing of information gathered from interactions between a person and the environment occur (Lambie, 2002). Piaget used the term *scheme* to label the process which describes an individual's frame of reference meaning-making (Piaget, 1985). The progression toward more complex schemes is conceptualized within Piaget's

theory as occurring in four distinct, hierarchical stages; which included (a) Preoperational, (b) Concrete Operational, (c) Conventional, and Post-conventional.

Using the conceptual framework of the scheme, Piaget (1955) introduced the concept of equilibrium, the process by which an individual exchanges one stage or mode of reasoning for another (Piaget, 1970). In Piagetian terminology, experience is given shape and meaning by a process of assimilation to existing meaning-making structures of the personality, while the personality itself is modified through accommodation to new information from the outside (Kirshner, 1988). In other words, disequilibrium occurs when a person experiences a new idea or thought that is not understood in his or her current scheme, because he or she has no frame of reference for the experience (Wadsworth, 1989). Therefore, disequilibrium is not a process where conflicts are reduced, but where cognitive dissonance (e.g. cognitive conflicts) is created (Murray, 1983; Shultz, Butkowsky, Pearce, & Shanfield, 1975). In order to navigate the disequilibrium in the developmental process, individuals either assimilate or accommodate the information. Assimilation is the process by which a person is confronted with information that does not fit his or her existing scheme and experiences disequilibrium. To restore equilibrium, the person integrates the new information into his or her existing scheme. As a result, assimilation results in maintaining stage stability. Conversely, accommodation results in stage growth, where the person adjusts his or her conceptual framework to adapt to the new information resulting in stage maturation (Manners & Durkin, 2000).

For Piaget (1970), cognitive development is a process of adaptation, in which the individual simultaneously engages in assimilation and accommodation to build knowledge and understanding. Piaget's concepts of adaptation and hierarchical stages are fundamental constructs of cognitive developmental theory. Each stage has an internal structure that is related

to the concept of equilibration. Expanding upon Piaget's constructs, Kohlberg (1968) added to the paradigm of cognitive developmental theory. The next section delineates the instrumental contributions of moral development by Lawrence Kohlberg.

Kohlberg

The developmental psychology of Piaget (1948) stimulated Kohlberg (1968) to develop a six-stage concept of moral development. Moral development refers to the cognitive ability to evaluate "goodness" or "rightness" of a course of action at anytime (Muus, 1996). Expanding upon the cognitive developmental perspective, Kohlberg (1976) asserts that moral reasoning skills develop over time and improve with increasing experience in ethical reasoning through interactions and collaboration with others, in conjunction with cognitive capacities. Kohlberg derived his model by presenting individuals of different ages with moral dilemmas (e.g., the Heinz Dilemma) to solve. In contrast to Piaget's theory, Kohlberg proposed that the developmental stages were "true" stages that form an invariant sequence (i.e., that individuals proceed through the stages in a fixed order, without stage skipping or reversals; also referred to as "hard" stages; Kurtines & Gewirtz, 1995).

Kohlberg's six stages of moral development were divided into three major periods. The first two stages of his model are *Preconventional*, as children in these stages want to avoid punishment or satisfy their personal needs, their judgments are based on these decisional choices. *Conventional* morality describes the next major period, where individuals' moral judgments are based on internalized standards that results from interaction in the social world (i.e., interaction between individual and environment); the emphasis is on making decisions that are approved within the context of society's laws. Ideally, individuals move toward *Postconventional* morality

in which the focus of decision making is based on more abstract principles of right and wrong and the highest relevant moral principle of the dilemma (Kohlberg, & Schrader, 1990).

Therefore, as individuals progress in their moral development, they become more capable to consider diverse perspectives regarding moral standards (Dehart, Sroufe, & Cooper, 2004).

Kohlberg postulated that higher stages of moral development provide individuals with more effective tools for making decisions and making meaning out of one's one world view and interactions with environment (Rest & Navareaz, 1994).

Hunt

While developmental theorists (e.g., Dewey, 1963; Kohlberg, 1981; Lewin, 1935; Piaget, 1955) were influential in addressing stages of development across the life span; Hunt (1964) was instrumental in developing a training model for training helping professionals (e.g., teachers, therapists, counselors, and social workers) who are charged with creating the environmental conditions to promote developmental growth of others. Counselors must possess a repertoire of skills including the capability to adapt the environments and understand the differential use of the environments that connect to long-term objectives for one single student or group of individuals (Hunt, 1966). Hunt's (1975) model of conceptual development describes a "person-environment interaction" (p. 210) which refers to the concept that individual differences in adaptation are a joint function of the degree of fit (match) between the nature of the individual's characteristics and the nature of the individual's context. The concept of fit can also be seen in Piagetian theory, with regard to the hypothesis that outside stimulation is assimilated into the existing schemata only when there is an optimal level of fit between the informational complexity of outside stimulation and the developmental level of an individual's schemata (Hunt,

1961). Similarly to other developmental theorists, Hunt's (1975) conceptual levels are arranged hierarchically on a continuum that ranges from less to increasingly more complex (Lawson & Foster, 2005). Hunt's conceptual developmental framework has been translated into counseling supervision models (e.g., Blocher, 1983, Stoltenberg, 1981) to foster developmental growth in counselor trainees. Therefore, counselor educators that support counselor development, recognize and understand the conditions necessary for counselors at varying stages in their development, and provide the environment and relationship congruent to the counselor-in-training's developmental needs.

Social Cognitive Development Theory

Social-cognitive development theory (SCD) proposed by Miller and Dollard (1941), expands upon cognitive development theory to include the effect of social relationships and the environment. SCD defines human behavior as a triadic, dynamic, and a reciprocal interaction of personal factors, behavior, and the environment (Swensen, 1977). According to SCD, an individual's behavior is determined by each of these three factors. Unlike other cognitive development theories, the social-cognitive theory incorporates a complex, three-way relationship between learners, their environment, and their self-regulating process of efficacy (Bandura, 1977; 1986). Additionally, SCD refers to the study of methods of cognitive development to illuminate socially relevant mental representations and mental processes (Olson & Dweck, 2008). Key aspects of social-cognitive development concern how these representations and processes are shaped by particular antecedents (e.g., culture, experiences, or environment) and how these representations and processes influence important outcomes for a person (e.g., overall well-being or relationships; Olson & Dweck, 2009). Further, SCD can be described as how

people make sense of themselves, other people, and events that occur in everyday existence, and how biases and stereotypes operate to influence behavior, thought, and action (Fiske & Taylor, 1991; Fiske, 1993). Thus, at its foundation, SCD examines a person's cognitive skills, social understanding, and social representations and what that might mean for their social, psychological, and academic well-being in the world (Olson & Dweck, 2008).

Social Cognitive Theory (SCT; Bandura, 1977; 1986) a derivative of SCD, places a strong emphasis on one's cognitions and purports that the mind is an active force in constructing one's reality, by selectively encoding information, performing behavior on the basis of values and expectations, and imposing structure on its own actions (Huitt & Hummel, 2003). Through feedback and reciprocity, a person's own reality is formed by his or her interaction with the environment and his or her cognitions. In addition, cognitions change over time as a function of maturation and experience (i.e. attention span, memory, ability to form symbols, reasoning skills). It is through an understanding of the processes involved in one's construction of reality that enables human behavior to be understood, predicted, and changed (Huitt & Hummel, 2003). While SCT upholds the behaviorist notion that response consequences mediate behavior, it contends that behavior is largely regulated antecedently through cognitive processes (Phares & Chaplin, 1997). Therefore, response consequences of a behavior are used to form expectations of behavioral outcomes. It is the ability to form expectations that give humans the capability to predict the outcomes of their behavior, before the behavior is performed. Thus, human behavior is viewed as motivated by life tasks and the individual approaches through various cognitive strategies, which explains how people react and cope within their social world (Cantor & Kihlstrom, 1985).

The integration of both cognitive developmental and social-cognitive developmental theories posits that through feedback and reciprocity, a person's own reality is formed by the interaction of the environment and one's cognitions (Huitt & Hummel, 2003). Therefore, the largest portion of variance in behavior is accounted for by the interaction between personality and the environment (Swenson, 1977). The combination of the above mentioned developmental theories has laid the theoretical foundation in understanding how Jane Loevinger's (1976) theory of ego development was developed over time. Each level of development is characterized by a particular way of perceiving, interpreting, and reacting to the people, objects, and events in the environment (Loevinger, 1979). The following section, details the theory of ego development, along with a review of pertinent research involving ego development related to counselors overall function and desirable counselor qualities.

Ego Development

Loevinger (1976) constructed a model of ego development, drawing from many earlier models of human development (e.g., Freud, 1954; Kohlberg, 1964; Piaget, 1932; Sullivan, 1953). As previously described, developmental theories assert that individuals progress through a series of qualitatively unique and distinct stages that are hierarchically arranged in terms of complexity level (Rest & Navarez, 1994). Maturation through the developmental stages occurs when an individual encounters an appropriate amount of stimulus (e.g., interaction with self, others, or the environment) that fosters modification of an existing cognitive schema and integration or assimilation of new information (Piaget, 1970). Although ego development encompasses Piaget's (1955) cognitive realm and Kohlberg's (1981) moral development, Loevinger's theory of ego development is more a holistic perspective, encompassing areas of cognition (Piaget,

1932), self (Freud, 1954) and interpersonal perception (Sullivan, 1953), and character development and moral reasoning (Kohlberg, 1964; Manners & Durkin, 2000; Walters, 2009).

The operational definition of the ego development construct is abstract and complex (Mosher, 1979). Loevinger (1976) states that “the subject of ego development cannot be encompassed by a formal definition, since ego development is something that occurs in the real world” (p. 13). For Loevinger, the “ego” is an abstraction, not an extant structure; therefore, the ego refers to a “frame of reference” or “lens” through which individuals perceive their social world (*ego development* thus represents a change in one's frame of reference). The five developmental ideas rooted in the ego construct are (a) individuality, (b) self-awareness, (c) complexity, (d) wholeness, and (e) autonomy (Noam, 1993). Ego development is cognitive, social, and interpersonal with an integration of these processes constructing an understanding of the self and the social world (Manners & Durkin, 2000).

Although Loevinger (1994) has advocated that ego development is one of several lines of development, and not the sum total of personality, the ego is conceptualized as the “master trait” of personality (Manners & Durkin, 2000), with the primary focus to synthesize an experience and provide an organizational structure through which individuals perceive and make meaning of their experiences. As one moves to a more complex level of ego development, one increases their ability to reflect on self and the world, has an increased ability to differentiate the world as an independent agent rather than an extension of the self, and alters how the individual relates to conventional norms, and has the profound ability to recognize how the individual restructures emotion-relevant information (Labouvie-Vief, 1992). Further, maturation, socialization experiences, education, and life experiences all contribute to increasing one’s capacity to control impulses, and increase the ability for self-evaluation, self-awareness, and reflection (Muus,

1996). Developmentally, the ego evolves through experience and interactions with other people in a logical, and predictable manner, which Loevinger (1976) organizes into a series of ego levels.

Fundamental to Loevinger's theory (1976) are the ego levels, which are hierarchical and sequential, and represent a progression toward total personality growth. Progression is seen through a series of changes encompassing a greater self and interpersonal awareness, cognitive and conceptual complexity, flexibility, personal autonomy, comfortableness with ambiguity, and personal responsibility (Lambie, 2007; Manners & Durkin, 2000; Walters, 2009). Developmental advances in these domains have been depicted in terms of "stages," a term that implies an underlying coherence and structure to personality. Loevinger has identified eight developmental levels, and each level is defined by a characteristic set of capacities (e.g., impulse control) and milestone developments (e.g., a concern with self-evaluated standards; Loevinger, 1976). Each level of development is characterized by a particular way of perceiving, interpreting, and reacting to the people, objects, and events in the environment (Loevinger, 1979).

Levels of Ego Development

Loevinger's (1976) ego levels are structures that follow an invariant sequence containing eight levels that are arranged in hierarchical order from immature (E2, Impulsive) to mature (E9, Integrative and Self-actualized) as listed in Table 2. A person can be located at one of the eight measurable levels of development, which are considered sequential, and may stop at any one level without progressing to higher levels. Loevinger (1976, 1997) organized these levels along four interconnected dimensions: (a) character development, (b) cognitive style, (c) interpersonal style, and (d) conscious preoccupations. Each ego level represents a typology on individual

differences, characteristics, and ways of being in the world. Ego development “encompasses the complexity of moral judgment, the nature of interpersonal relations, and the framework in which one perceives oneself and others as people” (Loevinger, 1979, p. 3). For Loevinger’s (1998) levels, “each stage’s characteristics are probabilistic, the line between one stage and the next one is ambiguous” (p. 51). The levels are ranged in hierarchal order from simple to complex. Tasks at one level must be completed before those can be initiated at the next level (Lambie, 2002). However, the levels are not tied to ages. Rather, each level is defined by characteristics common to all people at that level regardless of age. Cognitive ability is a necessary but insufficient component of growth, and Loevinger (1994) has resisted the assertion made by Kohlberg (1954) that higher stages are better than lower stages. A person, who does not reach the highest level of ego development, can still be happy or well-adjusted. Rather, people at higher levels of ego development are better able to adapt to new environmental conditions than people at lower levels. Although the optimal level a person becoming congruent and self-actualized is at the E9 level, only a few people ever reach this level (Hy & Loevinger, 1996; Manners & Durkin, 2000).

Table 2: Ego Development Levels and Features

Level	Code	Main Features
Pre-social/Symbiotic	E1	Preverbal; exclusive gratification of immediate needs
Impulsive	E2	No sense of psychological causation; dependent; dichotomous (i.e., good/bad; nice/mean); demanding; concerned with bodily feelings; sexual and aggressive
Self-Protective	E3	Hedonistic; exploitive; externalizes blame; wary; complaining; concerned with staying out of trouble
Conformist	E4	Conventional; moralistic; stereotyped; conceptually simple; 'black and white' thinking
Self-Aware	E5	Increased appreciations of multiple possibilities, explanations, or alternatives; emerging awareness of inner feelings of self and others; concerned with God, death, relationships, health
Conscientious	E6	Reflective; responsible; empathetic; conceptual complexity; self critical; self-evaluated standards; able to see broad perspectives; concerned with values achievement
Individualistic	E7	Heightened sense of individuality; tolerant of self and others; appreciation of inner conflicts and personal paradoxes; values relationships over achievement; rich ability to express self
Autonomous	E8	High tolerance for ambiguity; respectful of autonomy of self and others; cherishes individuality; appreciates conflict as an expression of the multifaceted nature of life; relationships are seen as interdependent; concerned with self-actualization
Integrated	E9	Best described as Maslow's self-actualizing person; this level is attained by very few individuals

Taken with adaptation from Hy and Loevinger (1996) and Manners and Durkin (2001)

Ego Development and Counselors

Ego development (Loevinger, 1976) is necessary in the development of well-rounded individuals (Watt, Robinson, & Lupton-Smith, 2002). Loevinger further describes ego development as the “master” personality trait, organizing and integrating all other aspects of personality (Swenson, 1990). Consistent with Loevinger description, Swenson asserted that the ego is the central variable in interpersonal relations, and conceptualized the ego as a unifying frame of reference that underlies all of a person’s thoughts and actions; a process of gaining psychological maturity (Bursik & Martin, 2006). The process encompasses changes in impulse control, character, and is an essential component to self-awareness (Loevinger, 1976). Self-awareness is a desirable counselor quality. As counselors-in-training are more self-aware, their levels of ego development are higher (Loevinger, 1976; Smith, 2005; Cannon, 2006).

Further related to self-awareness and counselor development, “the levels of ego development mark important distinctions in the ways and degrees of complexity with which individuals understand the self, others, and social situations” (Bauer & McAdams, 2004, p.155). As counselors’ level of ego development mature, they become increasingly flexible and adaptable to their environment and interpersonal interactions (Cook-Grieter & Soulen, 2007). Therefore, as counselors progress through Loevinger’s (1998) levels in an invariant hierarchical sequence, they progress to increased personal and interpersonal awareness, autonomy, ability to think complexly, and an enhanced capacity to self-regulate through accommodation and assimilation (Manner, Durkin, & Nesdale, 2004). The theoretical framework of ego development (Loevinger, 1998) has been applied to research involving counselors because “high levels of conceptual and ego development are the desired outcomes of counselor training and supervised clinical experiences” (Borders, 1998, p. 334). Research supports the relationship

between ego development and desirable counselor qualities such as, (a) counselor effectiveness and skill acquisition (Borders & Fong, 1989; Borders, Fong, & Neimeyer, 1986; Zinn, 1995); (b) counselors' expressed levels of empathy with clients (e.g., including those with disabilities; Carlozzi, Gaa, & Liberman, 1983; McIntyre, 1985; Sheaffer, Sias, Toriello, and Cubero, 2008); (c) counseling students' abilities to cope with stress and overall wellness (Lambie, Smith, & Ieva, 2009; Walter, 2009); (d) school counselors ability to cope with dimensions of burnout (Lambie, 2007); (e) counseling students' level of ethical and legal knowledge (Lambie, Hagedorn, & Ieva, 2010b); and (f) practicing school counselors levels of ethical and legal knowledge (Lambie, Ieva, Mullen, & Hayes, 2010a). Therefore, counselors at higher levels of ego development possess the qualities to provide effective service delivery than those that score at lower levels of ego development (Holloway & Wampold, 1986; Lambie & Sias, 2009). The following section reviews the research on Loevinger's (1998) model of ego development as it relates to counselors-in-training and practicing counselors.

Ego Development and Counseling Skills, Abilities, and Effectiveness

Substantial suggests the importance of high levels of social- cognitive (ego) functioning in counselors (Lambie & Sias, 2009; Sias & Lambie, 2008). In addition, researchers and theorists have posited that higher levels of ego development allow for a greater ability to cope with intricacies encountered in counseling relationships, and better demonstrate overall counselor effectiveness (Borders, at al., 1986; Holloway & Wampold, 1986). Moreover, counselors scoring at higher levels of ego development “negotiate complex situations and perform counselor-related tasks with empathy, flexibility, tolerance for ambiguity, boundary setting, personal and interpersonal awareness, interpersonal integrity, and self care more effectively than individuals at

lower levels of ego development” (Lambie et al., 2009, p.11). Therefore, it is suggested that counselors achieve higher and more complex levels of ego function, in order to effectively counsel and serve a diverse population of clients (Swenson, 1980).

Borders and Fong (1989) investigated ego development with counselors-in-training was in a two part investigation involving both beginning counseling students and one with advanced counseling students. Their study explored the relationship between students’ ego development and the acquisition of counseling skills and abilities. The initial part of the study examined 80 beginning counseling students in the first semester of a counselor education program who were enrolled in an introduction to counseling skills class. To assess their ego development, the WUSCT (Form 81; Loevinger, 1985) was administered along with two other measures to assess counseling skills; Global Rating Scale (GRS; Gasza, Asbury, Childers, & Walters, 1984) and a videotaped counseling examination developed by the researchers. The GRS was used in reviewing videotaped counseling sessions with volunteer clients. Additionally, the videotaped counseling examination was administered to each participant, which measured the students’ ability to perform eight specific counseling skills taught over the course of the semester. As part of the study, students were asked to demonstrate a counseling skill by making verbal responses to videotaped client segments. While the multiple regression analysis did not reveal a statically significant effect of ego functioning on counseling ability, the results demonstrated a statistically significant positive relationship ($r = .24, p < .05$) between ego development and the scores on the videotaped counseling examination, concluding that further research may indicate similar results.

Continuing with the second part of the study, Borders and Fong (1989) examined the relationship between students’ counseling performance rating and ego development levels with 44 advanced students enrolled in counselor education specialist and counselor education and

psychology doctoral programs. At mid-semester, students completed the WUSCT (Form 81; Loevinger, 1985) in small group administrations to assess their level of ego functioning. After completion of the WUSCT, students were asked to submit an audiotape of a “working” counseling session with a client of their choice that occurred at least past the third session, and excluding the termination session. These audiotapes were rated using the Vanderbilt Psychotherapy Process Scales (VPPS; O’Malley, Suh, & Strupp, 1983) to assess characteristics of the client, the counselor, and the interactions that are related to therapeutic outcomes. More specifically, the test was designed to assess positive and negative behaviors and attitudes that were applicable to a broad range of theoretical orientations and interventions through 80 Likert-type items. A multiple regression analysis using training level and ego development level (independent variables) to predict VPPS scores (dependent variable) did not show a statistically significant relationship; however Fong and Borders (1989) reported a positive trend of those that scored higher ego development scores, also scored higher on the VPPS scores. The researchers indicated that one of the limitations of the study included a less than ideal sample size, which could contribute to the non-significant results. In summary of the findings per Borders and Fong, although study did not reach statistical significance, the studies do suggest that higher levels of ego development were related to effective counseling.

Borders (1989) investigated the hypothesis that differences in in-session cognitions of beginning counseling students at various ego developmental levels would vary by time, place, client focus, counselor orientation, and degree of planning. Participants consisted of 27 counseling students (23 women and 4 men) ranging in age from 22 - 46 ($M = 32.61$, $SD = 6.92$) who had completed all required coursework and were enrolled in a counseling practicum course at a university in the Midwest. Students completed the WUSCT (Form 81; Loevinger & Wessler,

1970) to assess their ego functioning levels earlier in the semester. At midsemester, students were asked to videotape a “working stage” counseling session (third or later, excluding termination) of their choice. Videotapes were assessed using the Dole’s standardized recall procedure for in-session cognitions (Dole et al., 1982). Each scoring unit is classified for each dimension: (a) time, (b) place, (c) client focus, (d) locus of control, (e) orientation, and (f) mode. A Kruskal-Wallis analysis did not reveal a statistically significant effect of ego levels on cognition; however, a significant effect of ego level with negative cognitions ($\chi^2 [2, N = 27] = 8.14, p = .02$) with supervisees at higher ego levels reporting fewer negative thoughts about themselves and the clients. Additionally, there was a corresponding but non-significant result for neutral cognitions ($\chi^2 [2, N = 27] = 5.02, p = .08$) with supervisees at higher ego levels tended to be report more objective retrospections. Thus, the results suggested that counselors-in-training who were at higher ego levels, had more emotional awareness, and less were concerned about their personal reactions to clients.

Borders, Fong, and Neimeyer (1986) further investigated counselors’ -in-training self awareness and skill acquisition, specifically how students’ ($N = 63$) levels of social-cognitive development (ego) influenced their counseling-related cognitions. Results indicated that students at higher levels of ego development had a greater awareness of clients’ needs than students at lower levels of ego development. Participants, who scored at lower levels of ego development were more simplistic and used concrete descriptors. Conversely, those who scored at higher levels of ego development used more sophisticated and interactive descriptors. In describing the role of ego development in understanding counselor development and effectiveness, the researchers reported that, “counselors at different ego levels would have varying capacities to

express empathy, respect a client's differentness, deal with identity issues, and understand the interactive dynamics of the counselor-client relationship" (Borders et al., 1986, p. 39).

In an investigation of 64 counseling practicum students, Zinn (1995) examined the relationship between ego development and counselor effectiveness. The participants were administered the WUSCT (Loevinger, 1985) to measure their levels of ego development, as well as the Counselor Evaluation Rating Scale (CERS; Myrick & Kelly, 1971) and the Counselor Rating Form (CRF; Corrigan & Schmidt, 1983), an instrument which was completed by clients, to assess counselor effectiveness. The data analysis revealed no significant relationship between ego development levels and counselor effectiveness, possibly because of the small sample size and limited variance in ego development scores (91% of the practicum students scored at the Self-aware level [E5] of ego functioning). Although the findings were non-significant statistically, the study delivered important descriptive information about the average ego functioning (E5) of counselors and counselors-in-training which is consistent with previous findings (Lambie et al., 2009, Walters, 2009).

A counselors' ability to empathize has been identified as a significant variable and necessary conditions for effective counseling (Rogers, 1957). Empathy is a specific component of interpersonal style and should expect to have linear relationship with ego development, as these are skills that are characteristics of advanced ego levels, levels of accurate empathy would be predicted with each stage (Blalock, 2006; Manners & Durkin, 2001). The skills involved in high levels of accurate empathy include the capacity to (a) to discern a range of complex emotional states, (b) to discriminate between overt and covert forms of communication, and (c) to differentiate between personal responses and those of to others. McIntyre (1985) explored the relationship between counselors' expressed empathy and the clients' expressed counselor

preference and ego development. The study included 42 master's level counseling students from a large, mid-western university. The participants were administered the WUSCT (Form 11-68; Loevinger & Wessler, 1970) and then responded to four client analogues which were developed according to Loevinger's (1976) description of ego development levels. The participants were then asked to rank-order their preference for clients and to respond in writing to the clients as if they were the client's counselor. The levels of expressed empathy for the responses to the analogues were then analyzed using an empathy scale, which included six subscales with five point rating scales. Although an analysis of variance (ANOVA) revealed no significant relationship between participants' ego development levels and their expressed empathy, the data analysis did reveal a significant interaction between ego development levels and analogue level. The student counselors responded most effectively to client analogues which were reflective of an ego development level which matched or was one level higher than their own. Moreover, the researchers found that as the levels of the counselors' empathy scores increased, so did their ego development levels., indicating a positive relationship between counselor's empathic responses and their level of ego development.

Similar to McIntyre (1985), Carlozzi, Gaa, and Liberman (1983) investigated the ego development and counseling related behaviors (i.e., empathy). The participants consisted of 51 counselor trainees. The results yielded that those counselor trainees that score at the Preconformist level (e.g., E2 & E3) were found to be less empathetic than those at the Post Conformist level (e.g., E5-E9). Carlozzi and colleagues reported a significant positive correlation between greater empathy scores and higher levels of ego development among participants. Moreover, Blalock (2006) also investigated the effects of ego development, empathy, and social dominance towards clients in 100 undergraduate students and 52 graduate students in a

rehabilitation counseling program. Her results found a significant positive correlation between empathy and ego functioning as it related to multicultural counseling competencies. Therefore, all three studies (Blalock, 2006; Carlozzi et al., 1983; McIntyre, 1985) indicated a positive relationship between counselor's empathic responses and their level of ego development.

Empathy as a counseling behavior is specifically important when working closely with diverse and marginalized populations (Chung & Bemak, 2002). Sheaffer and colleagues (2008) examined the influence of social-cognitive development (ego), as measured by the WUSCT (Form 81; Hy & Loewinger, 1996) on attitudes towards people with disabilities as measured by the *Social Distance Scale* (Bogardus, 1932). The study included 102 first-year graduate students from four Allied Health Sciences departments (e.g., Rehabilitation Counseling, Communication Science Disorders, Occupational Therapy, and Physical Therapy) at a large Southeastern university. A General Linear Model (GLM) analysis was used resulting in a statistically significant ($p < .05$) inverse relationship between ego development and social distance ($F [1, 3] = 17.636, p = .00$). Therefore, the findings further supported the researchers hypothesis that as students social-cognitive development (ego development) matures, their need for distance with persons with disabilities dropped, indicating they were more accepting of persons with disabilities.

While counselors consistently serve diverse populations in complex systems (Lambie et al, 2010a; Kurtz & Tiegreen, 2005), the ability to navigate and cope becomes essential when helping clients. Personal wellness is another quality which counseling faculty and students believe to be essential for their effectiveness with clients (Roach & Young, 2007). Lambie and colleagues (2009) examined the relationship between ego development levels, wellness, and psychological disturbance in a sample of 111 counseling students. Overall wellness was measured by the Five Factor Wellness Evaluation of Lifestyle (5F-Wel; Myers & Sweeney,

2005), ego development was measured by the WUSCT (Hy & Loevinger, 1996), and psychological disturbance was measured by the Outcome Questionnaire-45.2 (OQ-45.2; Lambert, et al., 2004). No statistically significant relationship was found between ego development and psychological disturbance. However, through the application of simultaneous linear multiple regression ego development was found to have a statistically significant relationship to Total Wellness as well as to three of the five subscales of the 5F-Wel, which were Creative Wellness, Social Self, and Physical Self. The results suggested that ego levels and wellness may influence one another, where higher levels of ego development correlated with higher levels of counselor-in-training wellness, both desirable counselor qualities.

Ego Development and School Counselors

Although there have been ample research addressing ego development in counselors and counselors-in-training, there have been limited studies in relation to practicing school counselors levels of ego development. Diambra (1997) investigated the relationship between National Certified Counselors' (NCCs) experiences, credentials, and conceptual and ego development levels. Of the 400 NCCs randomly selected to receive mail survey packets which included; (a) general demographic questionnaire; (b) the WUSCT-Form 81 ([short form]; Hy & Loevinger, 1996); and (c) the Paragraph Completion Method (PCM; Gardiner & Schroder, 1972), 134 participants (32 males, 102 females) responded who worked in various settings; 43% in mental health settings, 34% in school settings, 24% in community settings, and less than 3% in other occupational settings. The results identified no significant statistical relationship between counselor experience and conceptual level as measured by the PCM. However, a statistically significant correlation was found regarding experience in specific work settings. Mental health

and community counselors scored significantly higher on ego development than practicing school counselors. Diambra suggested that counselor supervision may be a meaningful approach to address school counselor growth and development, since school counselors' scored lower on ego development. He concluded that school counselors potentially scored at lower ego functioning as a result of their occupational interaction with children and adolescents who are at lower stages of ego development. Although Diambra's (1997) study was limited by a small sample size and a questionable reliability of the PCM as noted by the researcher, the study provided distinctive information regarding ego development in counselors, more specifically with school counselors' levels of ego functioning. Further, the results of this study substantiate Zinn's (1995) findings that Self-aware stage (E5) is the modal level of ego functioning for counselors giving that 72% of the respondents in Diambra's study scored at this level of ego development.

Due to the complex system in which school counselors work, overall wellness would be a desirable counselor quality to possess at the practice level (Young & Lambie, 2007). As previously mentioned, people at higher levels of ego development are better able to adapt to new environmental conditions than people at lower levels, and greater able to cope with complexities (Hy & Loevinger, 1996; Manners & Durkin, 2000). Hence, Lambie (2007) investigated the contribution of ego development level to burnout in school counseling professionals. Participants were 225 school counseling professionals holding membership in the American School Counselor Association (ASCA). Members completed mail packets which assessed their ego levels as measured by the *WUSCT* (Form 81; Hy & Loevinger, 1996) and assess levels of burnout as measured by the *Maslach Burnout Inventory-Human Services Survey* (MBI-HSS; Maslach & Jackson, 1996). Burnout consists of three key dimensions, which include (a)

emotional exhaustion, (b) depersonalization, and (c) feelings of personal accomplishment.

Although the results from a path analysis did not yield a statistically significant causal relationship between higher levels of ego development and reduced burnout, it did result in a statistically significant relationship between ego development and personal accomplishment. Therefore, the finding supported that practicing school counselors at higher levels of ego development depersonalize less, and therefore were better able to maintain positive feelings toward their work (Lambie, 2007).

The research findings reviewed in this section support the position that ego development is an integral factor in the development of an effective, flexible, and adaptive counselors (Lambie, 2007; Lawson & Foster, 2005). However, additional research is needed with practicing counselors, more specifically school counselors. There have been other studies with practicing school counselors and school counselors-in-training (Lambie, et al., 2009; Lambie, et al., 2010b); however, they include the level of ethical and legal knowledge. Since this is a primary construct in this study, these findings are further discussed later in this chapter.

In summary, research supports the higher ego development is related to counselor skills, effectiveness, and wellness (e.g., Borders & Fong, 1989; Lambie, et al., 2009; McIntyre, 1985; Zinn, 1995). Therefore, counselors at higher level of ego functioning, work more effectively with their clients while coping with a myriad of systemic and occupational demands. Hence, practicing school counselors who are at more advanced levels of ego development may be better equipped to navigate the complex school system (Lambie, et al., 2010a). Research supports that ego development is a pivotal factor in the development of an effective, functional, and adaptive counselor (Lambie, 2002). However, although the process of ego development maturation is essential for counselors, it does not necessarily explain or predict a person's behavior based on

their social-cognitive developmental level in certain personal or professional situations.

Therefore, the next section provides further insight to locus of control, a construct derived from Rotter's (1954) social learning theory. The following section offers a brief overview of social learning theory, a detailed description of the personal and professional locus of control construct, and research investigated with locus of control, as well as research with both constructs of ego development and locus of control.

Social Learning Theory

Julian Rotter (1954), considered to be one of the 100 most eminent psychologists of the 20th century (Haggbloom, et al., 2002) was the founder of both *social learning theory*, and coined the construct *locus of control*. Social learning theory (SLT; Rotter, 1954, 1955, 1960) was developed in search for explanations of human behavior; an attempt to account how people use complex behavior in relatively complex social environments (Rotter, Chance, Phares, 1972). Locus of control (LOC) refers to the main construct that is a derivative of Rotter's SLT which explains individuals' perceived control over behaviors (Rotter, et al., 1972). Thus, together SLT with the construct LOC, attempted to integrate cognitive, behavior, and social learning theories to illustrate personality and personality change, and the desire to be able to predict and change the behavior of others more effectively (Rotter, 1954).

SLT (Rotter, 1954) an interactionist approach to personality (e.g., personality represents an interaction of the individual with his or her environment), and was influenced by the early writings of Adler (1927), Kantor (1924), and Lewin (1935). Rotter sought to connect what he thought was lacking in the individual theories, which is to conceptualize the effects of past experiences in a way that would both explain, and predict all behavior (Rotter, 1982).

Additionally, SLT involves both a *process theory* (a theory of acquisition and change learned, relatively stable, personal characteristics) and a *content theory* (a descriptive schema of individual differences). Therefore, the main emphasis of SLT was to (a) develop an adequate process theory to explain how people learn or acquire their characteristic behaviors and attitudes; (b) predict behavior choice by the individual in a given situation; (c) develop a reliable, efficient descriptive language, integrated with the process theory, to delineate individual differences in behavior in the same or similar situations; and (d) understand under what conditions such attitudes and behaviors change (Rotter, 1954; 1982). Table 3 presents the primary assumptions of SLT.

Table 3: Assumptions of Social Learning Theory

#	Assumptions
1	The unit of investigation for the study of personality is the interaction of the individual and his or her meaningful environment.
2	Personality constructs are not dependent for explanation on constructs in any other field.
3	Behavior as described by personality constructs takes place in space and time.
4	Not all behavior of an organism may be usefully described with personality constructs. Behavior that may usefully be described by personality constructs appears in organisms at a particular level or stage of complexity and a particular level or stage of development.
5	A person's experiences (or a person's interactions with his or her meaningful environment) influence each other. Personality has unity.
6	Behavior as described by personality constructs has a directional aspect, and may be described as goal directed. The directional aspect is inferred from the effect of reinforcing conditions.
7	The occurrence of a behavior of a person is most determined not only by the nature or importance of goals or reinforcements, but also by the person's anticipation or expectancy that these goals will occur. Such expectations are determined by previous experience and can be quantified.

Taken with adaptation from Rotter (1982).

Rotter (1954, 1972, 1982) suggested in understanding individuals' behavior one must take both the individual (i.e., his or her life history of learning and experiences) and the environment (i.e., those stimuli that the person is aware of and responding to) into account. Rotter describes personality as a relatively stable set of potentials for responding to situations in a particular way. Therefore, behavior is always changeable, there is not a critical period after which personality is set; change the way the person thinks, or change the environment the person is responding to, and behavior will change (Rotter). However, according to SLT the more life experience individuals have building up certain sets of beliefs, the more effort and intervention required for change to occur. From a SLT perspective, people are drawn forward by their goals, seeking to maximize their reinforcement, rather than just avoiding punishment (Rotter, et al., 1972).

Locus of Control

The term *locus of control* (LOC) refers to a construct that originated with Rotter's SLT (Rotter, et al., 1972). Rotter (1954) originally claimed that behavior is determined by two major types of "expectancy": the expected outcome of a behavior and the value a person places on that outcome. Twenty years later, as the construct further developed, Rotter, in collaboration with Chance and Phares (1972) described a general theory of personality with variables based on the ways that different individuals habitually think about their experiences. According to SLT, LOC is a generalized expectancy pertaining to the connection between personal characteristics and/or actions and experienced outcomes (Rotter, 1955). Specifically, LOC is how a person accumulates development over specific encounters in which persons perceive the causal sequences that occur in their lives (Rotter, 1954) and the extent to which a person perceives

events in one's life are consequences of one's behavior (Rotter, 1966). Further, LOC is a personality construct which encompasses the various aspects of attitudes, opinions, and values (Rotter, 1966). Therefore, LOC describes how one perceives causes of events and experiences and consequently determines how one forms opinions and goes about responding to events to alleviate problems or situations (Abdul-Kadir, 1993).

The construct of LOC specifies that individuals fall along a continuum from internal (lower score on locus of control scales) to external (higher scores on locus of control scales) (Rotter, 1982). More specifically, there are certain characteristics and qualities defined for both an internal and external LOC individual. Internal LOC has many beneficial qualities; people with an internal LOC experience more control over their behaviors (i.e., they act in ways that are aligned with their beliefs), as opposed to what others say to do, and more likely to believe that they can and will succeed. In contrast, people with external LOC believe that their lives are predestined, leading them to feel helpless and less motivated to work hard or follow through on an activity in which they have not initially succeeded, as well as belief what they are told to do. Further it has been noted that internal control beliefs are an important component of emotional adjustment and ability to handle stress in general (Kobasa, Maddim Kahn, 1982; Lefcourt, 1982) and at work (Spector, 1988).

Individuals described as "internal", believe that they exercise more control over events and outcomes affecting them. In contrast, people describes as "external" tend to believe that they have little control over what happens to them (Lefcourt, 1976; 1981). Control is a motivational variable that allows individuals to actively participate, regulate, and dictate events in their lives that facilitate independence and responsibility (Wallhagen, 1998). LOC can play a role in how people react when faced in certain situations. For individuals recognized with a more internal

state, many outcomes are seen as being dependent upon the effort placed upon a particular activity or task. Therefore, individuals who put forth the effort and energy in completing any task tend to be more internal.

Research provides evidence that internality correlates with personal, educational, and social achievement (Hill, 1978). In a meta-analysis of studies, Hill (1978) found that individuals with internal LOC are apt to score higher on achievement tests, get better grades prior to college, are more skilled at acquiring and using information, and have a greater sense of well-being (Abramowitz, 1969; Fish & Karabenick, 1971; Hersch & Scheibe, 1967; Platt & Eismann, 1968; Reznickoff, Bridges, & Hirsch, 1972; Roberts, 1971; Shybut, 1970). Additionally, internals tend to be more autonomous while externals tend to react as victims and reject commitment and responsibility. As a result of the analysis, Hill advocated promoting internality through educational practices of reinforcement of internal behaviors, promoting decision-making, and teaching behavioral skills of self-analysis and goal setting, components that already exist in a Council for the Accreditation of Counseling and Related Educational Programs (CACREP, 2009) *Standards for Counselor Education Programs*.

Empirical Research on Locus of Control

The following review of empirical research on the LOC personality construct, only reviews research studies that used a version of the Rotter I-E Scale (1966) or a version of the Nowicki –Strickland Scales (ANSIE; ANSIE-C; Nowicki & Duke, 1974; Nowicki & Strickland, 1983), which has demonstrated a correlation with the Rotter I-E Scale (Nowicki & Strickland, 1983).

LOC has been identified as a personality construct that can predict or explain others beliefs and potential behaviors (Rotter, 1982). Research suggests the importance of internal LOC in individuals (Hill, 1978). In addition, researchers and theorists have posited that individuals characterized as more internal has a greater impact on (a) personal well-being (Denny & Steiner, 2009; McLeod, 1982; Pannells, & Claxton, 2008); (b) greater academic achievement (Duke & Nowicki, 1974; Gifford, Perriott, & Mianzo, 2006, Hall, Smith & Chia, 2007; Rouche & Mink, 1976), and (c) contain greater job satisfaction (Judge & Bono, 2001). Further, a higher internal LOC orientation has demonstrated some desirable counselor qualities regarding (a) counselor effectiveness (Carlozzi, Campbell, & Ward, 1982; Martin & Shepel, 1974; Deysach, Ross, & Hiers, 1977); (b) emotional well-being (Caple, 1987; McIntyre, 1984; Salkind, Newman, & Perkins, 1987; and (c) relating to others (Majudmer, et al., 1977). Therefore, counselors scoring higher along the internal end of the continuum of LOC are more effective in counseling and serving a diverse population of clients (Majudmer, McDonald, Greever, 1977).

Locus of Control and Emotional Well-Being

Internal LOC orientation has been found to be a desirable quality (Rotter, 1966; Lefcourt, 1982), specifically in the helping professions (e.g., counseling, nursing, social work, and teaching). Stress may be a normal, inevitable factor in the lives and work experiences of helpers; however, individual differences in both the perception of factors as stressful and in the responses to these stressors reflect the unique frame of meaning-making within the individual (Steinwald, 1994). Similar to ego development (Loevinger, 1976; 1998), one's ability to cope with environmental stress also appears to be influenced by one's LOC, where as persons with a more internal LOC, appears to handle environmental stress more effectively than those with an

external orientation. Hurrell and Murphy (1991) suggested that individuals with an internal LOC suffer from fewer stress symptoms as they are more likely to define stressors as controllable and take proactive steps in coping. In contrast with internals, those with a more external orientation report more debilitating anxiety, more neurotic symptoms, and more self-punitiveness in response to frustration (Efran, 1971; Butterfield, 1964; Rotter, 1966; Tolar & Rezinkoff, 1967; Watson, 1967; Feather, 1968; Platt & Eiseman, 1968; Goss & Morisko, 1970; Hountras & Sharf, 1970). Additionally, the three dimensions of burnout include (a) emotional exhaustion, (b) depersonalization, and (c) feelings of personal accomplishment (Maslach & Jackson, 1986). Therefore, stress can potentially produce burnout, with LOC orientation regulating coping abilities. Thus, the following section reviews studies that investigated LOC and overall stress and burnout in the helping professions, specifically with educators and health care professionals (Capel, 1987; Higgs, 1992; McIntyre, 1984; Salkind, Newman, & Perkins, 1987).

School counselors work in the same environments as teachers, a complex and stressful system serving a diverse population with a multitude of issues (Lambie, 2007). Hence, both teachers and school counselors work in situations that potentially can be stress inducing. Each individual navigates that process in accordance with individual personality and cognitive characteristics (Rotter, 1954). McIntyre (1984) sought to explore the relationship between LOC and teacher stress and burnout. The participants included 399 self-contained special education teachers from 28 public schools in Connecticut and Massachusetts, that were administered the *Adult Nowicki-Strickland Locus of Control Scale* (ANSIE; Nowicki & Duke, 1974) and the *Maslach Burnout Inventory* (MBI; Maslach & Jackson, 1981). The results demonstrated a more external (higher) orientation on the ANSIE was significantly correlated with MBI subscales concerning the frequency ($r = -.17, p = .05$) and intensity ($r = .17, p = .05$) of feelings of

emotional exhaustion and intensity of feelings of depersonalization ($r = .11, p = .05$). That is, as LOC scores increased, indicating a more external orientation, teachers felt more emotionally exhausted and become more depersonalized and emotionally unavailable towards their students. Additionally, a negative correlation was found between externality and frequency of feeling of personal accomplishment ($r = .11, p = .05$). Therefore, as a person scores in a more external direction, they experience fewer feelings of personal accomplishment at their job. Thus, teachers with greater externality also report a greater degree of burnout. This finding compliments Lambie's (2007) results with practicing school counselors in which lower level of ego functioning results in higher burnout (in one dimension). Therefore, it may be concluded that those who feel burnout in the helping professions have lower levels of ego development and score higher in the external direction of LOC.

Salkind and colleagues (1987) examined burnout in health care professionals as a function of coping profiles, LOC, and self-esteem. The study employed an unidentified number of participants (e.g., registered nurses, interns, and residents from five general hospitals in three states) were administered the following: (a) *Maslach Burnout Inventory* (MBI; Maslach & Jackson, 1981) to measure burnout in the health care professional, (b) given a demographic questionnaire, (c) the *Self Esteem Scale* (Rosenberg, 1989), (d) *Rotter's I-E Locus of Control Scale* (Rotter, 1966), and (e) the *Alpha Omega Scale* (Newman et al., 1983), which addresses attitudes about death and dying. The findings supported that LOC accounted for a significant amount of variance in predicting; (emotional exhaustion, $R^2 = .1012$; depersonalization, $R^2 = .0463$; and personal accomplishment, $R^2 = .0527$). The results from this study need to be interpreted with caution as the effect sizes were small (Cohen, 1988). Nevertheless, results support previous findings (Cagle, 1987; McIntyre, 1985) that individuals who are internally

controlled experienced less frequency of burnout. Hence, the more internal an individual is, the better able to employ coping skills, and as a counselor perform more effectively. The following section reviews LOC in relation to the overall effectiveness of counselors.

Locus of Control and Counselor Effectiveness

Limited research has been conducted with LOC orientation in counselors (Salkind, et al., 1987; Abdul-Kadir, 1994). In counseling, counselors and clients agree on a definition of a problem, and work toward achieving mutually agreed upon goals. LOC may determine how the interaction occurs between the counselor and the client, and potentially affect the client-counselor relationship. Therefore, Abdul-Kadir investigated how perceived LOC orientation affects perceived counselor attractiveness. The results of a t-test indicated a statistical significant difference on the *Rotter I-E Scale* (1966) between the clients ($M = 8.72, SD = 8.72$), while counselors scored relatively lower ($M = 4.82, SD = 2.35$) (more internal). Similarly to prior ego development results, counselors should demonstrate higher ego functioning than their clients (Swensen, 1980; Zinn, 1995), counselors need to be at a more internal state than clients (Majudmer, et al., 1977).

In further examination with helping professionals, Martin and Shepel (1974) investigated LOC and discrimination ability. The subjects were 21 female nursing students from urban hospitals. Although none of the nurses had formal training in counseling, all were functioning to some extent in that role. Based on Carkhuff (1972), participants received an 18 hour training conducted over two days by three professional psychologists that emphasized developing a helping relationship, identifying and exploring problem areas, and devising plans of actions. Participants completed two instruments pre and post-training: (a) *James I-E Scale* (measures

locus of control; James & Shepel, 1973) and (b) *Discrimination Index* (measures discrimination ability Martin, 1971) Results indicated a shift toward internality on the I-E Scale with an initial ($M = 35.67$) reduced to ($M = 30.95$) (lower scores indicate internality) ($t = 4.40, p < .001$).

Therefore, the results supported that changes in counseling skills and personality orientation may be effected by structured training programs. Further, LOC was associated with counseling skills, and a statistically significant relationship was noted between post Discrimination Index and post I-E scores ($r = -.56, p = .001$), suggesting that an I-E scale may be useful as a selection device to optimize training effectiveness with counselors, as advocated by Hill (1978). Therefore, it may be inferred that training can increase levels of internal LOC and increase counselor effectiveness.

Ross and Hiers (1977) investigated LOC, interpersonal LOC and effectiveness of counselors ($N = 43$) at a therapeutic summer camp for emotional disturbed adolescents. Participants completed the *Rotter I-E Scale* (Rotter, 1966), *Locus of Control of Interpersonal Relationships* (LCIR; Lewis, Cheney, & Dawes, 1974), and the *Counselor Effectiveness Scale* (Ivey, 1971). Results identified correlations between LOC scales and judgment of counselor effectiveness. More specifically, the correlation between the I-E Scale and overall counselor effectiveness reported ($r = .45, p < .01$), and a higher correlation between the LCIR and counselor effectiveness ($r = .57, p < .01$). Although the LCIR resulted in a higher correlation, the general expectancy measure by the Rotter I-E scale still reached statistical significance, supporting Martin and Shepel (1974) findings, more effective counselors score at greater levels of internality.

In an investigation of counselors and LOC orientation, Majudmer and colleagues (1977) examined the interrelationships among LOC, attitudes towards the poor, attitudes toward the supervisor job satisfaction, and performance ratings of practicing rehabilitation counselors at a

state vocational rehabilitation program. Ninety rehabilitation counselors completed the questionnaire packets which included *Rotter's I-E Scale* (locus of control; 1966), *MacDonald's Poverty Scale* (1971; attitudes toward the poor), and a series of Likert questions to assess attitudes towards supervisors, and job satisfaction. Several notable findings were identified in this correlational study. As expected by the researchers, the more internal the counselor, (a) the higher the efficiency rating by the supervisor ($r = .40, p < .01$); (b) the more positive their attitude was toward the poor ($r = .53, p < .01$); (c) the greater the satisfaction with the supervisor ($r = -.30, p < .01$); and (d) the more the counselor tended to be satisfied with their job ($r = -.17, p < .01$). Although LOC and attitudes toward the poor were related to counselor efficiency, each was significantly related to each other ($r = .53, p < .01$). Additionally, results identified a positive correlation between LOC and age of counselor ($r = .26, p < .05$), in which externality was found to increase with age. This finding was consistent with Rotter's (1955) assertion that how individuals perceive previous experiences influences later behaviors. Results also yielded that LOC ($M = 7.1$) was a stronger predictor of efficiency as rated by their supervisor. The mean was lower (more internal) than the norm established from a variety of samples ($M = 9.1$) (Owen, 1969). The results were important due to clients come from all backgrounds and economic status, in every setting (e.g., rehabilitation, community, marriage and family, mental health, and school counseling). It appears that these findings support the position that internally oriented counselors would appear to work more cooperatively with their clients. Therefore, the researchers concluded similarly to that LOC should be a factor worth considering when hiring counselors, or admitting into university counseling programs. Since LOC is amenable to change (Majumder, Greever, Holt, & Friedland, 1973; Martin and Shepel, 1974), externality should not be seen as negative

factor in admission into the profession. Rather, externality could indicate a need to consider in-service or pre-service training to promote internality.

External orientation of LOC is seen by some researchers as detrimental for counselors who are to encourage clients to take charge of their lives and assume responsibility for their behavior (e.g., Combs, Avila & Purkey, 1971; Mahon & Altmann, 1977). Also, external trainees would experience difficulty learning and internalizing facilitative skills that call for the acceptance of personal responsibility in communicative exchanges (Carlozzi, Campbell, & Ward, 1982). To examine this hypothesis, Carlozzi and colleagues (1982) examined 215 master's degree candidates enrolled in a guidance and counseling program, to investigate the relationship of dogmatism and external LOC as related to skill acquisition in facilitative responding. Both dogmatism and externality were measured by the *Opinion Scale* (Kleiber, Veldman, & Menaker, 1973), a derivative of the *Rotter I-E Scale* (1966), which represents 23 items from the original scale which externality is endorsed, and the *Gross Rating of Facilitative Interpersonal Functioning Scale* (GRFIF; Carkhuff, 1969). Multiple regression and partial correlations were employed to reach statistical significance between the variables. Pearson product-moment correlations results were as follows: the correlation between dogmatism and externality ($r = .71, p < .01$); the dogmatism and GRFIF ($r = -.55, p < .01$); and externality and GRFIF ($r = -.40, p < .01$). As a result of dogmatism and externality highly correlated scores, the researchers ran a multiple regression analysis of GRIF scores with the two variables and covariates (e.g., religious, race, age, sex, class hours completed). The results demonstrated that externality and covariates combined account for 49% of the variance ($R^2 = .491$) in GRIF scores and an increment of 8% contributed by externality [$F(1, 195) = 31.32, p < .01$]. The results support that dogmatism and externality in LOC were inversely related to counselor

trainee skill in facilitative responding to client stimuli. Therefore, those students who were higher in dogmatism and externality were less able to respond to clients in a helpful or facilitative manner. The results were consistent with the view that internality is indicative of greater interpersonal skills and overall counselor effectiveness (Martin & Shepel, 1974; Deysach, Ross, & Hiers, 1977; Steagall, 1990). The following section explores the interaction of higher ego functioning and a more internal LOC orientation as it relates to counselors and counselors-in-training, both seen as desirable counselor qualities.

Ego Development and Locus of Control

Conceptually, there seems to be a connection between LOC and ego development (Janota, 1993). As previously stated, LOC refers to perceived control over one's environment (Rotter, 1966). Theoretically, ego development relates to how a person's ability to handle and cope with perceived stress within the environment; the higher an individual's level of maturation, the higher the ability to cope and adapt to the environment (Lambie, 2007; Lambie, et al., 2009). Hence, effective coping and adaptability encompasses a more internal LOC and higher stages of ego development. Similarly, Lambie (2007) found that higher levels of ego development were related to personal accomplishment (a subscale of the MBI-HSS), while McIntyre (1985) found a negative correlation between external LOC and personal accomplishment on the MMI.

Therefore, it would stand to reason that there should be a relationship between ego development and LOC that reflects healthy ways of coping; the higher the ego function, the more internal orientation an individual holds. Further, Loevinger's theory (1976) of ego development asserts that during the pre-Conformist (E3) and Conformist (E4) levels of development the child is highly dependent on external views of behavior and thought (locus of control); (Bursik & Martin

, 2006). If an adolescent moves beyond the Conformist level, self-defined standards become increasingly important. Thus, higher ego development should predict an increasingly internal LOC. In searching for research studies examining the relationship between LOC, and ego development, only two studies were found.

White (1985) investigated the relationship between ego development (as measured by the WUSCT; Loevinger & Wessler, 1970) and LOC (as measured by the Rotter I-E Scale; Rotter, 1966) in 163 women enrolled in a nurse practitioner training program. Results from the study indicate a small, but statistically significant correlation ($r = -.19, p = .01$) between the two constructs. The findings suggested that those who have higher levels of ego development tend to be more internal; therefore, supporting that claim higher ego development should predict an internal LOC.

In relation to counseling students, Steagall (1990) investigated the effect of Autogenic Training on practicum students ($N = 11$) and the relationships of ego development and LOC at Midwestern university. Participants' were assessed at both pre- and post- receiving the intervention and training in a group administration (including the control group); LOC orientation as measured by the *Internal Versus External Control of Reinforcement Scale* (I-E Scale; Rotter, 1966), and ego functioning as measured by the WUSCT (Form 81; Loevinger & Wessler, 1970). Additionally, practicum supervisors completed the *Counselor Evaluation Rating Scale* (CERS; Myrick & Kelly, 1971) at the end of each quarter to measure counselor effectiveness. A Spearman Rho Correlation Coefficient was calculated between the ego development scores and the I-E Scale. Although correlations did not reach statistical significance, it is important to note that there was a negative correlation indicating that as changes in one variable tend to be associated with changes in the other variable. Thus,

supporting theoretically, that as students become more internal the higher the level of ego functioning of the counselors-in-training.

Although limited research has investigated social-cognitive development (Loevinger, 1976) and LOC (Rotter, 1954); specifically, with practicing counselors, there seems to be sufficient support to assert that the more internal LOC orientation held by a counselor, the higher the social-cognitive functioning. Future research investigating LOC and social-cognitive development may provide a holistic understanding of school counselors, and specifically when faced with stress inducing situations (i.e., tough ethical dilemmas). The following section further describes LOC, specifically as it relates to the work environment.

Work Locus of Control

Work locus of control (WLOC) is an extension of Rotter's (1966) concept of LOC that asserts that individuals differ in terms of their beliefs about whether they control the outcomes in their lives (i.e., internal locus of control) or the outcomes are controlled by factors such as luck and other people (i.e., external locus of control). Building on the argument of Paulhus and Christie (1981) that there might be a generalized perception of control for various spheres of an individual's life, Spector (1988) formulated the *Work Locus of Control Scale* (WLCS). WLOC is a contextualized form of LOC, and refers to the belief of being in control of the workplace environment. In organizational settings, rewards or outcomes can include: (a) promotions, (b) favorable circumstances, (c) salary increases, and (d) general career advancement (Spector, 1982). Because employees spend a substantial part of their lives at work, and are dependent on their job to meet several personal needs, their work and personal lives are intertwined. As a result, stressors may originate from the conflict between these roles and that conflict may affect

the overall well-being of an employee (Danna & Griffin, 1999). Further, Locke (1983) suggested that a person's perception of work:

can affect his attitude toward life, toward his family, and toward himself. It can affect his physical self and possibly how long he lives. It may be related (indirectly) to mental health and adjustment, and plays a causal role in absenteeism and turnover (Locker, 1983, p. 1334).

Therefore, WLOC can affect employees' functioning and well-being.

Researchers suggested that WLOC may act as a mediating variable in job stress and strain (Spector & O'Connell, 1994). Therefore, WLOC has been linked with increased job satisfaction and psychological well-being (Karasek, 1979; Spector, 1986; Spector et al., 2002).

As summarized in his review, Spector described LOC as being related to a number of organizationally relevant variables: (a) internals tend to be more satisfied with their jobs than externals, (b) see their supervisors as higher on initiating structure, (c) report less role stress, (d) perceive more autonomy than control, (e) enjoy longer job tenure, (f) report a higher level of organizational commitment, and (g) look within themselves to determine courses of action (Judge, Erez, Bono, Thorensen, 2003; O'Brien, 1983; Spector, 1982; Spector, 1988).

Consequently, individuals with an external WLOC may underestimate the degree to which they are able to take action or handle situations, relying on company policies and procedures (Siu, Spector, Cooper, Lu, & Yu, 2002; Spector, 1982; Spector 1996), resulting in job stress, job dissatisfaction, and potential counterproductive behavior (Fox & Spector, 1999). Thus, the WLOC seems to be related to overall wellness, and employees' functionality. The following sections reviews the research with LOC as it relates to the work setting.

Research on Work Locus of Control

Research has shown that LOC has the potential to effect a wide range of variables: (a) work characteristics (e.g., job control, job motivation); (b) well-being; (c) organizational commitment (Coleman, Irving, & Cooper, 1999); (d) coping behaviors (Siu, Spector, Cooper, Lu, & Yu, 2002; Spector 1996), and (e) job satisfaction (Spector, 1998). Spector (1982) suggested that internals on average are more satisfied with their job because they are less likely to stay in a dissatisfying job and are more likely to be successful in organizations. Bond and Bunce (2003) found that individuals with a greater external LOC experienced lower levels of job satisfaction. Additionally, occupational health researchers have demonstrated that individuals with an internal LOC suffer from fewer stress symptoms, mental ill-health, and poor functioning, as they are more likely to define stressors as controllable and take proactive steps to cope with them (Gatchel, 1980; Hurrell & Murphy, 1991; Newton & Keenan, 1990; Rotter, 1966; Spector, 1986; Spector, 1988). Further, research has identified a correlation between internal WLOC and higher levels of job motivation, and displaying more initiative on the job (Blau, 1993). The following section reviews research using the WLCS (Spector, 1988) with different service populations (e.g., higher education administrators, managerial staff, and hotel managers) and specific outcomes.

Work Locus of Control and Job Satisfaction

As noted, organizational school settings (e.g., K-12 schools and higher education) tend to be diverse, dynamic, and complex (Lambie, 2007). In relation to the higher education system, student affairs employees and administrators perform similar tasks to practicing school counselors with an older student population such as: (a) promote and support academic

achievement, (b) promote and support personal and social development, and (c) prepare and support career development (American School Counselor Association [ASCA], 2005).

Investigating the work environment, Tarver, Canda, and Lim (1999) examined the relationship between job satisfaction and WLOC among 327 student affair administrators working in higher education universities. In this study, the locus of control measurement administered was *the Rotter I-E Scale* (1966), and the *Job Description Index* (JDI; Smith, Kendall, & Hulin, 1975). Pearson-product correlation coefficients yielded a statistically significant negative correlation ($p < .05$), indicating a positive relationship between job satisfaction and internal LOC orientation. Thus, confirming previous findings (Spector, 1988) that the higher the internal orientation of LOC, the more satisfied the employee, in this case student affairs administrators, were with their jobs.

Owens, Maradi, and Neimeyer (2008) examined faculty members in both clinical and counseling training programs. The researchers found that significant differences between tenured ($n = 101$) and untenured ($n = 73$) faculty were noted in relation to perceived LOC ($F_{1, 166} = 4.70$, $p < .05$; $N_p^2 = .03$). Compared to tenured faculty ($M = 2.40$; $SD = .44$), untenured faculty reported higher levels of external locus of control at work ($M = 2.57$; $SD = .53$). Similarly, clinical and counseling faculty differed significantly in their perceived WLOC ($F_{1, 166} = 6.81$, $p < .05$; $N_p^2 = .04$). Compared to clinical psychology faculty ($M = 2.41$; $SD = .46$), counseling psychology faculty reported significantly higher external LOC ($M = 2.59$; $SD = .51$). Comparatively to clinical psychology faculty ($M = 5.45$; $SD = 1.05$), counseling psychology faculty reported significantly lower levels of job satisfaction ($M = 5.07$; $SD = 1.05$). These results further supported prior findings (Leung, Siu, & Spector, 2000; Spector, 1988; Tarver et al., 1999) that the more internal orientation of WLOC, the greater level of job satisfaction. Conversely those

with a more external orientation, reported less job satisfaction. Spector (1982) asserted that these results can be explained by potential job stress, or unhealthy coping. However, internality is seen as a more desirable employee trait.

Fox and Spector (1999) investigated multiple hypotheses related to frustration and counterproductive work behaviors. As predicted, work-related frustration events were found to be significantly related to affective variables including WLOC as measured by the WLCS (Spector, 1988) ($r = .41, p < .01$). Additionally, WLOC was also correlated with anxiety ($r = .35, p < .01$), anger reaction ($r = .33, p < .01$), and counterproductive behaviors ($r = .30, p < .01$). Further, a negative correlation, as expected between job satisfaction ($r = -.42, p < .01$). Therefore, supporting that the more external an individual is the least satisfied they are with the job, the more they experience anger and frustration, and also engage more in counterproductive behaviors. Within the counseling profession, counterproductive behaviors are more dangerous where the direct effect of such behavior impacts work relationships, services, and ultimately vulnerable clients (Quattrochi-Tubin, Jones, & Breedlove, 1982). Thus, it is essential to see where school counselors may fall along this continuum of perceived work control, coupled with ethical and legal knowledge.

Work Locus of Control and Well-Being

Spector (1982) claims that occupational stress, coupled with unhealthy coping, can lead to job dissatisfaction in employees possessing external WLOC orientation. Hence, internals may be able to handle occupational stress with healthy coping skills, and lead to higher levels of job satisfaction. Muhonen and Torkelson (2004), investigated the role of WLOC (as measured by the WLCS [Swedish version]; Muhonen, 1999) with job satisfaction (as measured by one-item

global measure) and health (as measured by the *Hopkins Symptom Checklist-25* [HSCL-25; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974]) in the context of occupational stress. Data was collected from 281 men and women at both managerial and non-managerial positions on a Swedish telecom company. Alpha Coefficient of their data of a .86 was consistent with previous studies (Blau, 1993; Lu, Kao, Cooper, & Spector, 2000). Confirming the researchers hypothesis, that external work locus of control was positively related to stressors ($r = .36, p < .01$) and symptoms of ill health ($r = .38, p < .01$), whereas it was negatively related to job satisfaction ($r = -.32, p < .01$). Additionally, results from the hierarchical multiple regression analysis identified WLOC was a statistically significant predictor of both symptoms of ill-health ($B = .39, p < .01$), job satisfaction ($B = .24, p < .01$) and the interaction effect of the two ($B = .27, p < .01$). These findings support research indicating that the more external an employee, the more symptoms of work-related stress, and lower levels of job satisfaction (Blau, 1993; Spector, 1988).

In a study of university teachers in Hong Kong ($N = 106$), Leung, Siu, and Spector, (2000) investigated faculty stressors, job satisfaction, and psychological distress, using WLOC as a moderating variable. Results yielded those teachers that had an external WLOC orientation, intensifies with their dissatisfaction with financial inadequacy and their job. Consequently, the perceptions of university teachers with an internal WLOC orientation reduced their psychological distress (Leung, et al., 200). In conclusion of both studies, there were aspects of one's LOC that may be influenced by their overall well-being, and potential relation to social-cognitive development.

Work Locus of Control and Organizational Commitment

In addition to job satisfaction, organizational commitment has been researched in relation to work locus of control. Studies have found statistically significant correlations between locus of control and organizational commitment (Aube, Rousseau, & Morin, 2007; Furnham, Brewin, & O'Kelly, 1994; Kinicki & Vecchio, 1994; Luthans, Baack, & Taylor, 1987). Organizational commitment contains three components; (a) affective commitment (refers to a psychological attachment to an organization, stay with the organization because they *want* to); (b) continuance commitment (refers to costs associated with leaving the organization and perceived lack of alternatives, stay with the organization because they *need* to); and (c) normative commitment (refers to a perceived obligation to remain in the organization because they feel they *should*) (Meyer & Allen, 1991). Coleman and colleagues (2003) explored the relations between locus of control and two forms of organizational commitment (affective and continuance commitment). Participants consisted of 232 regional employees of a Canadian governmental agency, who completed two assessments, the Organizational Commitment scale (Meyer, Allen, & Smith, 1993), and the WLCS (Spector, 1988). Coefficient alpha for the WLCS was .83, similar to most studies (Bond & Bunce, 2003; Hermann, 2009; Spector, 1988). Results described that internal WLOC had a statistically significant correlation with affective commitment ($r = -.35, p < .01$) and external WLOC reached statistical significance with continuance commitment ($r = .34, p < .01$). That is, participants with high levels of internal WLOC (internals) also reported higher levels of affective commitment; in contrast, research participants identified as externals (high levels of external locus of control) reported high levels of continuance commitment. As a result of their findings, the researchers concluded that individuals, who feel stuck in their jobs because of organizational investments or lack of marketable skills, might be more likely to develop an

external WLOC. This finding is important for the current study, because reinforcements at work may differ from reinforcements at home, indicating the need to measure with a contextualized instrument, WLCS (Spector, 1988).

Work Locus of Control and Information Seeking Behavior

Spector (1982) asserts that in contrast to externals, internals exert greater efforts to control their environment, exhibit better learning, seek new information more actively, use information better, and seem more concerned with information. Internally oriented individuals have been found to engage in more active information search than are externals (Lefcourt & Wine, 1969). Additionally, internals were also found to use acquired information greater extent in decision-making than externals (Phares, 1968). Extending the findings of Renn and Fodor (2001) who found that employees who believe they have control over their environment, engage more actively in feedback-seeking behaviors than those who do not perceive control; De Vos, Buyens, and Shalk (2003) sought to explore the relationship between WLOC and frequency of contract-related information seeking of 527 newly recruited employees in eight large firms (e.g., Telecommunication, Consulting, and Banking and Insurance) in Belgium. Results identified a positive relationship ($B = .10, p < .05$) between LOC and information seeking about job content. This finding supports that employees who are more internal, seek more information regarding work (Lefcourt & Wine; Phares; Renn & Fodor). Individuals with an internal LOC communicate more and ask for additional communication or clarification about workplace events, due to the knowledge of being in control, and do not wait for information to come to them (Harris, Harris, & Eplion, 2007). Therefore, an inference may be made that the more internal orientation of LOC of a practicing school counselor, the more likely they are to seek out

relative information (e.g., school policies, ethical guidelines, and information specific to working with an unfamiliar population).

In summary, studies applying LOC to the work situation suggest that it is important to use a dispositional variable for explaining attitudes and behaviors in work settings (Blau, 1983; Spector & O'Connell, 1994). More specifically, individuals with a strong internal WLOC were found to be more intrinsically motivated to do well at their jobs, possess greater commitment to an organization, regulate job stress, and remain longer in their jobs (Macan, Trusty, & Trimble, 1996; O'Brien, 1984; Spector, 1982). Additionally, internals have demonstrated seeking information out on the job when needed (De Vos, Buyens, & Shalk (2003; Lefcourt & Wine, 1969; Phares, 1968; Renn & Fodor, 2001) and less likely to become frustrated as a result of perceived work control and engage in counterproductive behaviors (Chen & Spector, 1992; Fox & Spector, 1999; Storms & Spector, 1987). Research supports that overall well-being correlates both general internal expectancy of LOC (Rotter, 1966), internal WLOC (Spector, 1988), and ego development (Loevinger, 1976; 1998); all three measures there seems to be sufficient support to assert that the more internal LOC orientation (personally and professionally) held by a counselor, the higher the social-cognitive functioning, and the least likely to engage in counterproductive behaviors (e.g. unethical and illegal). Future research investigating LOC and social-cognitive development may provide a holistic understanding of school counselors, and specifically when faced with stress and frustration inducing situations (i.e., tough ethical dilemmas), provided that counselors have a general working knowledge of ethical and legal knowledge.

Ethical and Legal Knowledge

The experience of PSCs in public school settings are shaped by many complex factors, such as their previous education and experiences; physical environment; school managerial staff; national, state, and district standards, legal statutes, and educational policies that exist and sometimes conflict (Stone, 2005); and staff culture. School counselors' functions vary across communities as a result of views of parents, the school board policy-setting body, the school administrators, the teachers and students' needs (Henderson, 2007). Additionally, PSCs also have an obligation to meet the mental health needs of their student, while simultaneously have an obligation to advocate for students and interact with all stakeholders (e.g., students, parents, teachers, administrators, staff, and the community; Meyer, 1999). As a result, PSCs manage many distinct roles (e.g., counselor, educator, mentor, collaborator, family facilitator, consultant, etc.) in which the conflicting nature of these relationships has the potential for many ethical dilemmas to occur. Further, schools encounter ever increasing social problems as students are confronted with realities of life, such as economic recessions, changes in family structures, racial and ethnic tensions, gang culture, drug and alcohol abuse, and increasingly amount of computer bullying (Shulte & Cochran, 1995).

Despite the interactions between these interpersonal, social and systemic factors, PSCs contend with some of the most challenging ethical dilemmas facing counselors (Remley, et al., 2003). Examples of challenging ethical dilemmas include working with minors in a school setting such as students with suicidal ideations (Capuzzi, 2002; Gibbon & Studer, 2008), child abuse and neglect (Lambie, 2005), child custody disputes (Richardson & Rosen, 1999), sexual activities of minors (Stone, 2002), and bullying (Carney, 2008). Thus, PSCs work in challenging systems and are often confronted with diverse ethical challenges. Collectively, these complex

attributes and systemic challenges necessitate PSCs to possess sound ethical and legal knowledge and decision-making skills in order to provide ethical and effective services to their stakeholders (Davis & Mickelson, 1994).

PSCs also encounter a plethora of issues and situations that could result in criminal or civil litigation (Rawls, 1998). Davis and Ritchie (1993) expressed “because school counselors are expected to deal with sensitive issues as pregnancy, drug abuse, and suicide, it is likely that they will become vulnerable to legal action” (p. 23). In addition, Fisher and Sorenson (1991) listed the more common activities school counselors experience that lead to legal implications from malpractice suits: such as “(a) prescribing and administering drugs; (b) giving birth control advice; (c) making defamatory statements; (d) assisting in student locker searches; and (e) violating the privacy of records” (Fisher & Sorenson, 1991, p. 42). While some of these duties do not match the ASCA’s (2004; 2007) standards and competencies, it is important to note that these duties may fall under PSC district contracts which read “other duties as assigned.” An effective counselor includes having knowledge and the ability to integrate a code of ethics into one’s professional practice (Kocet, 2006). Furthermore, Welfel (2006) suggested that effective PSCs possess sound ethical knowledge and have the ability to effectively integrate ethical standards and best practices into their work with diverse student populations. The following section provides a brief overview of the historical context to the development of codes of ethics that professional organizations provide to serve as guidelines when faced with ethical dilemmas.

Foundation of Principle Ethics

Principal ethics emphasize the use of rational, objective, universal and impartial principles in the ethical analysis of dilemmas, and form the basis for developing codes of ethics

and standards of practice guidelines (Jordan & Meara, 1990). Five principles (Kitchner, 2000) generally serve as the basis for any code of ethics: (a) *beneficence*, which refers to promoting the welfare and interests of others; (b) *nonmaleficence*, which refers to not intentionally harming others; (c) *autonomy*, which refers to respecting the choices of others and their right to self-determination without controlling physical/ psychological restraints; (d) *justice*, which refers to treating others fairly and equitable allocation of resources; and (e) *fidelity*, which refers to keeping promises and obligations to others and abiding by the rules and regulations (Beauchamp & Childress, 1983; Kitchner, 2000). Ethical dilemmas arise when conflicts occur between any two or combination of the above mentioned five principles. Thus, the increase in ethical dilemmas brought to professional organizations and the courts, resulted in the creation of professional codes of ethics.

Code of Ethics

The first professional code of ethical standards for counselors was published in 1961 by the American Personnel and Guidance Association. Since that time there have been multiple revisions and standards for various counseling associations (e.g., ACA, ASCA). With an increased legal and professional accountability and liability issues (Gibson, 1992), codes of ethics have increasingly more legal implications. Counseling professional organizations (e.g., ACA, 2005; ASCA, 2004) have developed ethical standards to guide the practices and activities of professional counselors. Codes of ethics provide an idealized standard of practice to which counselors should aspire (Remley et al., 2003). Consequently, legal standards are developed by legislators to set the minimum societal standard. Therefore, codes of ethics may provide PSCs with resources when faced with ethical dilemmas, but are generally intended to serve as a

guideline in the process, rather than a prescription (Meyer, 1999). Additionally, referring to the ethical code is only one of the steps when confronted with an ethical dilemma (Stone, 2005). In summary, ethical codes offer broad guidelines which counselors may use in conjunction with informed and responsible judgment to provide services in the best interest on clients, in this case all stakeholders (Corey, Corey, & Callahan, 2007).

School counselors may have a number of ethics documents for which they have to comply (Remley & Huey, 2002). For example, a PSC who is a member of ACA (2005) and ASCA (2004), who is certified by the National Board of Certified Counselors (NBCC), and who is licensed by his or her own state counseling licensure board has agreed to abide by four separate sets of ethical standards. Fortunately, there are few conflicts among the codes of ethics (Remley & Huey, 2002). However, the potential of conflict does exist when state departments of education, district policies, and administrative policies are also mandated to be followed, and may conflict. Thus, reaffirming that school counselors should be equipped with a solid foundation of ethical and legal knowledge in order to handle challenging ethical dilemmas that may occur and potential conflict between ethics, the law, and administrative policies.

The overarching ethical standards that PSC should primarily follow come from ASCA (2004). In the *Ethical Standards for School Counselors*, ASCA specifies the principles of ethical behavior necessary to maintain the high standards of integrity, leadership, and professionalism among its members. The standards were developed to “clarify the nature of ethical responsibilities held in common by PSCs” (ASCA, 2004, p. 1). Additionally, they are to serve as a guide for ethical practices for all PSCs regardless of level, setting, or population served. The standards are comprehensive and highlight the following areas pertinent to PSCs: (a) responsibility to students; (b) confidentiality; (c) counseling plans; (d) dual relationships; (e)

appropriate referrals; (f) group work; (g) danger to self or others; (h) student records; (i) evaluation, assessment, and interpretation; (j) technology; (k) student support programs; (l) responsibilities to parents; (m) responsibilities to colleagues; (n) sharing information with other professionals; (o) responsibilities to the school and community; (p) responsibilities to self; (q) responsibilities to the profession, and (r) maintenance of standards. As counselors are aware of their ethical standards, the more likely they are to understand the complexities and maneuver being an ethical and competent professional, while delivering a developmental school counseling program. The primary ethical obligation of the school counselor is to students and their educational, career, emotional, social, and behavioral needs (Henderson, 2007); therefore, PSCs must maintain their knowledge of the laws, regulations, and policies that relate to their work and protect the rights of students (ASCA, 2004).

Legal Issues

PSCs have encountered some common legal issues like duty to warn, mandated reporting, subpoenaed to testify, *American with Disabilities Act Compliance* (1990), and parent request for information (Hermann, 2002). The following section reviews terms that are listed within the professions' codes of ethics and should be infused into a school counseling ethics necessary to PSCs' ethical practice.

Privileged Communication. Privileged communication is a legal concept and simply means freedom from subpoena or protection against being forced to divulge private information in court proceedings (Knapp & Vandecreek, 1983; Smith, 1986). Privileged communication excludes client counselor confidentiality and communication when the court's right to know outweighs the sanctity of the relationship (Thompkins & Mehring, 1993). Privilege of

communication exists only in state legislature and defined by the statute. In most states, legal protection has been granted to clients of physicians, social workers, and professional psychologists. Additionally, in many states privilege communication has also been granted to the clients of various counseling professions, with minimal states extending the privilege to school counselors. Fischer and Sorenson (1996) noted that only 16 states grant statutory privilege directly to counselors who are certified or licensed by state boards of education to practice as school counselors (e.g., North Carolina). Given the variations in state privileged-communication statutes, it is important for school counselors to determine if the statutes in their state afford privilege to their clients (Glasoff & Pate, 2002).

Confidentiality. Confidentiality is the single most common ethical dilemmas encountered by PSCs (Bodenhorn, 2006; Hermann, 2002; Isaacs & Stone, 1999). Legally, confidential communication and privileged communication have similar meaning. To the lay person, confidentiality often has a much simpler and more direct meaning. Majority of the time, confidentiality refers to the expectation of privacy and secrecy, which is the core of the counseling relationship. Thus, a student may confide in a counselor with the expectation of confidentiality which may not always exist. In reality, confidentiality relates to the individual's adherence to professional codes (Herlihy & Sheeley, 1987). The conflict of confidentiality is a demanding challenge since PSCs work with minors. However, ACA (2005) and ASCA (2004) ethical standards recognize that school counselors may have limits to their ability to protect counselee confidences. The *Ethical Standards for School Counselors* (2004) specify "the professional school counselor respects the inherent rights and responsibilities of parents for their children ..." (ASCA, B.1.a.). In addition, the Ethical Standards refer to counselors' obligations to follow both state laws and local guidelines (e.g., school board policies) (Glasoff & Pate, 2002).

In addition, the *Family Education Rights and Privacy Act* (FERPA, 1974) establishes that parents control the privacy rights of students under the age of 18. School counselors are sometimes confused by a FERPA provision that allows confidential notes or memory aids to be protected from FERPA's requirement that official school records be disclosed to parents. However, unless there is a specific privilege granted by statute or by a court, any material, including counselors' "confidential" case notes, may be subpoenaed. Counselors have no legal reason to refuse to testify or produce records if the students or the parents of a minor students request disclosure or waive their right to privilege.

Mandated Reporting. There are numerous circumstances when the general duty of confidentiality must yield to a duty to disclose. Each state legislation has their own mandates, but in general mandated reporting includes: (a) duty to warn of a threat of physical violence or substantial threat to property; (b) duty to report a violation of the *Safe Schools Act*; (c) duty to report bullying; (d) duty to report misconduct by school personnel; (e) duty to report or refer threats of self-inflicted harm; (f) duty to report or refer to Exceptional Education or 504 teams; and (g) duty to report pregnancy (some states the laws regarding age are specified). The most important scenario where it is absolutely critical for PSC to report is the suspicion of child abuse (e.g., neglect, emotional, physical, or sexual; Shulte, 1995; Stone, 2006.) All states require that school personnel report to their child protective services agency.

Ethics vs. the Law

School counselors have responsibilities to many people and several institutions. As PSCs make ethical decisions, they must consider federal and state educational law, local school board policies, and the procedural precedents in their school settings. PSCs must balance the needs of

the students with the rights of the parents/ guardians and the interest of the school while simultaneously reviewing laws, ethical codes, and policies. It is important to clarify the difference between ethic and the law. Laws are standards of conduct set by the government and enforced by the authority of the government (Remley, 2006). Ethical codes are different from laws as they are standards of conduct established by professional associations only for those who are members of the associations to which are somewhat aspirational in nature and enforced by the professional association (Remley, 2006). There are situations where the law and ethical codes conflict with one another that place PSCs in a difficult situation and force counselors to make decisions using their own judgment creating confusion and uncertainty. Remley asserted that “the ACA code of ethics and Standards of Practice defer to the law. Counselors must practice their profession within the limits of the law” (p. 285).

On the other hand, ethical codes are not legal obligations to professionals in the field, but rather moral obligations (Wasielewski, 2004). Hermann (2002) identified common legal issues faced by school counselors including: (a) reporting suspected child abuse, (b) confidentiality with minors, (c) responding to suicidal clients, and (d) responding to a client’s threat of violence. Hence, since every situation is different, there will always be gray areas that emerge and create ethical dilemmas, while at the same time create conflicts between ethical codes and legal responsibilities (Sealander, 1999). In summary, counselors may be caught between the law and codes of ethics and following the steps that ASCA recommends can help aid in the process. In order for counselors to effectively and ethically serve their populations and to understand the conflicts between ethics and the law, they must be equipped with a sound level of ethical and legal knowledge. The following section reviews the importance of acquiring ethical and legal knowledge.

Acquisition of Ethical and Legal Knowledge

School counseling preparation programs are where counselors-in-training begin to develop their ethical and legal knowledge-base and decision-making skills; thus, such programs are tasked with disseminating this information in a competent and comprehensive fashion (Lambie, Ieva, & Ohrt, 2010). In fact, the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2009) requires accredited counselor preparation programs to foster these skills and competencies in their students. In order to foster counselors-in-trainings' ethical knowledge development, instructors provide multiple educational strategies in their ethics courses, such as lecture, group discussions, and reviewing and processing counseling case studies (Vanek, 1990). In alignment with CACREP standards and topics that occur in codes of ethics, Lambie and colleagues (2010b) suggest the following topics should be infused in a school counseling ethics course: (a) professional identity; (b) ethical and legal terms; (c) ethical decision-making principles; (d) confidentiality; (e) suicide and client violence; (f) abuse, neglect, and negligence; (g) counseling and educational records, (h) educational and civil right laws, (i) counselor development and wellness; and (j) discrimination laws and ethics. In order to create an ethical climate in counselor education programs, Kitchner (1986) suggested that ethics training should meet four goals;

- (1) sensitize students to the ethical issues in the profession and consequences of their own actions;
- (2) improve students' ability to reason about ethical issues;
- (3) develop in students moral responsibility and the ego strength to act in ethical ways; and
- (4) teach students tolerance of ambiguity in ethical decision making (p. 308).

Kitchner further asserted that members of the counseling profession cannot assume that students enter graduate programs with ego strength, empathy, and morality fully developed. Therefore,

Lambie and colleagues (2010b) suggested that school counselor preparation programs may want to construct a specific ethics course relating to school counseling professionals. Further, Robinson and Gross (1989) found that completion of an ethics course seemed to be a significant variable affecting counselor's ability to recognize which ethical standard was being violated; thus, supporting that acquisition of ethical and legal knowledge is best initiated at the training level. The following section reviews the research with school counselors and their ethical and legal knowledge.

Empirical Research of Ethical and Legal Knowledge and School Counselors

While there has been ethical research with counselors and school counselors, some have focused on: (a) what ethical concerns counselors face (e.g., Bodenhorn, 2006; Davis & Mickelson, 1994; Hermann, 2002); (b) what resources school counselors use when making ethical dilemmas (e.g., McDonald, 2009; Meyer, 1999); and (c) the majority of the research involved ethical decisions made by counselors (e.g., Dowson-Hardy, 2001). In an investigation of how PSCs make ethical decisions, Meyer (1998) found that 50% of the secondary PSCs used a combination of common sense, colleagues, personal experience, school board policy, and professional development when examining an ethical dilemma. Similarly, McDonald (2009) reported that PSCs made ethical decisions grounded in their personal beliefs and values, as well as the professional preparation standards. Additionally, PSCs who demonstrate higher levels of cognitive and moral development tend to make ethical decisions that adhere to the standards of the profession (Dufrene, 2000). Moreover, Bombara (2002) found that the amount of PSCs' ethics education predicted the frequency they consulted professional ethical codes. Therefore,

PSCs' ethical decision-making processes may be related to the amount of ethical and legal knowledge held by the counselor.

While there has been research to provide insight on the ethical decision-making process, limited research has examined the level of ethical and legal knowledge of counselors. Zibert, Engels, Kern, and Durdoye (1998) attempted to gain a description of the ethical and legal knowledge held by members of a state counseling association in the United States. Their results suggested that ethical knowledge was not significantly related to membership division, age, years of formal education, years of experience, formal course work in ethics, or earned credentials, however, there was a statistically significant issue of sex differences in ethical knowledge ($n = 98$, *males*; $n = 259$, *females*). Female participants scored higher on ethical knowledge which was suggested by Herlihy and Golden (1990) that women were better skilled at correctly identifying the correct solution to an ethical when present with case scenarios. Additionally, a significant difference was identified between ethical and legal knowledge regarding work setting. The scores between counselors in community mental health settings ($M = 15.29$) and K-12 public school counselors ($M = 26.72$) reached a statistically significant difference, indicating that PSCs have a lower level of ethical and legal knowledge, which the researchers suggest could be explained by the nature and dynamics of the work setting.

Ego Development and Knowledge Acquisition

Preparation programs are where counselors-in-training begin to develop their ethical and legal knowledge-base and decision-making skills (CACREP, 2009; Lambie, et al., 2010b). Limited research exists with ego development and ethical and legal knowledge; however, there does exist a body of research in examining ego development with the acquirement of

multicultural knowledge by counselors-in-training, which is also required by CACREP to foster and develop at the graduate level. Pancini (2002) sought to examine the relationship between ego development and multicultural knowledge. Multicultural Knowledge was assessed as a subscale of the *Multicultural Counseling Inventory* (MCI; Sadowsky, Taffe, Gutkin, & Wise, 1994). Although the results did not indicate a statistically significant correlation ($r = .25, p < .07$), potentially due to error, it is important to note that as ego development of counselors-in-training increased, so did their level of multicultural knowledge.

Cannon (2005) further investigated if educational methodologies (e.g., Deliberate Psychological Education) impacted moral reasoning (as measured by the *Defining Issues Test* [DIT; Rest, Navarez, Thomas, & Bebeau, 1999]), ego development (as measured by the WUSCT; Loevinger, 1998), and multicultural knowledge (as measured by the *Multicultural Knowledge and Awareness Scale* [MKAS; Ponteroto, 2002]) of 33 community counseling students enrolled in internship over a period of two semesters. The results indicated that the treatment groups statistically significantly increased on both the MKAS and WUSCT. While correlations with these data were not conducted, the study presents two important findings. First, that developmental growth can occur at the graduate level through interventions. Secondly, that there was an increase in knowledge through the intervention. Therefore, it may be concluded that as ego development scores matured, so was the potential for acquiring multicultural knowledge.

In summary, results from both studies indicate that acquisition of knowledge (multicultural) may be related to a counselors' level of ego development. The next section provides insight on the acquisition of ethical and legal knowledge and ego development as it pertains to counselors-in-training and practicing PSCs.

Ego Development and Ethical and Legal Knowledge with School Counselors

School counselors require high levels of ego development and significant knowledge regarding legal and ethical practice (Lambie, et. al, 2010a; 2010b) to provide counseling services in systems that are dynamic, yet provide limited clinical supervision (Lambie & Sias, 2009). Additionally, research suggests that PSCs who demonstrate higher levels of cognitive and moral development tend to make ethical decisions that adhere to the standards of the profession (Dufrene, 2000). Two studies were found that investigated ego development with counselors-in-training (Lambie et al., 2010b) and practicing school counselors (Lambie et al., in 2010a) with ethical and legal knowledge. The first study examined the effect of an ethics course on 64 master's level counselor education students. The constructs investigated were ego development as measured by the WUSCT (Form 81; Hy & Loevinger, 1996); ethical and legal knowledge as measured by the *Ethical and Legal Issues in Counseling Questionnaire* (ELICQ; Lambie, Hagedorn, & Ieva, 2008), and ethical decision-making as measured by the *Ethical Decision Making Scale-Revised* (EDMS-R; Dufrene, 2000). Results of a simultaneous linear multiple regression indicated that counseling students levels of pre-course social-cognitive development predicted 21.4% ($R^2 = .214$) of the variance in the post-test ELICQ scores ($F [2, 60] = 8.17, p < .00$). A follow-up Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between pre-test social-cognitive development level and post-test ethical and legal knowledge scores ($r = .450, p < .001$). Therefore, counselors-in-training scoring at higher levels of social-cognitive development prior to beginning a counseling ethics course was predictive of higher ethical and legal knowledge scores at the completion of the course, supporting the position that individuals with higher social-cognitive

developmental level, acquire a higher level of knowledge (Cannon, 2005; McDonald 2005; Slomowitz 1981) (in this particular case, ethical and legal knowledge).

Lambie and colleagues (2010a) also conducted a similar study with a sample of practicing school counselors. The participants were 226 PSCs working in three school districts in the state of Florida. The PSCs were administered the same instruments as previously noted to assess ego development, ethical and legal knowledge, and ethical decision-making. Results of a linear multiple regression indicated that ethical decision-making and social-cognitive development predicted 6.1% ($R^2 = .061$) of the variance in the PSC's ethical and legal knowledge ($F [2, 183] = 5.97, p = .003$). However, among the predictor variables, only the social-cognitive development scores had a statistically significant beta coefficient. Again, the researchers followed up with a Pearson product-moment correlation (two-tailed) analyses, which supported the results of the statistically significant relationships between ethical and legal knowledge scores and level of social-cognitive development ($r = .213, p = .002$). Therefore, the findings supported that practicing school counselors levels of ethical and legal knowledge were correlated and can be predicted by levels of ego functioning. Thus, PSCs at higher social-cognitive development levels also have higher levels of ethical and legal knowledge.

In summary, research investigating ethical and legal knowledge and ego development supports that notion that those counselors who have higher ego functioning also have a higher level of ethical and legal knowledge. The findings that the participants' in both studies social-cognitive development level predicted their ethical and legal knowledge scores support that these two desirable counselor qualities influence one another (Lambie, et al, 2010a; 2010b). Consequently, counselors at higher levels of social-cognitive functioning exhibit desirable counseling qualities such as increased empathy, flexibility, perspective-taking, self-care, and

wellness (Borders, 1998; Lambie et al., 2009; Lambie et al., 2009) as well as learn ethical and legal knowledge more quickly than students at lower levels of development. The next section reviews how the research supports locus of control orientation with ethical and legal knowledge.

Ego Development, Locus of Control, and Ethical and Legal Knowledge

As noted, limited research was found that investigated all three constructs (a) ego function, (b) locus of control (LOC), and (c) ethical and legal knowledge. However, there has been a study with adolescents that examines ego development, LOC orientation, and academic achievement (which can be seen as acquiring knowledge). Bursik and Martin's (2006) study examined 142 students (10th- 12th graders) from a public high school in a suburban middle class town. During English class in a group administration, students completed the WUSCT (Form 81; Hy & Loevinger, 1996), an *Academic Locus of Control Scale* (Trice, 1985), and academic achievement as reported by the school system. The results of a regression analysis predicting academic achievement revealed that each variable accounted for statistically significant amount of variance associated with academic achievement ($R^2 = .38, F = 13.39, p < .001$). The findings supported that ego development, coupled with a higher internal locus of control orientation, is an important predictor of academic achievement. Thus, it may be inferred that counselors with higher ego development scores and a more internal locus of control orientation, score at higher levels of ethical and legal knowledge.

Summary

This review of the literature described an overview of cognitive and social-cognitive developmental theories, more specifically, Loevinger's (1976) theory of ego development, as the context and theoretical framework for understanding how school counselors perceive their

worlds and school culture. Locus of control, in which describes a personality trait that can perceivably explain behaviors of practicing school counselors, was also discussed. Next, the application of locus of control personality trait translated into the work setting and empirical research was reviewed, highlighting that learned experiences in work can affect a practicing school counselor's work locus of control. Finally, the concept of ethical and legal knowledge as applied to counselors was explored, and the relationships between ego development, locus of control, and ethical and legal knowledge. The review of the topics suggests that although there have been research involving counselors and counselors-in-training examining these three concepts independently (ego development, locus of control, and ethical and legal knowledge); there is a lack of research regarding the link between all three constructs. Thus, there is a need to investigate the potential contribution of practicing school counselors' ego development on their levels of locus of control, and their legal and ethical knowledge.

CHAPTER THREE: METHODOLOGY

This chapter describes the research design, methodology, and procedures for the study. The purpose of the research study was to investigate the contribution of practicing school counselors' social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. More specifically, this chapter reviews: (a) the population and sample, (b) the data collection methods, (c) the instrumentation, (d) the research design, (e) the research hypotheses and questions, (f) the methods of data analysis, (g) ethical considerations, and (h) limitations to the study.

Population and Sample

The target population for this study was practicing professional school counselors (PSCs) across the United States. According to the United States Department of Education (2008), there are approximately 103,823 practicing school counselors. A sample of 383 PSCs were needed in order to generalize to the United States population of PSCs at the 95% confidence level (Cohen, 1992). This study employed purposive sampling of practicing PSCs in five different school districts located in five states across the country (with institutional review board [IRB] permission). Additionally, the PSCs in each school district represented all levels (e.g., elementary, middle, and high school) as well as districts' size (e.g., rural, suburban, and urban) with a sample size of 301 participants. Purposive sampling is used with one or more specific predefined groups (Fraenkel & Wallen, 2009), as is the case with this specific study. Kerlinger (1986) further explained purposive sampling as a form of non-probability sampling, which is characterized by the use of deliberate effort to obtain representative samples by including typical areas or groups in the sample (e.g., level of work setting and geographic representation). The

researcher contacted 31 district school counseling coordinators in 22 different states. Of the 23 coordinators that responded (74% response rate from 22 states), 19 referred the researcher to their local departments of Evaluation and Research, to complete a formal district application to conduct research, while the other four coordinators declined the invitation. Only five districts in the following states agreed to participate in the data collection process: (a) Colorado; (b) Florida; (c) Maine; (d) Maryland; and (e) New Mexico.

Data Collection

Prior to data collection, the researcher received permission from the University of Central Florida's Institutional Review Board (IRB) to conduct the study. Simultaneously, the researcher completed all formal applications for the individual districts' Offices of Evaluation and Research and received permission to conduct the study. Additionally, permission was granted to use the instruments from the corresponding authors; (a) *Ethical and Legal Issues in Counseling Questionnaire-Revised* (ELICQ-R; Lambie, Ieva, Gill, & Hagedorn, 2010); (b) *Adult Nowicki-Strickland Internal External Scale* (ANSIE-C; Nowicki & Duke, 1974; personal communication, April 30, 2009); and (c) *Work Locus of Control Scale* (WLCS; Spector, 1988; personal communication April 22, 2009). Permission to use the *Washington University Sentence Completion Test* (WUSCT; Hy & Loewinger, 1996) was not needed from the authors as the instrument and training and scoring manual are available to purchase.

Data collection took place at school counseling professional development meetings per school district during the Fall of 2009. The researcher scheduled all dates with each school counseling coordinator to personally visit each district to administer and collect the data. Due to conflicting schedules, one district supervisor (Maryland) administered the instrument packets

themselves, and mailed them to the researcher. Data collection took place from October 15, 2009 through December 15, 2009. Participants were able to withdraw from completing the data collection packets (e.g., informed consent; *General Demographic Questionnaire*, Ieva, 2009; WUSCT, Hy & Loevinger, 1996; ANSIE-C, Nowicki & Duke, 1974; WLCS, Spector, 1988, and the ELICQ-R, Lambie, et al., 2010) at any time. Each participant received an envelope with a corresponding number, when the participant completed the instrument packet the envelope was sealed and kept anonymous.

Since instrumentation packets were used, Dillman, Smyth, and Christian (2008) suggest decreasing measurement error by ensuring that the instruments being used were legible and that the directions were clearly understood. Therefore, a review of the research packets were conducted using the three main instruments identified in this study and a demographic information sheet. Participants involved in the research packet review were seven doctoral candidates in counselor education. The administration was conducted by the researcher to field any comments or feedback on all data collection instruments. Feedback was considered to further refine the directions and demographic information for the instrument packets; however, some of the comments regarding the instruments themselves were not able to be implemented due to the copyright on the instruments. As a result of the research packet review, it was determined that directions and instruments were legible and easy to follow. Therefore, it was possible that if PSCs were not able to attend the meeting, they were still able to complete the packets and give them to their supervisor. Only six PSCs completed their data packets on their own.

Following administration and collection of the data in each school district, participants received answers to the ELICQ-R questions. After all data was scored and analyzed, the county school board contact received a compact disk (CD) with aggregate results. School districts

individually had the option of receiving a professional development module created by the researcher to either place the module on line, present the information themselves, or have the researcher return to present professional development information. Two districts chose for the researcher to return for professional development as an option, while the other three declined. Professional development was given at the school districts in Florida and Colorado.

Instrumentation

The constructs and instruments that were investigated in the study included: (a) social-cognitive/ ego development (*Washington University Sentence Completion Test* [WUSCT]; Hy & Loevinger, 1996), (b) ethical and legal knowledge (*Ethical and Legal Issues in Counseling Questionnaire-Revised* [ELICQ-R]; Lambie, et al., 2010a), (c) locus of control (*Nowicki-Strickland Locus of Control Scale-College Form* [ANSIE-C]; Nowicki & Duke, 1974) and (d) work locus of control (*Work Locus of Control Scale* [WLCS]; Spector, 1988) Additionally, this researcher created a *General Demographic Survey* that was used in the study. The following section provides information regarding the data collection instruments.

General Demographic Survey

The *General Demographics Survey* is a two-page questionnaire created by the researcher, which asks the practicing school counselors to report their basic demographic information (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, program certified by the CACREP, geographic location, etc.). More specifically, the demographic information included three areas relating to whether the PSCs: (a) were certified educators, (b) were members of professional organizations, and (c) how frequently the PSCs met with other counselors in their county. Further, the *General Demographic Survey*

(Ieva, 2009) included seven Likert scaled questions that asked participants to rank from 1-5 (1 = low frequency; 5 = high frequency) regarding professional activities and systemic school attributes. Prior to using the General Demographic Questionnaire in this study, it was reviewed by a panel of experts (committee members, counselor education faculty) as well as administered to a group of doctoral level counseling students for review of readability and clarity (Appendix B).

Washington University Sentence Completion Test (WUSCT)

The *Washington University Sentence Completion Test* (WUSCT; Hy & Loevinger, 1996) is a semi-projective inventory consisting of 18 to 36 sentence stems which relates to one of Loevinger's levels of ego development. The respondent completes the sentence stem in any way he or she chooses. Thus, the responses represent a projection of the participants' schema of meaning-making (Loevinger, 1998; Walter, 2009). Loevinger (1998) created a *Technical Foundations Manual* that includes previous forms of the test, a history of the development of the WUSCT, the theoretical basis, an extensive explanation of how to score the WUSCT, and a detailed description of the reliability and validity of the instrument. There are versions of the WUSCT specifically designed for men and women of all ages; from pre-adolescence and adolescence through adulthood. Scoring the WUSCT can be completed by anyone who completes the written scoring exercises found in the test manual (Hy & Loevinger, 1996). Further, Loevinger (1998) confirms that what is unique about the WUSCT from other projective test manuals is that the written instructions and training exercises for raters can be completed to produce ratings that mirror experienced raters. Therefore, it is feasible to conduct inter-rater reliability on this specific instrument, which was determined prior to scoring the instruments. For

this study, the two raters were the researcher and another rater. Both raters had experience scoring WUSCT for the past two years. Prior to rating the WUSCT for this study, both raters completed the trained scores with an inter-rater reliability of .97.

The WUSCT (Hy & Loevinger, 1996) was originally devised as part of a program of research on women's attitudes and personalities, and the study it was intended to examine women's and adolescent girls' acceptance of "feminine roles" (Loevinger & Cohn, 1998, p. 11). The WUSCT has since been broadened to use with men as well. Considerable research has been examined using the WUSCT, and as a result, the test has undergone numerous revisions to strengthen the application across different genders and cultures, as well as with adolescents and adults (Hy & Loevinger, 1996). Therefore, there are two forms of the WUSCT (Hy & Loevinger, 1996) for men and women; however, the only difference is a change in a personal pronoun to make the sentence stems personally relevant. For example, item 15 on the women's form, "A wife should" is altered to "A husband should" on the men's form. The test has been revised two times since 1970 (Hy & Loevinger; Loevinger, 1985) in which the most recent abbreviated version is called "Form 81," the alternate short-form of the WUSCT (81-1; Hy & Loevinger, 1996), which was administered in this study. WUSCT Form 81-1 contains 18 sentence stems, rather than 36 items, but has been found to produce nearly as reliable results as the full, 36-item form through the split-half method of reliability testing (Novy & Francis, 1992). The split-half method reliability of the WUSCT conducted by Novy and Francis (1992) was administered to a sample of 265 adults, which consisted of adults who were university students, adults who were employed in health professions, and adult delinquents, which resulted in a high and significant correlations between both halves; coefficient alpha was .84 for the first half, .81 second half, and .90 for the total 36 items. The correlation between to the two halves was .96 (Loevinger, 1998).

Additionally, a high level of inter-rater reliability has been demonstrated with the WUSCT and a diverse number of populations (Manners & Durkin, 2000). A high level of inter-rater reliability has been found in studies involving a range of populations (e.g., Browning, 1987; Dubow, Huessman, & Eron, 1987; Hauser et al., 1984; Novy & Francis, 1992; Snarey & Lydens, 1990; Waugh, 1981; Weiss, Zilberg, & Genevro, 1989). Moreover, Loevinger and Wessler (1970) reported a Cronbach's alpha of .91 using the item sum of the score of the instrument. Almost identical results have been found in subsequent studies (e.g., Browning, 1987; Novy & Francis, 1992; Redmore & Waldman, 1975). Further, the WUSCT has been translated into at least 11 other languages to allow its inclusion in research conducted in other languages than English as well as administered in over 15 countries to explore cross cultural questions with culturally and ethnically diverse sub-populations in English-speaking countries (Carlson, & Westenberg, 1998).

In the behavioral science field, "the use of any projective evaluation is controversial" (Walter, 2009, p.103); however, the WUSCT (Hy & Loevinger, 1996) has been found to be one of the "most extensively validated projective psychological assessments" (Garb, Wood, Lilienfield, & Nezworski, 2002, p. 461). As a result, each sentence stem response is rated as a whole by its level of meaning or what the person is saying, and is not conceptualized in relation to the other 17 responses (Hy & Loevinger, 1996). A total protocol rating (TPR) is then calculated using "an algorithm reflecting the respondent's assessed place on Loevinger's ego development scheme" (Loevinger, 1998, p. 78) as previously presented. Numerous studies have indicated that the WUSCT is a valid measure of ego development: extensive research using the WUSCT as a measure of ego development offers substantial confirmation of its strength as a psychometric assessment of social-cognitive development (Blumentritt, Novy, Gaa, & Liberman,

1996; Cook-Greuter & Soulen, 2007; Lilienfeld et al., 2000; Manner & Durkin, 2001; Noam et al., 2006).

The WUSCT (Hy & Loevinger, 1996) has been criticized for the potential interaction effect of intelligence, verbal fluency, and socioeconomic status (SES) with varying levels of ego functioning (Loevinger, 1998). For example, intelligence studies have shown a consistent, moderate, positive correlation between intelligence and ego levels (Blasi, 1971; Cramer 1999; Loevinger, 1979; Newman, Tellegen, & Bouchard, 1998). However, the relationship between these two constructs is still unclear (Cohn & Westenberg, 2004; Loevinger, 1998). In regards to verbal fluency, wordiness has been found related to ego development (Loevinger & Wessler, 1970; McCrae & Costa, 1980; Sanders, Lubinski, & Benbow, 1995). The correlations have been small enough to support the position that the WISCT is not directly measuring verbal fluency. Further, Manners and Durkin (2000) asserted that more words are often necessary to convey ideas of which are reflective of the complexity of higher ego levels. However, respondents can have a high level with only a one word response. Lastly research investigating the relationship between ego levels and SES has been inconclusive. Some research findings have supported the correlation between ego levels and SES (e.g., Redmore & Loevinger, 1970, Redmore & Waldman, 1975); however, other studies have produced results suggesting limited connection between ego functioning and SES (Browning, 1987; Powers, Hauser, Schwartz, & Noam, 1983). Nevertheless, research supports the WUSCT scores contain variance that is not shared with intelligence or verbosity (Cohn & Westenberg, 2004), providing strong evidence for discriminant validity of the WUSCT.

Evidence for the construct validity of the WUSCT is provided by several lines of research, which have been reviewed by Loevinger (1979, 1998), Hauser (1976; 1993), and

Manners and Durkin (2001). The research found consisted of only four studies comparing the WUSCT with other measures of ego development (Helson & Wink, 1987; Rozsnafszky, 1981; Sutton & Swenson, 1983; Westenberg & Block, 1993). Sutton and Swenson (1983) found a significant correlation between the WUSCT and both the unstructured interview and Thematic Apperception Test (TAT; Murray, 1943). Additionally, Rozsnafszky (1981) compared the distinctive milestone traits described as characterizing each ego development level with California Q-Sort (CQ-S; Block, 1961/1978) personality ratings. Results yielded that both observer and self-ratings of particular personality descriptors were consistent with the level of ego development as determined by the WUSCT, for both alcoholics and the medical patients. Moreover, Westenberg and Block (1993) also used CQ-S (Block, 1978) ratings to investigate the relationship between personality variables and ego development with a sample of 98 male and female participants, assessed at ages 14 years and 23 years. The CQ-S is a set of 100 descriptive personality statements printed on individual cards where the 'sorter' arranges the cards into groups from least characteristic to most characteristic in order to describe an individual's personality. Westenberg and Block's findings were consistent with the predictions from ego development theory, in which ego development was associated with increasing ego resiliency, increasing personal integrity, increasing need regulation, and conformity peaked at the conformist ego stage and declined at the self-aware ego level. Lastly, Helson and Wink (1987) examined data from their longitudinal study of life and personality changes in a large sample of women, and compared personal maturity as measured by the WUSCT and the competence score on the revised California Psychological Inventory (CPI; Gough, 1987), which measures the ability to function effectively within society, whereas the WUSCT views maturity as increased self-differentiation and integration, and an independence from social conventions. Comparing the

two measures of maturity in a sample of 90 women at 43 years of age (Helson & Wink, 1987), a significant correlation was found between the two measures. As a result of all four studies, it may be concluded that there is “substantial support for the construct validity of ego development” (Manners & Durkin, 2000, p. 548).

Research on ego development over the past three and a half decades has been motivated by an interest in describing and predicting a broad array of developmental and behavioral outcomes in both general and clinical samples (Newman, Tellegen, & Bouchard, 1998). Although Loevinger’s (1976) theory of ego development does not assert predictions, studies have been conducted that have produced results regarding the predictive validity of the WUSCT (Hy & Loevinger, 1996). In a longitudinal study, Dubow, Husmann, and Eron (1987) found that child-rearing styles characterized by acceptance, a non-authoritarian approach to punishment, and identification of the child with the parent predicted higher levels of adult ego development 22 years later. Additionally, according to Manners and Durkin (2000), the first study using the predictive nature of the WUSCT was conducted by Hart and Hilton (1988). Hart and Hilton investigated the hypothesis that the patterns of contraceptive use among female adolescents would be related to their level of ego development. They found that the degree of consistency in the use of contraception was predicted by the level of ego development. Further, Louise von der Lippe and Moller (2000) found that daughter’s ego development predicted the family conflict negotiation level, indicating additional evidence of the predictive ability of the WUSCT, and the construct of ego development.

Since predictability of ego development has been demonstrated in extensive research, the WUSCT has been deemed a reliable and valid instrument of ego functioning, considerable research has also investigated the relationship of ego development with a number of attitudinal

variables (e.g., Dunston & Roberts, 1987; Browning, 1987; Weaver, Berry, & Pittel, 1994; Erickson, 1977; Roznafsky & Jendel, 1977; McCrae & Costa, 1980; Morros, Pushkar, & Reis, 1998). In addition, multiple studies have examined ego development as it relates to the counseling profession and desirable counselor qualities, such as (a) counselor effectiveness and skill acquisition (Borders & Fong, 1989; Borders, Fong, & Neimeyer, 1986; Zinn, 1995); (b) counselors' expressed levels of empathy with clients (e.g., including those with disabilities) (Carlozzi, Gaa, & Liberman, 1983; McIntyre, 1985; Sheaffer, Sias, Toriello, and Cubero, 2008); (c) counseling students' abilities to cope with stress and overall wellness (Lambie, Smith, & Ieva, 2009; Walter, 2009); (d) school counselors ability to manage burnout (Lambie, 2007); (e) counseling students' level of ethical and legal knowledge (Lambie, Hagedorn, & Ieva, 2010); and (f) practicing school counselors levels of ethical and legal knowledge (Lambie, Ieva, Mullin, & Hayes, 2010). Through the use in multiple studies, the WUSCT is widely regarded as one of the most psychometrically sound measures of maturity and personality development (Cohn & Westenberg, 2004). Therefore, the WUSCT (Appendix C) is an appropriate for measuring practicing school counselors' level of social-cognitive development, specifically in a group administration.

Adult Nowicki-Strickland Internal External Scale (ANSIE-C)

Locus of control (LOC) refers to the degree to which a person perceives he or she can control the outcomes of his or her behavior (Rotter, 1966). Several instruments measuring LOC have been developed and identified in the past 30 years (Lefcourt, 1982). Rotter (1975) and Lefcourt, confirm that maximum predictions on this construct were best obtained if the researcher tailors his or her instrument or measure to specific populations and their concerns

rather than relying upon a more global measure (i.e., *Rotter Internal- External Scale* [Rotter I-E Scale]; Rotter, 1966). More specifically, different instruments have been constructed to measure different aspects of LOC; such as in achievement behaviors (Crandall, Katkowsky, & Crandall, 1965), parental LOC (Campis, Lyman, & Prentice-Dunn, 1986), LOC in marital satisfaction (Miller, Lefcourt, & Ware, 1983), drinking related LOC (Donovan & O’Leary, 1978), weight loss LOC (Saltzer, 1982), and the mental health LOC (Hill & Bale, 1980). Thus, the researcher chose the *Nowicki-Strickland Locus of Control Scale-College Form* (ANSIE-C; Nowicki & Duke, 1974) in order to capture the general LOC with this specific population; college graduate adults in a professional field. Further, the ANSIE-C was administered because it is not affected by social desirability as strongly as Rotter's (1966) I-E Scale (Roueche & Mink, 1976).

The ANSIE-C (Nowicki & Duke, 1974) was derived from the *Nowicki-Strickland Internal-External Control Scale for Children* (CNSIE; Nowicki & Strickland, 1973), designed to measure general expectancy for internal versus external control of reinforcement among children, as defined by Rotter. The CNSIE has developed a solid reputation over the years (e.g., strong internal consistency, correlates significantly with other LOC measures, and has been used to assess LOC in children for over 40 years). To further measure general expectancy of LOC across the life span, Nowicki and Duke developed the *Adult Nowicki-Strickland Locus of Control Scale-* (ANSIE; Nowicki & Duke, 1974). The ANSIE was originally designed to measure internal and external LOC of non-college adults. Therefore, the ANSIE items were written at a lower reading level. The motivating force behind the specific development of the ANSIE was to fully capture the adult population, and to ensure there was an ease of understanding the task required (Nowicki & Duke, 1983). Thus, the reading level is less demanding and the simple “yes” and

“no” format makes it easier to understand the task in completing the ANSIE questionnaire (Lefcourt, 1991).

Nowicki and Duke (1974) further constructed another instrument to assess the general expectancy of LOC among college students (ANSIE-C). The ANSIE-C is a self-administered scale of 40 questions that require “yes” or “no” answers that refer to both an external or internal LOC with items describing reinforcement situations across interpersonal and motivational areas such as affiliation, achievement, and dependency (e.g., “Do you believe that if people study hard enough, they can pass any subject?”). The lower a participants’ score on the ANSIE-C, the greater the level of internal LOC. Conversely, the higher the score achieved, the greater the external LOC. The ANSIE-C was normed on university students ($N = 156$; Nowicki & Duke 1983). The original sample used for evaluating the psychometric properties of the scale comprised of 156 students, though further statistics derived from 766 subjects in 12 separate studies. Scores range from 0 (internal) to 40 (external), where external comments are configured for a total score. The scores among colleges students resulted in ($M = 9.1, SD = 3.9$); and among non college students ($M = 11.0, SD = 5.6$), indicating that non-college students scored more external than college students.

The reliability of the ANSIE-C (Nowicki & Duke, 1974) has been strong (Lefcourt, 1991). Internal consistency yields a split-half reliability indexes of the ANSIE-C to vary from .74 and .86. It is suggested that alpha values should be at least .70 (Nunally, 1978). Factor analysis has reported a large general factor, accounting for approximately 30% of the variance that has been characterized as “helplessness” (Nowicki & Duke, 1983, p. 17). Additionally, Christner (1975) and Piotrowski (1976) conducted factor analysis on the ANSIE and also found one general factor. Findings from the factor analyses support Rotter’s claim (1954) that it is possible

to assess generalized expectancy of LOC. Further, test-retest reliability figures have varied from .65 with a seven-week interval, to .83 with a six-week interval. Thus, it may be concluded that the reliability for the ANSIE-C is moderate to strong (Nowicki & Duke, 1983).

The psychometric properties of the ANSIE-C were further confirmed through the description of validity. Convergent validity for the ANSIE-C is related to the Rotter I-E scale (Rotter, 1966) with correlations ranging between .44 and .68 (Nowicki & Duke, 1974). Further, the ANSIE-C was found to be related to the Internal factor of the Levenson's (1974) *Locus of Control Scale* ($r = -.24, p < .01$); Powerful Others ($r = .24, p < .01$); and Chance ($r = .40, p < .01$); with a large sample ($N = 1195$) (Mink, as cited in Nowicki & Duke, 1983). Additionally, within discriminant validity, the ANSIE-C scores have been found to be relatively free of social desirability bias and unrelated to intelligence scores or gender (Herman, 1976; Nemeč, 1974; Duke & Nowicki, 1974; Nowicki & Duke, 1983; Quinn, 1974). Moreover, the Crowne-Marlowe scales have been of low magnitude ($r = .10, .06; p > .05$) and insignificant, along with relationships with the *Scholastic Aptitude Test* (SAT; $r = .11, p > .05$). Therefore, the reliability and validity measures demonstrate the effectiveness of the ANSIE-C in measuring the general expectancy of LOC construct.

A strength of the ANSIE-C is that it has been translated in several languages and has been constructed for other populations (Lefcourt, 1983). The Nowicki Scales CSNIE, ANSIE, and ANSIE-C (Nowicki & Duke, 1973;1974; 1983) have been translated into the over 20 languages, including some of the following; (a) Chinese (Hung, 1977); (b) Japanese (Inouye, 1976; Jiromara, 1980); (c) Hebrew and Arabic (Blum, 1973); (d) Ghanian (Morris, 1975); (e) South Sea Island native dialects (Basow, 1991); (f) Bengalese (Rashlonong, 1975); and (g) Spanish (Palenzuela, 1980). Additionally, in some cases the ANSIE-C wording was changed to

make it more appropriate for other English speaking countries like Australia (Dixon, 1979); England (Gammage, 1980), Scotland (Green, 1980; and South Africa (Barling, 1979). An overview of cross-cultural studies using the ANSIE-C indicates that similar results are obtained when participants are drawn from various cultures and comparable socioeconomic levels (Lefcourt, 1983). However, while LOC seems to be a relevant variable in all cultures studied, variations occur in the mean LOC scores. For example, Israelis appear to be more internal as a group (Gordon, 1974) and Ghanaians appear to be more external with age (Barling, 1979), as is the case with other populations (Lefcourt). Furthermore, regardless of mean level of LOC in various populations, correlates of LOC seem to be familiar from group to group.

There is sufficient evidence to support the use of the ANSIE-C with an adult population of practicing school counselors (Lefcourt, 1983; Nowicki & Strickland, 1983). Substantial research suggests the importance of internal LOC in individuals (Hill, 1978). In addition, researchers and theorists have supported that individuals characterized as more internal have a greater impact on (a) personal well-being (Denny & Steiner, 2009; Pannells, & Claxton, 2008); (b) greater achievement (Gifford, Periott, & Mianzo, 2006; Hall, Smith & Chia, 2008), (c) greater job satisfaction (Judge & Bono, 2001), and (d) more able to relate to others (Majudmer, McDonald, Greever, 1977). A limitation of the ANSIE-C is the manner in which items were selected, which were not systematic or in a balanced way; however, since research has confirmed its validity and strong to moderate reliability, for the purposes of this study, the scale was used to assess a general expectancy (personal) measure that differs from the specific expectancy related to the work environment (professional). Therefore, the ANSIE-C is an appropriate instrument to measure the level of general expectancy of school counselors, who relate with others as part of their professional duties. (Appendix, E).

Work Locus of Control (WLCS)

LOC is a personality variable that has been studied extensively in a variety of settings (Spector, 1988). As previously mentioned, maximum predictions on this construct are best obtained if the researcher tailors his or her instrument or measure to specific populations (Lefcourt, 1982; Phares, 1976; Rotter, 1975). Therefore, Spector (1988) created the *Work Locus of Control Scale* (WLCS) in order to measure contextualized control beliefs in work settings. In general, LOC is defined as a general expectancy that rewards, reinforcements, or outcome in life are controlled either by one's own actions (internality) or by other forces (externality) (Rotter). In organizational settings, rewards or outcomes can include: (a) promotions, (b) favorable circumstances, (c) salary increases, and (d) general career advancement (Spector, 1982). As summarized in his review, Spector described LOC being related to a number of organizationally relevant variables. Internals tend to be more satisfied with their jobs than externals, see their supervisors as higher on initiating structure, report less role stress, perceive more autonomy than control, and enjoy longer job tenure (O'Brien, 1983; Spector, 1982; Spector, 1988). In other words, the WLCS seems to be related to overall well-being and employees' functionality.

The WLCS (Spector, 1988) is a measure of an individual's beliefs of internal or external control in relation to the work setting. Additionally, research indicates that this measure is a better predictor of work behaviors and work outcomes (e.g., job satisfaction) than the Rotter's general LOC scale (Blau, 1993; Coleman, Irving, & Cooper, 1999; Macan, Trusty, & Trimble, 1996; Orphen, 1992; Spector, 1988). The WLCS consists of 16 Likert scale items, with responses ranging from "disagree very much" (1) to "agree very much" (6). Some sample items are "Getting the job you want is mostly a matter of luck," and "People who do perform their jobs

well generally get rewarded for it.” The scale contains an equal number of internally and externally worded items, whereas half of the items are written in an internal direction, representing a belief that individual control their own rewards. The remaining items are written in an external direction, representing the belief that others or luck controls rewards (Spector & O’Connell, 1994). Higher scores indicate greater externality, which is consistent with the ANSIE-C (Nowicki & Strickland, 1983) and the Rotter I-E Scale (Rotter, 1966).

The initial development of the WLCS consisted of a pool of 49 items. Items were generated from a conceptual analysis of the LOC construct and how it related to work behavior (Spector, 1988). The norming population used for this sample comprised of six different independent samples: (a) 1,151 business administration and industrial psychology undergraduate students at the University of South Florida, (b) 41 department store sales employees, (c) 101 mental health agency employees (e.g., counselors and nurses), (d) 292 national convenience store clerks, (e) 160 mental health facility employees (Storms & Spector, 1987), and (f) 496 municipal managers from Florida (White & Spector, 1987). Alpha internal consistency reliability coefficients are in the acceptable range from .75 to .85 across the six samples (Spector, 1988).

In development of the WLCS, Spector (1988) did not report a factor analysis and treated the measure as unidimensional (Macon, Trusty, & Trimble, 1996). Later, Spector (1992) conducted an exploratory factor analysis on the WLCS that yielded a two factor structure; externality and internality. The two-factor model is consistent with the findings of Daniels and Guppy (1992) who also uncovered a clear two factor structure (e.g., internal, and external). Additionally, Spector computed separate internal and external subscales and correlated each with various criteria. Further, statistical *t* tests of the difference in magnitude of the correlations for the two subscales revealed that only one out of 32 pairs of correlations were different at a

statistically significant level (Macon et al., 1996). Spector (1992) commented that the data were restricted in that few subjects score high on externality and that the restriction of range may have eased the correlations between subscales, and urged for further studies to explore “the possibility that the internal and external items reflect different constructs” (p. 64). Thus, more recently Oliver, Jose, and Brough (2006) conducted a confirmatory factor analysis of the WLCS (Spector, 1988).

The confirmatory factor analysis used data of a longitudinal study that consisted of 261 mental health workers from various community mental health organizations in New Zealand with a six month follow-up (Oliver, et al., 2006). Descriptive statistics revealed a Cronbach’s alpha for the single factor structure were .73; the internal reliabilities of the two-factor structure were .71 for the internal subscale, and .87 for the external subscale scores. Nunally (1978) suggested that alpha values should be at least .70; however, a cutoff value of .80 is generally considered acceptable (Henson, 2001). The two subscales were modestly but statistically significantly correlated ($r = -.12, p < .05$; Oliver et al., 2006). The one factor model that was tested fit the data poorly as none of the fit indices approached an acceptable level. Although the two factor model provided a much better fit, as indicated by the fit indices and showed a statistically improvement from the one-factor to the two-factor model ($X^2 [1] = 414.91, p < .001$). However, the two-factor model did not reach adequate fit.

Next, Oliver and colleagues (2006) conducted an exploratory factor analysis that revealed the presence of three components that explained a total of 53.08% of the variance in the measure and individually accounted for 27.72%, 17.21%, and 8.23% respectively. The first component (27.72%) was composed of the eight items considered to be out of an individual control, and labeled “external control” (Oliver et al., p. 840), which corresponded with Spector’s (1988)

original proposed external items. The second component (17.21%) and third component (8.23%) represented a split in the internal control subfactor, and labeled Internal 1 and Internal 2. Lastly, the researchers compared the three-factor model with the previous two models (one-factor and two factor) using confirmatory factor analysis, and found that the three factor model was statistically better and significant from the two-factor model. Overall, the findings confirmed the psychometrics of the external subscale to be psychometrically sound, which is seen as a less desirable quality in a counselor, educator, or employee (Leung, Siu, & Spector, 2000; Muhonen & Torkelson, 2004; Owens, Maradi, & Neimeyer, 2008), but can be easily identified through the WLCS.

In regards to validity, the WLCS (Spector, 1988) has been found to correlate significantly with (a) job satisfaction, (b) intention of quitting, perceived influence at work, (c) role stress, and (d) perceptions of supervisory style, and supported the construct validity of the WLCS scores (Spector, 1988). Macon, Trusty, and Trimble (1996) analyzed the dimensionality and validity evidence of the WLCS with three populations: 440 undergraduate business and psychology students; 314 M.B.A. and undergraduate business major students; and 374 managers at a large Midwestern utility company. All participants completed the following instruments; (a) WLCS, (b) *Rotter's I-E Scale* (Rotter, 1966), (c) *Levenson's Locus of Control Scale* (Levinson, 1974), (d) Hackman and Oldham's (1975) *Job Satisfaction Scale*, (e) the *Career Satisfaction Scale* (Trimble, 1992), (f) *Organizational Commitment Scale* (Meyer & Allen, 1984), and (g) Lawler and Hall's (1970) *Intrinsic Motivation Scale*. Coefficient alphas ranged from .86 to .95, within the acceptable range (Nunally, 1978). Further, with regards to criterion- related validity results indicated that the internal subscale of the WLCS was statistically significant with all variables.

In relation to convergent and discriminant validity, the WLCS (Spector, 1988) was statistically significant at the .05 level for both internal and internal subscales with Rotter's I-E subscales (1966) and will all three subscales (e.g., internal, chance, and powerful others) of the Levinson Scale (1974). Concluding that "validity has been demonstrated with the WLCS and organizational variables (i.e., job satisfaction, commitment, intention, autonomy, influence, role-stress, consideration, and initiating structure) as well as other LOC measures (e.g., Rotter's I-E Scale)" (Strauser & Ketz, 2002, p.23). Thus, supporting the psychometric soundness of the WLCS with diverse populations.

Overall the results of the six independent studies suggest that the WLCS is a viable scale (Spector, 1988). Internal consistency is adequate and early investigations provided solid validation evidence. Although Spector (1992) has provided evidence of adequate internal reliability and criterion validity, evidence regarding the underlying structure of the scale needs further examination. Spector reported that further work needs to be done using the WLCS and other general LOC instruments to test further hypothesis in work settings. However, the absence of such psychometric evidence of the WLCS's structure has not hindered its widespread use (e.g., Coleman, Irving, & Cooper, 1999; Oiling, Spector, Cooper, & Donald, 2001; Tat-wing, Oiling, & Spector, 2000). Therefore, in this investigation the WLCS was compared with the ANSIE-C (another measurement of LOC) for correlational results. The necessity of both instruments is warranted to get a clear picture of the practicing school counselors' generalized expectancy of LOC on a personal nature as measured by the ANSIE-C, and a more accurate contextualized LOC orientation specifically related to the work setting as measured by the WLCS as shown in *Figure 2* (Blau, 1993; Coleman, Irving, & Cooper; Macan, Trusty, & Trimble, 1996; Orphen, 1992; Spector, 1988). (Appendix F)

Ethical and Legal Issues in Counseling Questionnaire-Revised (ELICQ-R)

The *Ethical and Legal Issues in Counseling Questionnaire- Revised* (ELICQ-R; Lambie, et al., 2010) is a 35-item multiple choice assessment designed to measure counselors' ethical and legal knowledge. A sample question from the ELICQ-R is: "To be eligible to receive services under *Section 504 of the Rehabilitation Act of 1973*, an individual must: (a) Have a low socioeconomic status, (b) Be diagnosed with a specific learning disability, (c) Have a physical or mental impairment that limits one or more of his or her major life activities, or (d) Be diagnosed with a psychological and/or interpersonal disorder."

The ELICQ-R (Lambie, et al., 2010) is a revised version of the *Ethical and Legal Knowledge in Counseling Questionnaire* (ELICQ; Lambie, Hagedorn, & Ieva, 2008). To begin, the ELICQ was grounded in an extensive literature review of counseling ethics and laws (e.g., Corey et al., 2007; Cottone & Tarvydas, 2006; Cottone & Tarvydas, 2007; Pope & Vasquez, 2007; Remley & Herlihy, 2009; Stone, 2005; Welfel, 2009). Next, the development of the ELICQ followed the suggested eight steps for scale construction (DeVellis, 2003): (a) determine what to measure, (b) generate an item pool, (c) establish the format for measurement, (d) have the initial item pool reviewed by experts, (e) judge inclusion of validation items, (f) administer items to a developmental sample, (g) evaluate the items, and (h) optimize scale length. The preliminary construction of the ELICQ was comprised of 10 factors or subscales ([a] professional identity; [b] ethical and legal terms; [c] ethical decision-making principles; [d] confidentiality; [e] suicide and client violence; [f] abuse, neglect, and negligence; [g] counseling and educational records, [h] educational and civil right laws, [i] counselor development and wellness; and [j] discrimination laws and ethics). The ELICQ was developed for a previous study

to measure the effects of an ethics course on 64 counselors-in-training levels of social-cognitive development, ethical and legal knowledge, and ethical decision-making (Lambie, et al., 2010b).

To assess the face validity of the ELICQ prior to the initial use, 10 experts (counselor educators employed at different universities throughout the United States) examined the content of the ELICQ (Lambie, et al., 2010b) to determine the degree to which the instrument measured counselors' levels of ethical and legal knowledge. Reliability of the ELICQ with that data was analyzed for measurement consistency using Cronbach's reliability scaling; the overall alpha coefficient for the ELICQ on the initial study (Lambie, et al., 2009) was acceptable with an overall reliability score of .70. Additionally, the ELICQ was further used with 229 professional school counselors (Lambie, Ieva, Mullen, & Hayes, 2010) in an investigation of their current ethical and legal knowledge with an overall reliability score of .74.

To further strengthen the psychometric properties of the ELICQ, a reliability analysis was conducted with the each of the norming populations 128 counselors-in-training (Lambie et al, 2010a; Lambie, et al., 2010b), and 229 professional school counselors (Lambie, et al., 2010c) to ensure a sound instrument. A factor analysis was not used since all subscales are a general factor of ethical and legal knowledge (Gill, personal communication, July 12, 2009). The analysis yielded the potential removal of 19 items, with a reliability of .79; however, prior to the official removal of the items, a secondary review of experts comprised of counselor educators was conducted in the summer and fall of 2009. After the expert panel review, it was determined to remove the same 19 items, and remained with a .79 reliability, and has been renamed the ELICQ-R (Lambie, et al., 2010a). Although, there were the removal of items, the 10 categories previously discussed, still remain. Overall, the ELICQ-R has yielded consistent results and seems an appropriate fit to use with this specific population (e.g., PSCs) and has been shown to

correlated with the WUSCT (Hy & Loevinger, 1996) with counselors-in training ($r = .449, p < .001$; Lambie, et al., 2010b) and with PSCs ($r = .227, p < .001$; Lambie, et al., 2010c). However, since this is a revised version of the instrument, expected results may be different from previous comparisons with WUSCT. (Appendix D)

Research Design

The research design for this study was descriptive correlational, in which the three constructs (four variables) were investigated. Descriptive correlational research designs may be used for a potential cause and effect relationships (Frankel & Wallen, 2009). More specifically, correlational research was appropriate for this research study because the use is two-fold; (a) to help explain important human behaviors and (b) to predict likely outcomes (Creswell, 2005; Frankel & Wallen; Gall, Gall, & Borg, 2005), both of which were examined in this study. Additionally, correlational research was used to determine the relationship and directionality between the three variables (e.g., social-cognitive development, LOC, and ethical and legal knowledge). While correlational research provides strengths of relationships between variables, a noted limitation is the inability to explain the causality of the variables (Frankel & Wallen, 2009). Another limitation of correlational research is potential threat to internal validity, in which the relationships found may have alternative explanations, including extraneous variables that may influence the correlations (e.g., age, reading ability, intelligence). Although there are noted limitations of descriptive correlational research, this study was the first study to examine the relationships between the three constructs; social-cognitive development, ethical and legal knowledge, and locus of control. The following section outlines the formulation of the two

research hypotheses based on review of theoretical conclusions of research literature, and four exploratory questions.

Research Hypotheses

The purpose of this research study was to investigate the contribution of practicing school counselors' social-cognitive development to their levels of ethical and legal knowledge and LOC orientation. The following section described the two major hypotheses and four exploratory research questions.

Research Hypothesis One

School counselors' social-cognitive development (as measured by the *Washington University Sentence Completion Test* [WUSCT; Hy & Loevinger, 1996]) will contribute to their levels of ethical and legal knowledge (as measured by the *Ethical and Legal Issues in Counseling Questionnaire- Revised* [ELICQ-R; Lambie et al., 2010]) and LOC orientation (as measured by *Nowicki-Strickland Adult Locus of Control Scale* [ANSIE-C; Nowicki & Duke, 1974]; and the *Work Locus of Control Scale* [WLCS; Spector, 1988]). See Figure 3 below.

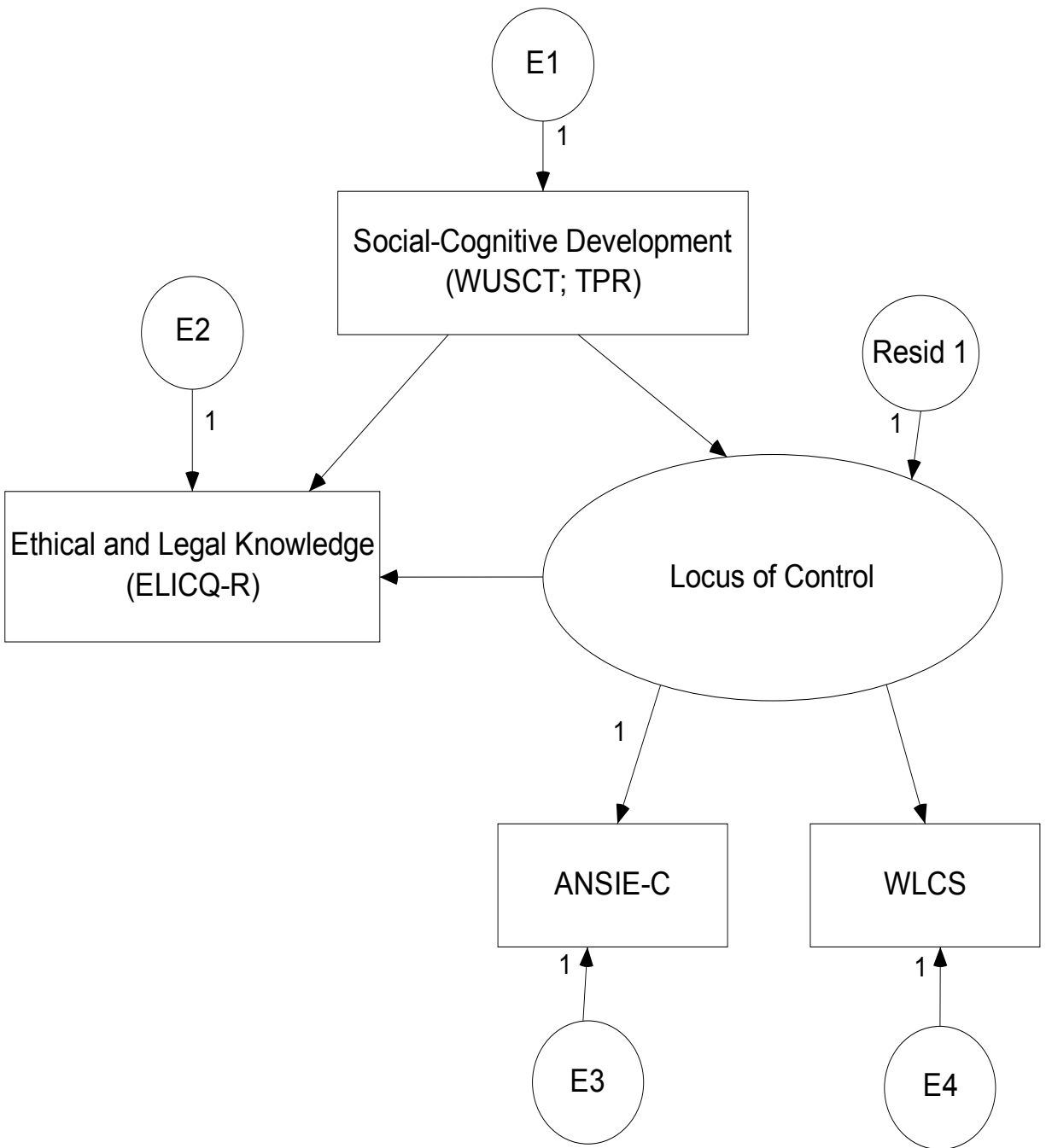


Figure 3: Path Diagram: Contribution of Social-Cognitive Development to Locus of Control and Ethical and Legal Knowledge

Research Hypothesis Two

School counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) and work locus of control (as measured by the WLCS; Spector, 1988) will contribute to their ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010a). See Figure 4 below.

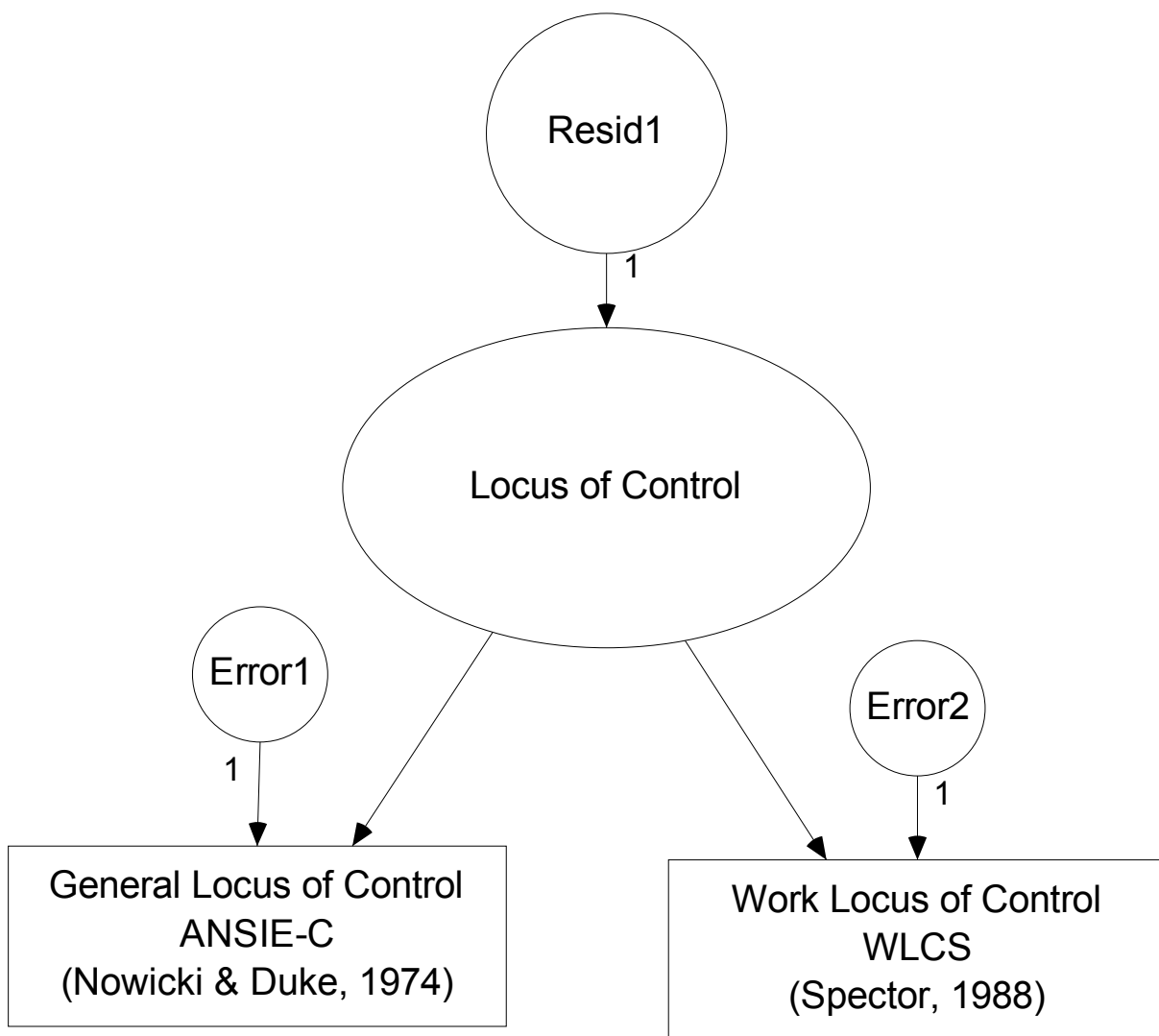


Figure 4: Path Diagram Locus of Control

Exploratory Research Questions

1. Is professional school counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) significantly related to their work locus of control (as measured by the WLCS; Spector, 1988)? Presented in Figure 4.
2. Is there a statistically significant relationship between practicing schools counselors' levels of social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?
3. Is there a statistically significant relationship between practicing schools counselors' their levels of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and the WLCS, Spector, 1988) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?
4. Is there a statistically significant relationship between practicing schools counselors' levels of ethical and legal knowledge (as measured by the ELICQ-R]; Lambie et al., 2010, 2010a) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?

Data Analysis

Data was analyzed for the information collected from the *General Demographic Questionnaire* and the other four instruments (WUSCT;; ELICQ-R;; ANSIE-C;; & WLCS).

Specifically, the data was input and analyzed with *Statistical Program Systems Software 17th edition* (SPSS, 2008) and the *Analysis of Moment Structure 17th edition* (AMOS, 2008). AMOS provides simple methods for developing, analyzing, and translating path diagrams as well as presenting hypothesized relationships (SPSS, 2008). Data was tested for statistical assumptions (e.g., normality, homogeneity, multicollinearity, etc.), all assumptions were met. Data from the demographic questionnaire was analyzed using descriptive analysis. Structural Equation Modeling (SEM; Path Analysis), Simultaneous Multiple Regression, and Pearson's Product-Moment correlation (two-tailed) were used to analyze the data obtained from the participants. Alpha was set at .05 for data analyses and statistical significance because alpha of .05 indicates a probability that at least 95% of the variance of the differences found between the variable will be due to the actual relationship between variables rather than sampling error (Frankel & Wallen, 2009). Furthermore, a detailed description for each hypothesis and subsequent exploratory questions are outlined below.

Research Hypothesis One and Two

Structural Equation Modeling (SEM; Path Analysis), an extension of multiple regression (Klem, 1995) was used to test the first two research hypotheses. Path analysis is a form of correlational analysis which examines correlations between two or more predictor variables (e.g. ego development [Hypothesis One] and locus of control [Hypothesis Two]) and a criterion variable (e.g. ethical and legal knowledge) and classifies possible directional relationships (Leedy & Ormrod, 2001). Furthermore, path analysis incorporates theoretical constructs with existing data in order to determine causal relationships between two or more variables (Ary, Jacobs, & Razavieh, 2002). Path analysis follows four steps in testing overall model fit: (a)

identify a theory to test, (b) locate measures for variables in the theory, (c) correlate the variables in the theory, and (d) determine if the correlations are consistent with the theory (Creswell, 2002; p. 378). In order to pictorially represent the model tested, AMOS (2008) was used to develop and examine the hypothesized model. An advantage of path analysis is that this method of analysis involves the use of path diagrams and specific models to show directional representation of relationships between variables (Klem, 1995). Path analysis was used to test the overall theory of the model fit (Schumaker & Lomax, 2004) of the contributions of PSCs' levels of social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. Additionally, the path analysis was used to determine the contributions of locus of control on PSCs' levels of ethical and legal knowledge (within the overall model). Conversely to multiple regression, "path analysis is the best multivariate procedure to allow for less measurement error in testing both construct validity and theoretical relationships" (Hair, Black, Babbitt, Anderson & Tatham, 2006, p. 740). However, a multiple regression was used as a follow-up to confirm the path analysis findings from the overall model fit.

In determining overall model fit with SEM, the standard structural equation modeling goodness of fit indices (Kline, 2005; Hoyle, 1995; Hu & Bentler) used were (a) model chi-square p value (X^2, p), (b) root-mean square error of approximation (RMSEA), (c) comparative fit index (CFI), and (d) Tucker Lewis Index (TLI). A statistically significant chi-square indicates a lack of model fit (Hu & Bentler, 1998). To further determine model fit, the examinations of additional indices were recommended (Hu & Bentler, 1998). Satisfactory model fit includes a RMSEA less than .06, CFI greater than .95, and TLI closer to .95 (Schumaker & Lomax, 2004).

Exploratory Research Question One

Exploratory research question one was analyzed using a multiple regression to examine if work locus of would be predicted by general locus of control orientation. To follow-up, Pearson Product Moment Correlations (two-tailed) were conducted between the ANSIE-C (Nowicki & Duke, 1974) and the WLCS (Spector, 1988). Product correlations were chosen for this particular analysis to assess whether correlations existed, and if they were positive (i.e., when one score is higher, the other score is also higher) or negative (i.e., if one variable is low as another variable is high).

Exploratory Research Questions Two, Three, and Four

Simultaneous multiple regression analysis was used for exploratory research questions two through four; to investigate the relationships between the three constructs (e.g., social-cognitive development, locus of control, and ethical and legal knowledge) and the reported demographic variables. Multiple regression examines the relationship between a dependent variable and multiple independent variables (Creswell, 2002). Furthermore, Creswell explained that multiple regression considers the variance of the independent variables as explaining any variation in the dependent variable. Specific relationships examined were social-cognitive development, ethical and legal knowledge and locus of control orientation in relation to reported demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location). Additional analyses of variance (ANOVAs) were conducted to compare means scores between groups to determine the variance between groups (Hair, et al., 2006).

Dependent and Independent Variables

Dependent/ Endogenous Variable

Social-cognitive / ego development is the dependent variable that represents a projection of the participants' schema of meaning-making (Loevinger, 1998; Walter, 2009). Social-cognitive development was chosen as the dependent variable as it represents the criterion that theoretically may be most affected by the independent variables (locus of control and ethical and legal knowledge) as they are manipulated (Frankel & Wallen, 2009).

Independent/ Exogenous Variables

The independent variables designated in this study were based on a review of the literature that indicated what might be influenced by social-cognitive/ ego development. The independent variables were:

1. Locus of Control: Two specific types of locus of control were investigated. They were classified as a general expectancy of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974), and work locus of control work locus of control (as measured by the WLCS; Spector, 1988). Locus of control was chosen as an independent variable since it theoretically may be influenced by one's social-cognitive development, as noted in Chapter 2. Additionally, it is known as an exogenous variable since there are two observed measures to indicate locus of control construct.
2. Ethical and Legal Knowledge: Ethical and legal knowledge in counseling refers to amount of knowledge of professional standards of ethics and knowledge of legal statutes that are specific to both counseling and a school setting (as measured by the ELICQ-R; Lambie, et al., 2010a). Ethical and legal knowledge was chosen as an independent

variable due to its imperative knowledge base of PSCs and to the theoretical basis that it may be influenced as a result of a one's social-cognitive/ ego development as suggested by previous research (Lambie, et al., 2010b; Lambie, et al., 2010c).

3. Demographic variables were entered as independent variables. The reported demographic variables included: (a) age, (b) ethnic classification, (c) gender, (d) level of education, (e) length of experience as a school counselor, (f) geographic location, (g) personal level of ethic and legal knowledge, (h) personal preference of importance of ethical and legal knowledge, (i) consistency of meeting with other school counselors, (j) level of support in the work environment, (k) ability to voice opinions with superiors, (l) principals' level of knowledge of counseling, (m) belief of school counseling program congruency, (n) level of job satisfaction, (o) use of professional membership services, and lastly (p) influence of administration on making ethical decisions. The demographic variables were chosen to represent a wide variety of differences that may influence PSCs on the job, and to investigate a baseline of the PSC population.

Ethical Considerations

Ethical considerations were considered by Institutional Review Board (IRB) committee and dissertation committee at the University of Central Florida. Some of these considerations include, but were not limited to:

1. The identity and all data collected were anonymous.
2. Participation in this research project was entirely voluntary.
3. All respondents were informed of their rights and the above mentioned information through and approved *Informed Consent* form pre-approved by the IRB at the University

of Central Florida. Participants had the opportunity to withdraw from the study at any time without consequence.

4. Permission to use the instruments were granted by the authors and developers of each instrument; (a) ELICQ-R (Lambie, et al., 2010a); (b) ANSIE (Nowicki & Duke, 1974); and (c) WLCS, Spector, 1988).
5. The study was conducted with the permission and approval by the dissertation chair, committee members, and IRB of the University of Central Florida.

Limitations of the Study

As in all research studies, this study has potential limitations. A limitation was the descriptive correlational research design, as other extraneous factors may have influenced the participants and may have contributed to the actual cause. Additionally, as correlations are influenced by the distribution of scores, a restricted range may potentially reduce an observed relationship between the variables. Moreover, the use of purposive sampling is that the type of people who are available for study may be different from those in the population who can't be located and this might introduce a source of bias (Gall, et al., 2005). Next, the *ELICQ-R* was a fairly new instrument that is still being potentially normed with this population. Further, even though states were specifically chosen due to regions across the country, and presentation of rural, suburban, and urban areas, results may not be generalizable to the general population compromising population validity.

Summary

This chapter presented the research methods for this study in examining the contribution of PSCs' social-cognitive development to their levels of ethical and legal knowledge, and locus

of control orientation. The research methods presented in this chapter included; (a) population sample, (b) data collection, (c) instrumentation, (d) research design, (e) research hypothesis and exploratory questions, and (f) data analysis. Furthermore, the chapter included a description of the dependent and independent variables, as well as the ethical considerations, and potential limitations to the study.

CHAPTER FOUR: DATA RESULTS

This study investigated the contributions of professional school counselors' social cognitive development to their levels of locus of control and ethical and legal knowledge. The data were analyzed using descriptive statistics as well as Pearson's product-moment correlations (2-tailed), simultaneous multiple regression, structural equation modeling (path analysis), and analysis of variance (ANOVA). The results are presented in this chapter in the following format: (a) sampling and data collection procedures, (b) descriptive statistics, and (c) data analyses per research hypothesis and question.

Sampling Procedures and Data Collection Procedures

The population target for this study was practicing professional school counselors (PSCs) across the United States. The researcher contacted via email 31 district school counseling coordinators in 22 different states. The coordinators were contacted based on the geographic representation in the country (e.g., northeast, southeast, Midwest, South West, and Mid-Atlantic) and population of the school district (e.g., rural, suburban, urban) as labeled by the National Center of Education Statistics (NCES; 2006). Of the 23 coordinators that responded (74% response rate from 22 states), 19 referred the researcher to their local Department of Evaluation and Research to complete a formal district application to conduct research, while the other four coordinators declined the invitation. Only five districts in the following states agreed to participate with the approval of the school counseling coordinators and subsequent Offices of Evaluation and Research Approval; (a) Colorado, (b) Florida, (c) Maine, (d) Maryland, and (e) New Mexico. Additionally, the researcher obtained approval from the University of Central Florida Institutional Review Board (IRB) prior to data collection. Purposive sampling was used

to identify potential participants, for this specific predefined group (e.g., practicing PSCs; Fraenkel & Wallen, 2009). Kerlinger (1986) further explained purposive sampling as the use of deliberate effort to obtain representative samples by including typical areas or groups in the sample (e.g., level of work setting and geographic representation of PSCs). The sample for this study included PSCs ($N = 301$) in the five mentioned states that agreed to participate. The counties that were selected in each state represented rural (e.g., Maine), suburban (e.g., Florida), and urban (e.g., Colorado, Maryland, and New Mexico) school district classifications (NCES, 2006).

Data collection was scheduled by the researcher, the school counseling coordinators, and district personnel contacts. Data collection took place from October 15, 2010 through December 15, 2010. Participants attended an already scheduled meeting in their perspective districts. At each meeting, with exception of Maryland and Maine, the researcher personally introduced the study to all PSCs at the meeting and distributed the data collection packets which included: (a) Informed Consent, (b) Form 81 of the *Washington University Sentence Completion Test* (WUSCT; Hy & Loevinger, 1996), (c) the *Ethical and Legal Issues in Counseling Questionnaire-Revised*, (ELICQ-R; Lambie, Ieva, Gill, & Hagedorn, 2010), (d) the *Adult Nowicki-Strickland Internal External Scale- College* (ANSIE-C; Nowicki & Duke, 1974), and (e) the *Work Locus of Control Scale* (WLCS; Spector, 1988). To increase the response rate and reduce sampling, the researcher utilized aspects of Dillman's (2007) *Tailored Design* method. All the practicing school counselors that attended the district meetings completed all the data collection instruments ($N = 301$), yielding a 100% response rate. Due to scheduling conflicts, the Maryland the school counselor coordinator was responsible for collecting the packets, and in

Maine, the school personnel contact collected and returned the instrument packets to the researcher.

Sample Demographics and Descriptive Statistics

As noted, all the practicing school counselors that attended the district meetings completed all the data collection instruments ($N = 301$), yielding a 100% response rate. All participants completed the four data collection instruments (e.g., WUSCT, ELICQ-R, ANSIE-C, and WLCS) and demographic information sheet; however, participants reserved the right to leave off some demographic information. Of the 301 participants, 36 omitted their age (12%), 8 omitted their ethnicity/ race (2.7%), and 25 (8.3%) did not report their coupling status.

Professional School Counselors' Demographics

Descriptive analyses of data collected from the researcher developed *General Demographic Survey* identified that of the 301 PSCs, 19 (6.3%) were from the suburban school district in Florida, 7 (2.3 %) were from the rural district in Maine, 35 (11.6%) were from the urban district in Colorado, 122 (40.5%) were from the urban district in Maryland, and 118 (39.2%) were from an urban school district in New Mexico. Additionally, demographic results identified the participants' reported gender as 239 (79.4%) as female, 61 (20.3%) male, and one (.3%) identified as other. Ethnicity and race of participants were reported as: 228 (75.7%) Caucasian, 48 (15.9%) as Hispanic, 12 (4.0%) as African American, 1 (.3%) as Asian American, 1 (.3%) as Native American, and 4 (1.3%) as Other. The mean age of the participants that reported their age ($N = 265$) was 44.18 years ($SD = 12.08$), with a range of 24 to 74 years of age. The reported coupling relationship for the participants was 56 (18%) classified as single, 43

(14.3%) classified as divorced, 168 (55.8%) were married or partnered, 6 (2.0%) Cohabitated, and 3 (1%) identified as Other.

Additional descriptive analyses identified school level of participants to be 34.6% ($n = 104$) Elementary School Counselors, 21.3% ($n = 64$) Middle School Counselors, 40.9% ($n = 123$) High School Counselors, 3.3 % (10) Multi-Level. The mean number of students that school counselors reported being responsible for in their case load was 442 students ($SD = 194.78$), with a range of 80 to 1,800 students. Caseload analyses were conducted with the removal of seven participants (district level coordinator, intern, and five outliers).

In regards to preparation, 80.1% ($n = 241$) of the school counselors indicated that the highest degree earned was a Master's, 16.3% ($n = 43$) received an Education Specialist Degree (EdS), 3.3% ($n = 10$) received a Doctoral Degree, and .3% ($n = 1$, School Counselor Intern) reported having only a Bachelor's Degree. In their preparation programs, 67.4% ($n = 203$) of the participants described having a separate *Legal and Ethical Issues in Counseling* course or ethics training, while 31.9% ($n = 98$) did not receive a separate course or training specific to ethical and legal issues. Prior to becoming a PSC, 47.2% ($n = 142$) reported being previously certified educators, while 52.8% ($n = 159$) were not previous teachers. The participants' length of employment as previous educators ranged from zero to twenty-six years with the mean reported to be 4.41 ($SD = 6.13$) year. Additionally, the length of employment as PSCs ($N = 301$) ranged from zero to thirty-six years with a mean reported of 10.5 ($SD = 8.28$) years.

Regarding professional membership and development, the participants reported their status in professional organization as follows: 41.2% ($n = 127$) were active members in a national professional counseling organization (e.g., ACA, ASCA), while 58.8% ($n = 177$) did not belong to any professional organizations. However, 45.2% ($n = 136$) indicated they had attended

a state or national conference in the past three years, while 54.8% ($n = 165$) of the school counselors did not report attending any counseling related conferences.

Ethical and Systemic Influences

In order to assess the participants' perceptions of some ethical and system influences that may affect PSCs. comprehensive developmental school counseling program, a five-point Likert scaled statements were incorporated on the demographic questionnaire (Ieva, 2009). The statements examined participants': (a) level of job stress, (b) the importance of ethical and legal knowledge in school counseling practice, (c) the frequency of meeting with other school counselors in their district, (d) the level of support received in their work environment, (e) the level of comfort in vocalizing their opinion to persons in high positions (e.g., supervisor, principal, etc.), (f) the level of principal's knowledge of the school counseling program, and (g) the consistency of the comprehensive school counseling program with their beliefs. Statements were reported on a Likert Scale ranging from a one to five, with different descriptors per specific question. The following section presents the specific questions, descriptors for the Likert scale per question, and the results per each of the seven questions.

Level of Job Stress

The Likert scale statement that participants were asked to respond to regarding job stress was, "*How would you rate your current level of stress on the job?*" from a scale ranging one (limited stress) to a five (very stressful). A review of the data revealed ($M = 3.52$, $SD = .897$; range 1-5) as the results described in Table 4.

Table 4: Level of Job Stress

Scale	Total (n)	Percentage
Limited Stress	5	1.7%
2	31	10.3%
3	105	34.9%
4	123	40.9%
Very Stressful	37	12.3%

N = 301

Importance of Counselors' Levels of Ethical and Legal Knowledge

The next statement the participants responded to on a Likert scale was “*How important do you think a counselor’s legal and ethical knowledge-base is to his or her practice?*” ranging from a one (not important) to a five (very important). Analyses of the results reported ($M = 4.75$, $SD = .514$; range 1-5) as indicated in Table 5.

Table 5: School Counselors Perception of Ethical and Legal Knowledge

Scale	Total (n)	Percentage
Not Important	1	.3%
2	0	0%
3	5	1.7%
4	62	20.6%
Very Important	233	77.4%

N = 301

Work Environment

There were three statements on the demographic questionnaire regarding PSCs' work environment. All work environment statements used a five-point Likert Scale. A review of data analyses is described in Tables 6 through 8. The first statement about work environment asked participants, "How supportive do you consider your current work environment to be?" ranging from a scale from a one (not at all supportive) to a five (very supportive). A review of the data revealed ($M = 3.74$, $SD = 1.11$; range 1-5) as the results described in Table 6.

Table 6: School Counselors Perceptions of Support

Scale	Total (n)	Percentage
Not At All Supportive	12	4%
2	30	10%
3	72	23.9%
4	97	32.2%
Very Supportive	90	29.9%

$N = 301$

The next statement asked, "How frequently do you meet with other counselors (both in & outside your school)?" with answers ranging from a one (rarely never) to a five (Very Frequently [*daily to weekly*]). A review of the data revealed ($M = 3.84$, $SD = 1.19$; range 1-5) as the results described in Table 7.

Table 7: School Counselors Frequency of Meeting with Others

Scale	Total (n)	Percentage
Rarely Never	7	2.3%
2	47	15.6%
3	55	18.3%
4	69	22.9%
Very Frequently	122	40.5%

N = 300

The third question regarding work environment was, “*How would you rate your Principal’s knowledge of school counseling?*” from a scale ranging from a one (limited knowledge) to a five (very knowledgeable). A review of the data revealed ($M = 3.13$, $SD = 1.20$; range 1-5) as the results described in Table 8.

Table 8: Principals’ Knowledge of School Counseling Program

Scale	Total (n)	Percentage
Limited Knowledge	35	11.6%
2	59	19.6%
3	74	24.6%
4	97	32.2%
Very Knowledgeable	36	12.0%

N = 301

Voice Opinion. Participants were asked “*How would you rate your ability to voice your opinion to persons in high positions (e.g., your principal, supervisor, etc.)?*” on a Likert scale

ranging from a one (limited Ability) to a five (strong ability). Results reported were ($M = 3.62$, $SD = 1.25$; range 1-5) as detailed in Table 9.

Table 9: School Counselors' Level of Vocal Ability

Scale	Total (<i>n</i>)	Percentage
Limited Ability	28	9.3%
2	30	10.0%
3	54	37.2%
4	104	34.6%
Strong Ability	85	28.2%

$N = 301$

School Counseling Program Perception

The final Likert question asked for participants to respond to on the demographic questionnaire was, “*How consistent is your present school counseling program with how you believe your program should be implemented?*” on a Likert scale ranging from a one (not very consistent) to a five (very consistent). A review of the results were ($M = 3.36$, $SD = 1.10$; range 1-5) as indicated in Table 10.

Table 10: School Counselors Program Consistency Perceptions

Scale	Total (n)	Percentage
Not At All Consistent	18	6%
2	47	15.6%
3	93	30.9%
4	96	31.9%
Very Consistent	47	15.6

N = 301

Social-Cognitive Development

The *Washington University Sentence Completion Test* (WUSCT; Hy & Loewinger, 1996) Form 81 (short-form; 18 sentence stems) was used to measure participants' social-cognitive development (ego development). The mean total protocol ratings (TPR) score for all participants (*N* = 301) was 88.65 (*SD* = 7.09) with a range from 62 to 117. The mean ego level for the participants was 5.31 (*SD* = .84) with a range from a of level E3 (Self-Protective) to a E8 (Autonomous). The ego levels of the participants were as follows: (a) Self-protective (E3; *n* = 10, 3.3%), (b) Conformist (E4; *n* = 26, 8.6%), (c) Self-aware (E5; *n* = 143, 47.5%), (d) Conscientious (E6; *n* = 109, 36.2%), (e) Individualistic (E7; *n* = 10, 3.3%), and (f) Autonomous (E8; *n* = 3, 1.0%). The measures of central tendencies for both the WUSCT TPR scores and ego levels by school district are presented in Table 11.

Table 11: WUSCT Total Protocol Ratings and Ego Levels per State/ District

State	N	Mean TPR Score	SD	Mean Score Level	SD
Colorado (Urban)	35	87.23	7.52	5.20	.797
Florida (Suburban)	19	85.25	5.79	4.89	.737
Maine (Rural)	7	94.71	7.91	6.00	.816
Maryland (Urban)	122	88.73	6.20	5.30	.800
New Mexico (Urban)	118	89.17	7.70	5.37	.894
Total	301	88.65	7.09	5.31	.844

Locus of Control

Two data collection instruments were used to assess the construct of locus of control. The first instrument, the *Adult Nowicki-Strickland Internal External Scale- College Form* (ANSIE-C; Nowicki & Duke, 1974) measured a generalized expectancy of local of control. The second instrument, *Work Locus of Control Scale* (WLCS; Spector, 1988) measured the belief of internality or externality specific to the PSCs’ work environment. Table 12 presents the measures of central tendency for both the ANSIE-C (Nowicki & Duke, 1974) and the WLCS (Spector, 1988).

Table 12: Locus of Control Measures of Central Tendency

Instrument	Mean	SD	Range
ANSIE-C	8.72	3.44	2-21
WLCS	37.03	8.47	16-64

N = 301

Ethical and Legal Knowledge

The *Ethical and Legal Issues in Counseling Questionnaire- Revised* (ELICQ-R; Lambie, Ieva, Gil, & Hagedorn, 2010) was used to obtain the participants' scores of ethical and legal knowledge. The mean total score for the ELICQ-R for all of the participants ($N = 301$) was 50.27 ($SD = 8.02$) with a range from 22 to 66, with the highest possible score of 70.

Data Analysis for Hypothesis and Research Questions

The following section reviews the results of the analyses for the two research hypotheses and four exploratory research questions. Data was analyzed using the *Statistical Package for the Social Sciences* (SPSS, 2008) and the *Analysis of Moment Structures* (AMOS, 2008). Alpha level was set at .05 for data analysis and statistical significance, which indicated a probability that at least 95% of the variance of the differences found between the variable was due to the actual relationship between variables as opposed to sampling error (Frankel & Wallen, 2009). Prior to analyzing the data, preliminary analyses were conducted to confirm the absence of any violations of statistical assumptions including linearity, normality, and multicollinearity. The analysis of the scatterplots observed a straight line, indicating that the relationship between the variables were linear (Hair, Black, Babin, Anderson, & Tatham, 2006). Additional analyses for missing data, outliers, and homstasticity, and normality of data distribution using histograms, Q-q plots, and scatterplots revealed that assumptions of statistical normality with these data were met.

In order to further verify the results of the SEM for hypothesis one, a Pearson's Product-Moment Correlation analysis (two-tailed) was employed to identify the strength, direction, and statistical significance of possible correlations. The strength of a correlational relationship ranges from -1.00 to 1.00, in which a correlation of 0 indicates no relationship, while 1.0 correlation

indicates a perfect relationship (Frankel & Wallen, 2009). Additionally, the directionality of the correlation can be determined where a -1.0 indicates a negative relationship, while a 1.0 suggests a positive relationship. Correlations can be classified using the interpretation levels noted by Cohen (1988); whereas correlations ranging from .10-.29 indicate a small correlation, moderate correlations ranging from a .30 to .49, and large correlations ranging from .50 to 1.0.

Research Hypothesis One

The first research hypotheses was analyzed using structural equation modeling (SEM), linear multiple regression, and Pearson's product-moment (two-tailed) correlations. Specifically in SEM, path analysis using Maximum Likelihood (ML) estimation was conducted to test a hypothesized model (Figure 5) of the contributions of social-cognitive development (dependent variable/exogenous) to levels of ethical and legal knowledge (independent variable/ endogenous) and locus of control orientation (independent variable/endogenous) of PSCs. ML estimation is consistent with moderate sample sizes (Quintana & Maxwell, 1999), as it performs at best with sample sizes that exceed 200. The term *fit*, as used in path analyses refers to the consistency between the theoretical model being tested (Figure 4) and the data, and involves comparing all the implied correlations to all of the actual correlations (Schumaker & Lomax, 2004). The standard SEM goodness of fit indices (Kline, 2005; Hoyle, 1995) used were (a) model chi-square p value (χ^2, p), (b) root-mean square error of approximation (RMSEA), (c) goodness of fit index (GFI), and (d) Tucker and Lewis Index (TLI). Definitions of recommended model fit indices are presented in Table 13. The path model is recursive due to two basic features: (a) the disturbances are uncorrelated, and (b) all causal effects are unidirectional (Kline, 2005). Inspection of the initial path model indicated an acceptable goodness of fit model ($\chi^2 = 1.44, df = 1, p = .23$).

Further examination of the RMSEA, GFI, and TLI supported an adequate fit for the path model, suggesting that social-cognitive development contributed to PSCs' level of ethical and legal knowledge and locus of control orientation for these data, as presented in Table 14.

Table 13: Path Analyses Fit Measures

Fit Index	Definition	Interpretation
Chi Square (X^2)	Extent to which the overall model (structural and measurement) predict the observed covariance	In general, if the ratio between X^2 and <i>degrees of freedom (df)</i> is less than two, the model is a good fit
Goodness-of-Fit (GFI)	Extent to which the overall model (structural and measurement) predict the observed covariance	Ranges from zero (0) to one (1), where one indicates a perfect fit. Score below 0.8 identify a poor fit.
Root-mean-square error of approximation (RMSEA)	Compares the fit of an independent model (a model which asserts no relationships between variables) to the fit of the estimated model.	When score is .05 or lower a good fit is being indicated.
Tucker and Lewis Index (TLI)	Computed by using ratios of the model chi-square and the null model chi-square and dfs for the models. Describes the extent which specified model performs better than a baseline model.	Ranges from zero (0) to one (1), where one indicates a perfect fit. Scores closer .95 (although .90 can be used) indicates a good model fit.

Adapted from Schumacker & Lomax (2009) and Byrne (2010)

Table 14: Results for Research Hypothesis 1 Path Analysis Model

X^2	Df	P	GFI	RMSEA	TLI
1.44	1	.230	.99	.04	.94

$N = 301$

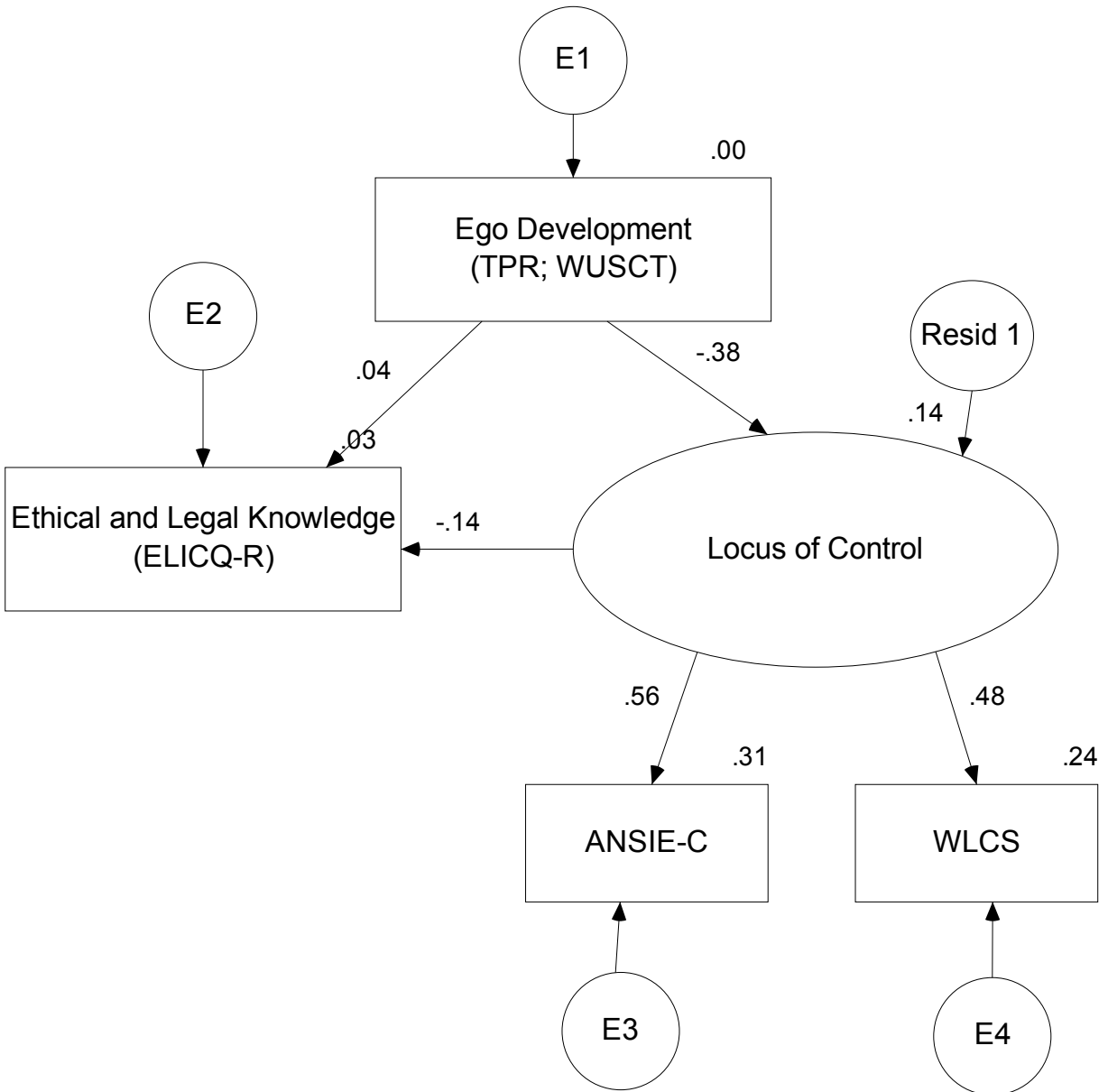


Figure 5: Research Hypothesis 1 Path Diagram with Standardized Estimates

Inspection of the standardized regression weights for the research hypothesis one model (Figure 5) revealed that approximately less than 1% of the variance was explained by the influence of *social-cognitive development* on *ethical and legal knowledge* ($r = .04$). Additionally, 14% of the variance was explained by the contribution of *social-cognitive development* to locus of control ($r = .38$) for these school counselors. Further, 2% of the variance was explained by the influence of *locus of control* on *ethical and legal knowledge* ($r = .14$). Therefore, although *ethical and legal knowledge* scores may contribute to the acceptable model fit, *locus of control* scores appeared to be the most significantly influenced by *social-cognitive development* scores.

To further substantiate the results for Research Hypothesis 1 model fit, a simultaneous multiple regression was used to examine if social-cognitive development (as measured by the WUSCT, level; Hy & Loevinger, 1996) predicted school counselors levels of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and the WLCS; Spector, 1988), and ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010). Prior to analysis, violations of assumptions were explored. Outliers, normality, linearity, multicollinearity, and homoscedasticity were addressed by the observation of normal p-p plots and residual scatterplots (Tabachnick & Fidell, 2007). Overall, the linear composite of the predictor variables (ethical and legal knowledge and locus of control) predicted approximately 7% ($R^2 = .067$) of the variance in the school counselors levels of social-cognitive development ($F_{3, 297} = 7.10, p < .01$). However, among the predictor variables, only locus of control (ANSIE-C and WLCS scores) had statistically significant beta coefficients. Additionally, the beta weights suggested that for every decrease (toward internality) in locus of control score, there was a .144 unit increase observable in the WUSCT level score for the ANSIE-C and a .155 unit increase

observable in the WUSCT level for the WLCS. The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between WUSCT level scores and locus of control (ANSIE-C; $r = -.199, p < .001$) and (WLCS; $r = -.197, p < .001$). Both analyses indicated negative, small correlations. The effect size was small, with a shared variance of 7%. Therefore, as school counselors were more internal on the continuum (e.g., the negative correlation), they scored at higher levels of social-cognitive development. Table 15 presents the measures of central tendency and correlation coefficients of for the WUSCT, ANSIE-C, WLCS, and ELICQ-R scores.

Table 15: Means, Standard Deviations, and Correlation Coefficients

Instrument	Mean	SD	Range	1	2	3	4	5
1. WUSCT (Level)	5.31	.844	3-8	1.00	.894**	.084	-.205**	-.140*
2. WUSCT (TPR)	88.65	7.09	62-117		1.00	.097	-.140*	-.197**
3. ELICQ-R	50.27	8.02	22-66			1.00	-.121*	-.033
4. ANSIE-C	8.72	3.44	2-21				1.00	.270**
5. WLCS	37.03	8.47	16-64					1.00

* $p < .05$, ** $p < .01$

Research Hypothesis Two

School counselors' locus of control (as measured by ANSIE-C; Nowicki & Duke, 1974) and their work locus of control (as measured by the WLCS; Spector, 1988) will contribute to their ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010).

Inspection of the standardized regression weights for the Research Hypothesis Two model (Figure 5) revealed that 2% of the variance was explained by the influence of *locus of*

control on *ethical and legal knowledge* ($r = -.14$). Therefore, although *ethical and legal knowledge* may contribute to the acceptable model fit, it was statistically significant by the small influence by *locus of control*.

In an attempt to further substantiate the results of the influence of *locus of control* on *ethical and legal knowledge*, a simultaneous multiple regression was used to see if locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and the WLCS; Spector, 1988), predicted PSCs' levels of ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010). Prior to analysis, violations of assumptions were explored. Results indicated that there was not a statistically significant prediction between ELICQ-R scores by the predictor variables of locus of control (ANSIE-C and WLCS; $F_{2, 298} = 2.22, p > .05$). However, among the predictor variables, the ANSIE-C scores had a statistically significant beta coefficient. Additionally, the beta weights suggested that for every decrease (toward internality) in ANSIEC-C score, there was a .283 unit increase observable in the ELICQ-R score. The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between the ELICQ-R scores and the ANSIE-C scores ($r = -.121, p < .05$). The effect size was small, with a shared variance of 1.5%. Therefore, school counselors scoring at more internal levels of locus of control (lower, as measured by the ANSIE-C) was predictive of increased ethical and legal knowledge. Refer to Table 15 for correlation coefficients.

Exploratory Research Question One

Is professional school counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) significantly related to their work locus of control (as measured by the WLCS; Spector, 1988)?

The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between the ANSIE-C and WLCS ($r = .270, p < .001$). The effect size was small with a shared variance of 7.29%.

Exploratory Research Question Two

Is there a statistically significant relationship between practicing schools counselors' social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996) and their demographic variables (e.g., age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?

The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between WUSCT level scores and participants' age ($r = .194, p < .001$; 3.76% variance) and the number of years working as a PSC ($r = .132, p < .05$; 1.74% variance). Both correlations were small and indicated a positive relationship (Cohen, 1988). There were no relationships identified with the WUSCT and gender, ethnicity, coupling status, previous ethics training, previous certified educator experience, school level, student caseload, professional organization member, and conference attendance.

To further explore Research Question Two, a simultaneous multiple regression was used to predict the influences of age and number of years working as a PSC to their WUSCT level scores. Each analysis was observed for violation of assumptions (outliers, normality, linearity, and homoscedasticity), which may hinder the results of the regression analyses. After there were no violations, analysis proceeded. In assessing the relationship of the independent variables (age and number of years as a PSC) to the dependent variable (WUSCT level scores), all independent variable were entered simultaneously. Overall, the linear composite of the variables entered in

the regression procedure explained approximately 4% of the variation in WUSCT level scores ($N = 263$; $F_{2, 261} = 5.53$, $p < .01$). Further inspection of the beta weights indicate that for every increase in age and number of years working as a PSC, the level of social cognitive development increased (.149) with age and (.067) number of years working as a PSC.

Exploratory Research Question Three

Is there a statistically significant relationship between practicing schools counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and WLCS; Spector, 1988) and their demographic variables (age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?

Generalized Locus of Control. The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between locus of control (as measured by the ANSIE-C) and whether school counselors were members of professional counseling organizations ($r = .114$, $p < .05$), and the number of years working as a certified educator, prior to being a PSC ($r = .117$, $p < .05$). Both correlations were small and indicated a positive relationship (Cohen, 1988). However, no relationship was found between ANSIE-C scores and age, gender, ethnicity, coupling status, previous ethics training, years of counseling experience, school level, student caseload, and conference attendance.

To further explore Research Question Three, a simultaneous multiple regression was used to examine the predictions of professional counseling organization members and years working as a certified educator to their ANSIE-C score (Nowicki and Strickland, 1974). Each analysis was observed for violation of assumptions (outliers, normality, linearity, and homoscedasticity). After there were no violations, analysis proceeded. In assessing the relationship of the

independent variables (professional membership and number of years as a certified educator) to the dependent variable (ANSIE-C scores), both independent variables were entered simultaneously. Overall, the linear composite of the variables entered in the regression procedure explained approximately 5% ($R^2 = .046$) of the variation in ANSIE-C scores ($N = 280$; $F_{2, 278} = 6.75$, $p < .001$). Further inspection of the statistically significant beta weights indicate that for every school counselor that did not belong to a professional organization, their ANSIE-C score increased by .183. Additionally, as the number of years a PSC worked as a certified educator prior to becoming a PSC increased, so did their ANSIE-C score by .149. Therefore, the findings indicate the increase toward externality is accounted for by professional membership and number of years as a certified educator.

Work Locus of Control. In examining the WLCS (Spector, 1988) and demographic variables, the Pearson product-moment correlation (two-tailed) also indicated a statistically significant relationship of work locus of control (as measured by the WLCS) and assigned student caseload ($r = .155$, $p < .001$). The correlation was small and indicated a positive relationship (Cohen, 1988). However, no relationship was found between WLCS scores and age, gender, ethnicity, coupling status, previous ethics training, previous educator experience, years of educator experience, years of counseling experience, school level, professional membership, and conference attendance.

To further examine Research Question Three, a simultaneous multiple regression was conducted to predict the influences of student caseload to PSCs' WLCS scores (Spector, 1988). The analysis was observed for violation of assumptions (outliers, normality, linearity, and homoscedasticity). After there were no violations, analysis proceeded. In assessing the relationship of the independent variable (student caseload) to the dependent variable (WLCS),

the overall linear composite of the variable entered in the regression procedure explained approximately 5% of the variation in work locus of control scores ($N = 280$; $F_{1, 300} = 7.38$, $p < .01$). Further inspection of the statistically significant beta weight indicated that for every increase in student caseload there was a .155 unit increase on the WLCS score, toward externality. Therefore, for these data the results indicated that as PSCs' increase in student caseloads, they move toward more externality along the locus of control continuum.

To further explain these results, a one way ANOVA was conducted to examine the amount of variance explained by PSCs' student caseloads. Results from the one-way ANOVA indicated that there was a statistically significant difference ($F_{1, 301} = 1.48$, $p < .01$) in mean scores on the WLCS (Spector, 1988) and the participants' reported student caseloads. The analysis yielded that approximately 37% of the overall variance in WLCS scores was accounted for by student caseload. Therefore, PSCs scoring at higher levels of externality on the WLCS appear to be highly influenced by larger student caseloads.

In order to analyze mean differences between groups (by county and school level) on the WLCS (Spector, 1988), a one-way ANOVA was conducted. Results from the one-way ANOVA indicated there was a statistically significant difference ($F_{17, 301} = 2.92$, $p < .01$) in mean score on the WLCS (Spector, 1988) between the five school districts and school level (e.g., elementary, middle, high school, etc.). Approximately 11% ($R^2 = .108$) of the variance in the WLCS score can be accounted for by each school district and current school level. Post hoc analyses of a Scheffe test did not indicate that the mean difference in groups were statistically significant; however, mean scores are presented by county and school level in Tables 16 and 17.

Table 16: Mean WLCS Scores Per School District

School District	<i>N</i>	Mean	<i>SD</i>	Range	Std. Error
Florida	19	41.35	10.94	16 – 64	2.484
Maine	7	31.42	6.28	23 – 31	4.432
Colorado	35	38.09	8.84	18 – 61	1.921
Maryland	122	36.36	7.79	21 – 60	.758
New Mexico	118	38.36	8.47	18 – 56	2.145

N = 301

Table 17: Mean WLCS Scores Per School Level

Current Level	<i>N</i>	Mean	<i>SD</i>	Range	Std. Error
Elementary	104	37.66	8.04	20 – 55	1.265
Middle School	64	34.26	7.97	16 – 51	2.168
High School	123	38.47	9.00	18 – 61	.947
Multi-Level	10	43.83	7.93	25 - 52	4.738

N = 301

Lastly, an additional simultaneous regression was conducted to explore if ethical and systemic factors on the job reported on the demographic sheet predicted PSCs’ work locus of control score (WLCS; Spector, 1988). In assessing the relationship of the independent variables ([a] stress level, [b] frequency of meeting with other PSCs, [c] level of supportive work environment, [d] level of ability to vocalize to supervisors, [e] principal’s level of knowledge of the school counseling, and [f] how consistent the delivery of their current comprehensive developmental school counseling program is with the PSCs’ belief system) to their WLCS scores, all independent variables were entered simultaneously. The overall linear composite of the independent variables entered into the regression procedure explained approximately 12% ($R^2 = .115$) of the variance in WLCS score ($F_{6, 293} = 5.482, p < .001$). Further inspection of beta weights revealed that three variables (stress level, frequency of meeting with other PSCs, and level of ability to vocalize to supervisors and administration) resulted in statistically significant Beta weights for WLCS scores (see Table 18). Beta weights suggested for every increase in perceived level of stress by the school counselor, there was a .117 unit increase toward externality on the WLCS. Additionally, as the frequency of meeting with other PSCs increased, their WLCS score decreased in unit by .160, which suggest the direction toward internality. Moreover, as PSCs increased their perceived ability to vocalize to those in authority (e.g.,

administration, direct supervisors); there was a .181 decrease in PSCs' WLCS score, again suggesting toward more internality. Therefore, the results suggested that as PSCs were given ample opportunity to meet and discuss with others and were comfortable in their ability to vocalize their opinions, they score at more internal levels on the WLCS. Consequently, the results also suggested that as the PSCs' perceived level of stress at work increases, so did their movement toward externality on the WLCS.

Table 18: Beta Coefficients for WLCS Regression

Variable	B	Std. Error	Beta (β)	t	Sig.
(Constant)	44.031	3.483		12.642	.000
Stress Level	1.104	.555	.117	1.990	*.047
Meet with Others	-1.142	.402	-.160	-2.839	** .005
Supportive Work Environment	-.223	.622	-.029	-.359	.720
Vocal Ability to Authority	-1.225	.541	-.181	-2.266	*.024
Principal's Knowledge	.236	.583	.034	.405	.686

N = 299

* Significant at the .05 level

** Significant at the .001 level

Exploratory Research Question Four:

Is there a statistically significant relationship between practicing schools counselors' levels of ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010) and their demographic variables (age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location, etc.)?

A Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between ELICQ-R scores and participants' reported age ($r =$

-.262, $p < .001$); gender ($r = .120, p < .05$); ethnicity ($r = -.170, p < .001$); previous certified education experience ($r = .236, p < .001$); the number of years working as a certified educator, prior to being a PSC ($r = .229, p < .001$); the number of years working as a PSC ($r = .178, p < .001$); current school level ($r = -.114, p < .05$); and whether school counselors were current members of professional counseling organizations ($r = -.119, p < .05$). However, no relationships were found with coupling status, previous ethics training, student caseload, and conference attendance.

To further explore Research Question Four, a simultaneous multiple regression was used to predict the influences of the demographic variables (age, gender, ethnicity, certified educator, number of years as a certified educator, number of years as a PSC, and school level) on the ELICQ-R scores. Each analysis was observed for violation of assumptions (outliers, normality, linearity, and homoscedasticity), which can hinder the results of the regression analyses. After there were no violations, analysis proceeded. In assessing the relationship of the independent variables (age, gender, ethnicity, certified educator, number of years as a certified educator, number of years as a PSC, and school level) to the dependent variable (ELICQ-R), all independent variables were entered simultaneously. Overall, the linear composite of the variables entered in the regression procedure explained approximately 19% ($R^2 = .192$) of the variation in ELICQ-R scores ($N = 241; F_{7, 234} = 7.43, p < .001$). Further inspection of the beta weights indicate although the other variables contributed to the overall regression, only three Beta weights were statistically significant; (a) ethnicity, (b) number of years as a previous educator, and (c) school level. Results are presented in Table 19.

Table 19: Beta Coefficients for ELICQ-R Regression

Variable	B	Std. Error	Beta (β)	<i>t</i>	Sig.
(Constant)	53.67	3.96		13.559	.000
Gender	1.56	1.20	.081	1.303	.194
Age	-.06	.06	-.092	-.972	.332
Ethnicity	-1.38	.50	-.165	-2.763	*.006
CertifEduc	1.61	1.33	.103	1.213	.226
Educyrs#	-.24	.11	-.195	-2.185	*.030
PSCyrs #	-.08	.09	-.082	-.903	.367
School Level	-.73	.37	-.120	-1.991	*.048

$N = 299$

* Significant at the .05 level

Results further indicate that as PSCs increased in number of years working as a previously certified educator, their ELICQ-R scores decreased by .195. Additionally, as ethnicity changed, there was a .165 decrease in ELICQ-R. Similarly, results suggested that as school level changed, there was a .120 decrease in ELICQ-R scores.

To follow-up with the results of the regression, a one-way ANOVA was conducted to examine if there was a mean difference among ethnic groups, school level, and school district on PSCs' ELICQ-R scores. Results yielded a non-statistically significant relationship ($N = 293$; $F_{35, 258} = 1.36$, $p > .05$). Although means scores did not have a statistically significant difference on the ELICQ-R (Lambie, et al.), the means are presented in Table 20 by school district and school level, and by ethnicity in Table 21.

Table 20: Means of the ELICQ-R by School District and Level

School District	Current Level	Mean	<i>N</i>	Std. Deviation
School District Florida	Current Level	<i>N</i>	Mean	Std. Deviation
	Elementary	6	45.00	12.506
	Middle	2	48.00	11.314
	High School	8	49.50	6.740
	Multi-Level	2	57.00	9.899
Maine	Total	19	48.74	9.291
	Elementary	6	55.00	6.164
	Middle	1	52.00	
Colorado	Total	7	54.57	5.740
	Middle School	6	51.33	6.022
	High School	23	47.13	8.503
	Multi-Level	6	43.67	10.115
	Total	35	47.26	8.276
Maryland	Elementary	34	52.82	8.782
	Middle School	35	50.57	8.846
	High School	53	50.26	7.565
	Total	122	51.07	8.297
New Mexico	Elementary	58	51.28	6.925
	Middle School	20	50.90	6.882
	High School	39	48.46	8.006
	Multi-Level	1	56.00	.
	Total	118	50.32	7.336

Table 21: ELICQ-R Mean Scores per Ethnicity

Ethnicity	Mean	<i>N</i>	Std. Deviation
Caucasian	51.16	228	7.991
African American	46.83	12	4.387
Hispanic	48.33	48	8.067
Other	46.16	6	7.550
Total	50.40	294	7.986

N = 294

Summary

This chapter presented the results of the data analyses procedures which included: (a) descriptive analysis, (b) Path Analysis, (c) Simultaneous Multiple Regression, (d) Pearson's product moment correlations (two-tailed), and (e) one way Analysis of Variance (ANOVAs). The following chapter continues with a discussion of the results, implications for school counselors and counselor educators, and limitations to the study.

CHAPTER FIVE: DISCUSSION OF RESULTS

This chapter begins with a brief overview of the study and research methodology. Next, a review of the findings per research hypothesis is presented. The results from Chapter 4 are reviewed and compared to previous research findings, noting consistency and/or incongruence within the literature. The chapter concludes with a discussion of the (a) limitations of the study, (b) recommendations for future research, and (c) implications for professional school counseling and counselor education.

Summary of Study

The purpose of this study was to investigate the contribution of Professional School Counselors (PSCs') social-cognitive development to their levels of ethical and legal knowledge, and locus of control orientation (generalized locus of control and work locus of control). The three constructs and instruments in this study were: (a) social-cognitive development (ego development; the *Washington University Sentence Completion Test* [WUSCT]; Hy & Loevinger 1996), (b) Locus of Control (the *Adult Nowicki-Strickland Internal External Scale-College* [ANSIE-C]; Nowicki & Duke, 1974; the *Work Locus of Control Scale* [WLCS]; Spector, 1988), and (c) Ethical and Legal Knowledge (the *Ethical and Legal Knowledge in Counseling Questionnaire-Revised* [ELICQ-R]; Lambie, Ieva, Gill, & Hagedorn, 2010).

Previous research identified correlations between social-cognitive development and desirable counselor qualities including increased flexibility and adaptability, enhanced ability to cope with the complexities of counseling relationships, and overall counselor effectiveness (e.g., Cook-Grieter & Soulen, 2007; Lambie, Smith, & Ieva, 2009; Zinn, 1995). Similar to social-cognitive development, counselors scoring at more internal locus of control orientation

have been found to be (a) more autonomous, (b) possess increased skills at acquiring and using information, and (c) demonstrated a greater capacity to manage stress and cope with complex environments (e.g., Capel, 1987; Hill, 1978; Hurrell & Murphy, 1991; McIntyre, 1987).

Although initial research identified a relationship between counseling students and school counselors' levels of social-cognitive development and ethical and legal knowledge (Lambie, Hagedorn, & Ieva, 2010a; Lambie, Ieva, Mullen, & Hayes, 2010b); no research was found that investigated the relationship between these three desirable counseling constructs. Therefore, research was needed to investigate the contribution of PSCs' social-cognitive development to both their levels of ethical and legal knowledge and locus of control orientation.

The sample for the study included 301 certified, practicing school counselors (Elementary School, $n = 104$; Middle School, $n = 64$; High School, $n = 123$; Multi-Level, $n = 10$) from different school districts in five states (Colorado, $n = 35$; Florida, $n = 9$; Maine, $n = 7$; Maryland, $n = 122$; and New Mexico, $n = 118$). Data collection was scheduled by the researcher, the school counseling district coordinators, and district personnel contacts and took place from October 15, 2010 through December 15, 2010. Participants attended a scheduled school counselor meeting in their districts. The study was introduced to all PSCs at their meetings and each attendee received a data collection packet that included (a) a general demographic information sheet (Ieva, 2009; Appendix B), (b) the WUSCT (Hy & Loevinger, 1996; Appendix C), (c) the ELICQ-R (Lambie, et al., 2010; Appendix D), (d) the ANSIE-C (Nowicki & Duke, 1974; Appendix E), and (e) the WLCS (Spector, 1988; Appendix F). To increase the response rate and reduce sampling error, the researcher utilized data collection procedures per Dillman's (2007) *Tailored Design* method. All the practicing school counselors that attended the district meetings completed all the data collection instruments ($N = 301$), yielding a 100% useable

response rate. The statistical procedures used to analyze the data included structural equation modeling (path analysis), simultaneous multiple regression, Pearson product-moment correlation (2-tailed), and analysis of variance (ANOVA). An alpha level of .05 was used in the data analyses.

Discussion

The following section reviews the results that were reported in Chapter 4, including further examination of the descriptive statistics related to the reported demographic data and instrumentation scores. Additionally, in the discussion, the researcher compares the findings to previous research investigating the constructs of social-cognitive development, ethical and legal knowledge, and locus of control; which were reviewed in Chapter 2.

Participants

Results of the descriptive analyses of the general demographic questionnaire revealed that of the 301 practicing school counselors that participated in the study, 61 (20.3%) identified as male, 239 (79.4%) as female, and one (.3%) identified as other. Ethnicity and race of the participants were reported as: 228 (75.7%) Caucasian, 48 (15.9%) as Hispanic, 12 (4.0%) African American, 1 (.3%) as Asian American, 1 (.3%) as Native American, and 4 (1.3%) as Other. The mean age of the participants ($N = 265$) was 44.18 years ($SD = 12.08$), with a range of 24 to 74 years of age. Further analysis of coupling relationship yielded 56 participants (18%) classified as single, 43 (14.3%) classified as divorced, 168 (55.8%) were married or partnered, 6 (2.0%) Cohabitated, and 3 (1%) identified as Other.

Additional descriptive analyses of the general demographic questionnaire identified school level of the participants to be 34.6% ($n = 104$) Elementary School Counselors, 21.3% ($n =$

64) Middle School Counselors, 40.9% ($n = 123$) High School Counselors, and 3.3 % ($n = 10$) Multi-level School Counselors. The mean number of students that the school counselors ($N = 296$) reported being responsible for on their caseload was 442 students ($SD = 194.78$), with a range of 80 to 1,800 students.

In regards to school counselor preparation, 80.1% ($n = 241$) of the participants indicated that the highest degree earned was a Master's, 16.3% ($n = 49$) received an Education Specialist Degree (Ed.S), 3.3% ($n = 10$) received a Doctoral Degree. In the school counselors' preparation programs, 67.4% ($n = 203$) of the participants reported having completed a separate *Legal and Ethical Issues in Counseling* course or ethics training, while 31.9% ($n = 98$) did not receive a separate course or training specific to ethical and legal issues. Prior to becoming a school counselor, 47.2% ($n = 142$) of the participants reported being previously certified educators, while 52.8% ($n = 159$) were not previous educators/teachers. The participating school counselors' length of employment as previous educators ranged from zero to twenty-six years with the mean reported to be 4.41 ($SD = 6.13$) year. Additionally, the length of employment as school counselors ($n = 300$) ranged from 0 to thirty-six years with a mean reported of 10.54 ($SD = 8.26$) years.

Research studies with practicing school counselors have resulted with similar demographic data. For example, Paige and colleagues (2001) found that majority of the school counselors across the country ($N = 185$) were Caucasian females (74%), with a mean age of 43 years. Similarly, Lambie (2007) found that the majority of school counselors holding membership in the American School Counselor Association (ASCA; $N = 225$) within a national sample were also Caucasian females (87.6%), with a mean age of 39.26 ($SD = 10.57$; range 22-

65). Therefore, based on the current findings and previous research, the average school counselors were predominately Caucasian females around 40 years of age.

Research studies involving practicing school counselors have found similar data regarding participation of PSCs by school level. In a national survey, Paige and colleagues (2001) found 47% of the participants ($N = 269$) worked at the elementary school level, 24% at the middle school level, 29% at the high school level. Similarly, Lambie (2007) reported 32% worked in an elementary setting, 15.6% in a middle school setting, 16.4% in a high school setting, and 9.3% in other levels. In contrast to the other studies, the majority of the participants in this study 40.9% worked in middle school settings. The divergence between school counselors' levels in this study and other research may partially be explained by the recent position cuts in two of the researched school districts that eliminated elementary school counselor positions within the past school year. Although, there was an inconsistency in the majority of the participants, similar percentages in the current study for elementary and high school settings were consistent with the previous studies (Paige, et al., 2001; Lambie 2007). Further, Lambie (2007) and Paige and colleagues' (2001) samples included a national mail survey of school counselors; thus, the potential inconsistency is based on different data collection processes.

The length of employment reported by the school counselors was consistent with previous research. For example, the school counselors in Florida average length of employment to be 10.54 years ($SD = 8.26$; .0 – 37 years; Shillingford, 2010) and 11.33 ($SD = 6.42$; range 0-36 years; Lambie et al., 2010) Therefore, based on the current findings and previous research, the average PSCs' years of school counseling experience were between 10-11 years.

In relation to the school counselors' reported professional membership and counseling conference attendance, the majority did not hold membership in a national professional organization ($n = 117, 58.8\%$) and had not attended a state or local counseling conference within the past two years ($n = 165, 54.8\%$). These findings were inconsistent with school counselors in the state of Florida (Lambie et al., 2010b), where the majority of the school counselors held membership in a national professional organization ($n = 149, 65.1\%$), but did not attend a state or national counseling conference within the past three years ($n = 172, 75.1\%$). The inconsistencies between the school counselors in the current study and the counselors in Lambie et al. (2010b) study may be related to differences in the samples (e.g., school counselor in Florida and school counselors practicing in five different states). Nevertheless, the findings that the majority of practicing school counselors are not members of professional counseling associations and haven't attended recent counseling conferences is discerning and necessitates further investigation.

The school counselors reported student caseload ($M = 443.81, SD = 194.8$, range 80 – 100) was also noteworthy. ASCA (2008) advocates that for school counselors to provide effective services their students, the counselor-to-student ratio of 1 to 250 is recommended. Nevertheless, the current national average school counselor-to-student ratio is significantly higher at 1 to 460 per the 2007-2008 data (United States Department Education's National Center for Education Statistics, 2010). Similarly, McCarthy and Colleagues (2010) reported an average student caseload of 441.36 ($SD = 246.98$) for a national sample of school counselors. Therefore, the school counselors' counselor-to-student ratio in this study appeared consistent with national averages; however, was significantly higher than the recommended caseload to provide effective school counseling service delivery.

General Demographics Likert Scale Questions

Likert scale questions were included on the General Demographics Survey to solicit the participating school counselors' perceptions relating environmental influences and interpersonal attributes. The Likert scale items ranged from one to five with different qualifiers per question.

School counselors' reported job stress. In obtaining the PSCs' current level of stress on the job, participants responded from a range of one (Limited Stress) to a five (Very Stressful). A mean score of 3.52 ($SD = .897$) suggested "moderate" stress on the job for the school counselors. A review of the results indicated that more than half of the participants ($n = 160$; 58%) perceived that their job was "Very Stressful". Conversely, only 1.7% ($n = 5$) of the school counselors perceived their stress levels to be "Limited Stress" on the job. No studies were found that specifically asked school counselors to report their level of stress on the job; however, research has investigated the burnout in school counselors (e.g., Bulter & Constantine, 2006; Lambie, 2007). Both Butler and Constantine (2006) and Lambie (2007) found school counselors to score at moderate levels of emotional exhaustions, but within the normal range. Therefore, the limited research investigating occupational stress in school counselors and the current findings that identified that the majority of counselor reported their job as "Very Stressful" necessitate further research.

Frequency of school counselors' meetings. In obtaining the counselors' frequency of school counselor meetings, participants responded from a range of one (Rarely Never) to a five (Very Frequently). A mean score of 3.84 ($SD = 1.19$) suggested "adequate" frequency of meeting with other PSCs. Additionally, 40% ($n = 122$) of the participants believe they meet with other PSCs very frequently, indicating that approximately 60% felt they rarely met with other PSCs. No studies were found that specifically asked school counselors to report the frequency of

meeting with other school counselors; however, these findings support Page, Pietrzak, and Sutton's (2001) findings from a national survey of school counselors where 57% ($N = 267$) of the participants reported wanted to receive clinical supervision. Therefore, the limited research investigating school counselor clinical supervision and the findings from the current study that identified that the majority of counselors reported "Rarely to Never" meeting with others necessitate further investigation.

Level of environment support. In obtaining the PSCs' perceived level of support on the job, participants responded from a range of one (Not at all supportive) to a five (Very Supportive). A mean score of 3.74 ($SD = 1.11$) suggested that participants perceive their work environment to be "somewhat" supportive. Additionally, approximately 30% ($n = 90$) of the counselors perceived their work environment to be very supportive, while less than 4% ($n = 12$) perceived their work environment as "not at all supportive". No studies were found that examined PSCs' perceived level of supportive work environment; however, results appear to be consistent with Clark's (2006) investigation, in which approximately 60% ($N = 118$) of school counselors reported satisfaction with the support they received from their principals. Therefore, based on the findings from the current study and Clark (2006), it appears that school counselors may feel supported by their administration; however, further investigation is needed.

School counselors' ability to voice opinions. In obtaining PSCs' perceived ability to vocalize their opinion to persons in high positions (e.g., principal, supervisor, etc.), participants responded on a Likert scale from a range of one (limited ability) to a five (strong ability). A mean score of 3.62 ($SD = 1.25$) suggested that counselors' perceive to have "moderate" ability to voice their opinion to persons of higher authority. Approximately 28% ($n = 85$) believed they possessed a strong ability to voice their opinion to persons of higher authority, while 9% ($n =$

28) indicated they felt they possess limited ability to voice their opinion to supervisors. No studies were found to that investigated school counselors' perceived ability to vocalize opinions to superiors; however, the result from the current study were consistent with research examining leadership abilities in school counselors (e.g., Shillingford, 2009; Mason, 2008). Both Shillingford (2009) and Mason (2008) found school counselors to have the lowest mean scores on the *challenging* subscale of the *Leadership Practices Inventory* (LPI; Posner & Kouzes, 1988). Therefore, the limited research investigating school counselor leadership and the findings from the current study concerning counselors' ability to voice their opinions warrants further investigation.

Instrumentation

The instruments used to investigate the three constructs within the sample of practicing school counselors' were: (a) social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996), (b) levels of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and the WLCS; Spector, 1988), and (c) ethical and legal knowledge (as measured by the ELICQ-R; Lambie, et al., 2010c).

Social-Cognitive Development. The mean ego development total protocol rating (TPR) score for the participants was 88.65 ($SD = 7.09$, range = 62 - 117). The mean WUSCT level score for the PSCs was 5.32 ($SD = .84$, range E3 – E8), and the modal score was at the E5 (Self-aware). The ego development levels of the participants were as follows: (a) Self-protective (E3; $n = 10$, 3.3%), (b) Conformist (E4; $n = 26$, 8.6%), (c) Self-aware (E5; $n = 143$, 47.5%), (d) Conscientious (E6; $n = 109$, 36.2%), (e) Individualistic (E7; $n = 10$, 3.3%), and (f) Autonomous (E8; $n = 3$, 1.0%). The results suggested that the Self-aware level of social-cognitive is average

for practicing school counselors, which was consistent with other findings (e.g., Diambra, 1997 [N = 134]; Lambie, 2007 [N = 221]; Lambie, et al., 2010b [N = 186]). These findings were encouraging as majority of the participants (88%) scored at E5 (Self-Aware) or above, indicating that these school counselors are functioning at a level of social-cognitive development necessary to provide effective counseling services (Zinn, 1995).

Locus of Control. The ANSIE-C (Nowicki & Duke, 1974) was used to obtain the participants generalized locus of control scores. The average ANSIE-C was 8.72 ($SD = 3.44$, range 2 – 21), indicating that school counselors fell more internal along the generalized locus of control continuum. No studies were found that used the ANSIE-C to measure the generalized locus of control with practicing school counselors; however, the results were consistent with a study with counselors. Specifically, Carroll, Robinson, and Flowers (2002) found female counselors ($N = 285$) average ANSIE-C scores to be 8.84 ($SD = 2.77$). Therefore, based on the current findings and the limited research findings investigating locus of control in counselors, it appears that the average counselors scored at more internal levels on the locus of control spectrum.

The WLCS (Spector, 1988) was used to obtain participants' locus of control specific to their work environment. The average WLCS was $M = 37.03$ ($SD = 8.47$; range 16-64), indicating that the school counselors fell at the more external level on the work locus of control continuum; however results fall more internal along the continuum, scores were significantly more external than the observed general locus of control scores (ANSIE-C; $M = 8.84$, $SD = 2.77$). Comparatively, Spector (2006) reported the mean score of 39.5 for samples from 41 studies within the United States ($N = 6,277$). While Spector's (2006) findings were consistent with the

findings from this investigation; there are inconsistencies in the literature. No studies were found that used the WLCS with practicing school counselors; however, the WLCS has been with other helping professions (e.g., counseling faculty, human services). Specifically, Owens, Maradi, and Neimeyer (2008) investigated work locus of control with faculty members ($N = 174$) in clinical and counseling training programs and found significantly lower (more internal) scores for clinical psychology ($M = 5.45$; $SD = 1.05$) and counseling psychology ($M = 5.07$; $SD = 1.05$) faculty than practicing school counselors. Similarly, Harris and colleagues (2007) found average customer service employees ($N = 136$) WLCS scores to be on average 3.69 ($SD = .654$). Conversely, the initial norming population of mental health support workers ($N = 165$) for the WLCS was a mean of 39.04 ($SD = 9.00$; Spector, 1988), which is similar to the current findings. Therefore, although the findings from the current study were consistent with the United States mean score (Spector, 2006) and mental health employee workers (Spector, 1988), PSCs were more external along the continuum than the other helping professions (Harris et al., 2007; Owens et al., 2008).

Ethical and Legal Knowledge. The ELICQ-R (Lambie, et al, 2010) was used to obtain participants' ethical and legal knowledge in counseling scores. The Cronbach alpha for the ELICQ-R was moderate, but acceptable with an overall alpha coefficient score of .70 (Cohen, 1988) for these data. The mean score for the ELICQ-R for the participants ($N = 301$) was 50.27 ($SD = 8.02$) with a range from 22 to 66, with the highest possible score of 70. Therefore, the average participant answered correctly on 71% of the ELIC-R items. No studies were found that used the ELICQ-R with practicing school counselors. However, the original version, the ELICQ (50 questions, 100 highest possible score), was used with counselors-in-training ($N = 64$; Lambie et al., 2010a) and practicing school counselors ($N = 189$; Lambie et al., 2010b). Lambie and

colleagues (2010a) found that the average counseling students responded correctly to 74.71% ($SD = 8.24$) of the ELICQ items following the completion of a counseling ethics course.

Additionally, Lambie and colleagues (2010b) found that the average practicing school counselor in the state of Florida responded correctly to 60.90% ($SD = 9.26$) of the ELICQ items. Therefore, the school counselors participating in this study scored at higher levels of ethical and legal knowledge than school counselors working in the state of Florida, but scored on average were lower than counseling students who had recently completed a counseling ethics course.

Nevertheless, it should be noted that the divergence in ethical and legal knowledge scores may be attributed to modifications in the ELICQ to the development of the ELICQ-R, and not actual differences in ethical and legal knowledge.

Descriptive Data Analysis

Research Hypothesis One

School counselors' social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996) will contribute to their levels of locus of control (as measured by ANSIE-C, Nowicki & Duke, 1974; and the WLCS, Spector, 1988), and ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010c).

The first research hypotheses was analyzed using structural equation modeling (SEM; path analysis) to test a hypothesized model (Figure 6) of the contribution that social-cognitive development had on levels of ethical and legal knowledge and locus of control orientation of practicing school counselors. Inspection of the path model fit indices indicated an acceptable goodness of fit model ($X^2 = 1.44$, $df = 1$, $p = .23$). Further examination of the Root Mean Square Error of Approximation (RMSEA; .04), Goodness Fit Index (GFI; .99), and Tucker Lewis Index

(TLI; .94) supported an adequate fit for the hypothesized model with these data. Therefore, school counselors' social-cognitive development contributed to their levels of ethical and legal knowledge, and locus of control for these data.

Upon further inspection, the tested path model revealed that approximately 1% of the variance in the ethical and legal knowledge scores was explained by the participants' social-cognitive development TPR scores ($r = .04$). Additionally, 14% of the variance in the school counselors' locus of control scores was explained by their social-cognitive development TPR scores ($r = -.38$). Further, 2% of the variance in the participants ethical and legal knowledge scores was explained by their locus of control scores ($r = -.14$). Therefore, the school counselors' social-cognitive development scores did contribute to their locus of control and ethical and legal knowledge; however, the effect sizes were small. Thus, the findings indicated higher levels of social-cognitive development contributed to higher ethical and legal knowledge scores and an increased sense of internal locus of control in practicing school counselors.

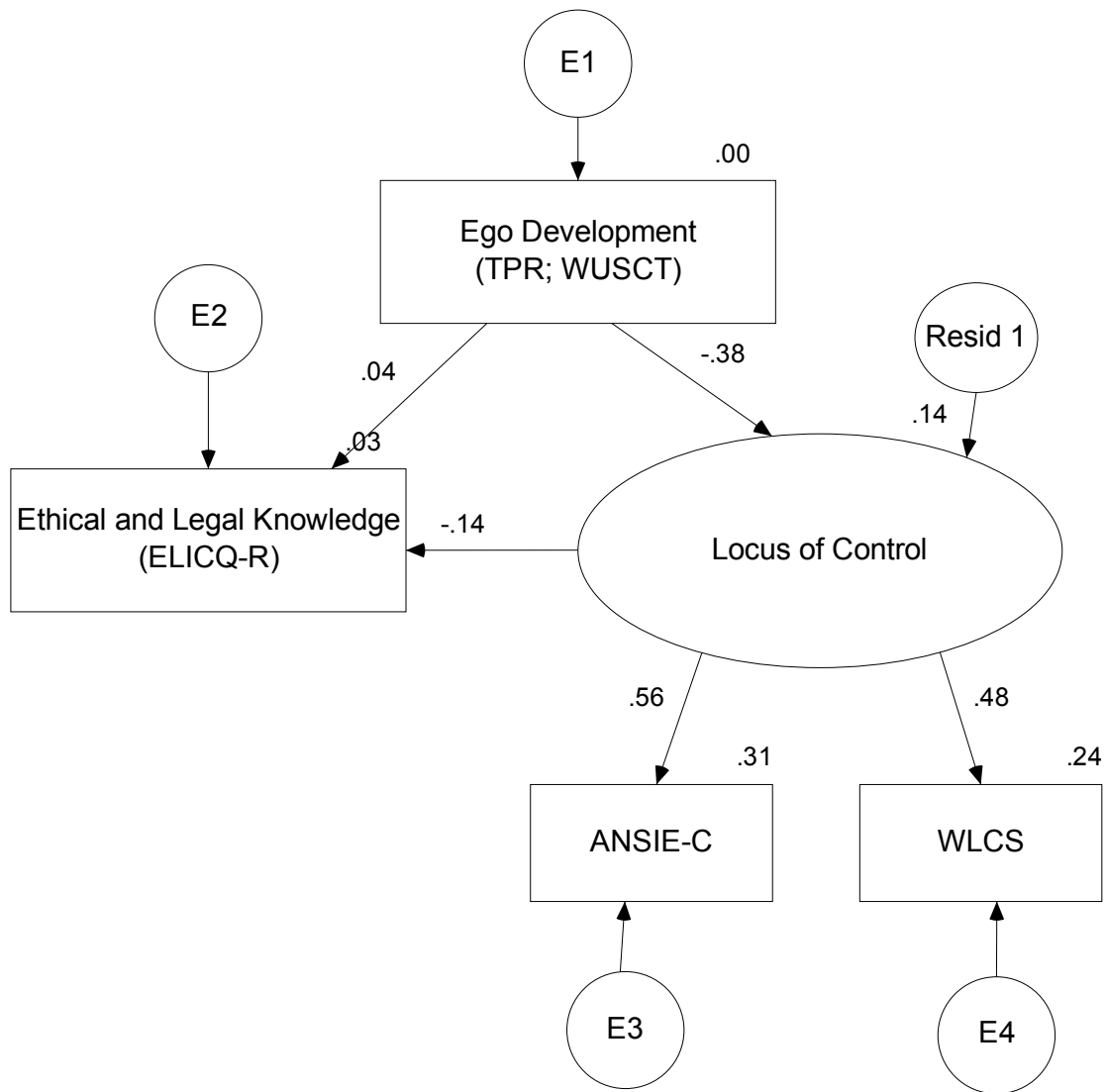


Figure 6: Path Model Analyses

Research supports that higher levels of social-cognitive development predicts higher ethical and legal knowledge scores in counseling students (Lambie et al., 2010a) and practicing school counselors (Lambie et al., 2010b). Additionally, research has identified a relationship between social-cognitive development and locus of control, where individuals scoring at higher levels of ego maturity possessed a greater sense of internal locus of control than person scoring

at lower levels of development (Janota, 1993; Waterman & Waterman, 1974). However, no studies were found that investigated the relationship between counselors' locus of control and their ethical and legal knowledge. Therefore, it may be concluded that as school counselors score at higher levels of social-cognitive development, they also score at higher levels of ethical and legal knowledge and more internal levels of locus of control (lower scores locus of control orientation). Thus, promoting higher levels of social cognitive development in school counselors may also promote higher levels of ethical and legal knowledge and more internal states of locus of control, which are both desirable counselor qualities.

Research Hypothesis Two

School counselors' locus of control (as measured by ANSIE-C; Nowicki & Duke, 1974) and their work locus of control (as measured by the WLCS; Spector, 1988) will contribute to their ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010c).

As previously noted in Path Diagram 1 (Figure 6), the overall path model fit indices indicated an acceptable goodness of fit model ($\chi^2 = 1.44$, $df = 1$, $p = .23$). Further examination of the path model goodness of fit indices, RMSEA (.04), GFI (.99), and TLI (.94), support the hypothesized path model with these data. . Inspection of the standardized regression weights for the hypothesized path model indicated that 2% of the variance in the ethical and legal knowledge scores was explained by the school counselors' locus of control ($r = -.14$). Therefore, the school counselors at greater internal locus of control contributed to higher ethical and legal knowledge scores. To substantiate the findings of the SEM, Pearson's product-moment correlations (two-tailed) were conducted to support the path findings. The Pearson's product-moment correlations (two-tailed) results indicated that only the ANSIE-C measure of locus of

control had a statistically significant relationship to the participants' ethical and legal knowledge scores ($r = -.121, p > .01$; 1.5% of the variance explained). Therefore, the findings suggest that the school counselors' ANSIE-C scores influenced their ethical and legal knowledge more than their WLCS scores. Although the correlation between locus of control and ethical and legal knowledge was small, the findings supported that as counselors score more internal along the locus of control continuum (lower scores), their levels of ethical and legal knowledge increased.

No studies were found that investigated the contributions of locus of control to ethical and legal knowledge in school counselors or other helping professionals. Nevertheless, the research supports that people who score at more internal level of locus of control (a) have higher levels of academic achievement and college success, (b) are more skilled at acquiring and using information, (c) are more effective with clients, (d) have greater interpersonal skills, and (e) are more effective in coping with stress (e.g., Hall & Gahn, 1997; Gifford, Perriott, & Mianzo; Grimes, 1997; Majumder, MacDonald, & Greever, 1977; Martin & Shapel, 1974). As a result of the current findings and the reviewed literature, it may be concluded that PSCs who score at more internal levels of locus of control make seek out as needed, ethical and legal information beyond what they received from their counselor preparation programs.

Exploratory Research Question One

Is professional school counselors' locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974) significantly related to their work locus of control (as measured by the WLCS; Spector, 1988)?

The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between general locus of control (ANSIE-C) and work locus of control (WLCS; $r = .27, p < .001$; 7% of the variance explained). No studies were found that measured both general locus of control (ANSIE-C) and work locus of control (WLCS); however, the findings were consistent with Spector's (1988). More specifically, Spector (1988) found statistically significant correlations in three studies using the WLCS (Spector, 1988) and the *Rotter Internal-External Scale* (1966) with 1,151 business and psychology undergraduate majors ($r = .57, p < .05$; 32.5% of the variance explained), 160 employees of a mental health facility ($r = .55, p < .05$; 30.3% of the variance explained), and 496 municipal managers ($r = .49, p < .05$; 24% of the variance explained). The correlation between school counselor ANSIE-C and WLCS was statistically significant, but small; however, the findings were consistent with previous research investigating general locus of control and work locus of control. While the correlations from this study's findings reached statistical significance, the size of the correlation was smaller than Spector's (1988) findings which may be explained by the use of the Rotter scale (1966), as opposed to the ANSIE-C (Nowicki & Duke, 1974). Future research may be needed to further examine the WLCS and ANSIE-C in education work settings.

Exploratory Research Question Two

Is there a statistically significant relationship between practicing schools counselors' levels of social-cognitive development (as measured by the WUSCT; Hy & Loevinger, 1996) and their demographic variables (age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location,)?

The Pearson product-moment correlation (two-tailed) analyses supported the results of a statistically significant relationship between social cognitive development (WUSCT level scores) and school counselors' reported age ($r = .194, p < .001$; 3.8% of the variance explained) and the number of years working as a school counselor ($r = .132, p < .05$; 1.7% of the variance explained). Both correlations were small and indicated a positive relationship (Cohen, 1988). An additional analyses of a simultaneous multiple regression revealed that approximately 4% of the variation in social-cognitive development scores ($N = 263$; $F_{2, 261} = 5.53, p < .01$) was explained by the school counselors' age and years of experience as a PSC. Further inspection of the beta weights indicated that for every increase in age and number of years working as a PSC, the level of social cognitive development increased by .149 with age and .067 with increased number of years working as a PSC.

The statistically significant relationship between school counselors' social-cognitive development and their reported age and years of experience was consistent with previous findings. More specifically, Lambie and colleagues (2010b) found correlations between social-cognitive development TPR scores and age ($r = .278, p = .026$; 7.7% of the variance explained) as well as TPR scores and coupling status ($r = .293, p = .019$; 8.6% of the variance explained) in a sample of counseling students. Additionally, in a study involving practicing school counselors in Florida, Lambie and colleagues (2010a) identified a significant relationship between the WUSCT (Hy & Loevinger, 1996) TPR scores and reported age ($r = .228, p = .005$; 5.2% of the variance explained). Thus, the findings from the current study and Lambie and colleagues (2010a; 2010b) suggest that life and work experiences may influence a counselors social-cognitive functioning.

Exploratory Research Question Three

Is there a statistically significant relationship between practicing schools counselors' levels of locus of control (as measured by the ANSIE-C; Nowicki & Duke, 1974; and WLCS; Spector, 1988) and their demographic variables (age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location)?

Generalized Locus of Control. The Pearson product-moment correlation (two-tailed) analyses identified a statistically significant relationship between locus of control (as measured by the ANSIE-C) and whether school counselors were members of professional counseling organizations ($r = .114, p < .05$; 1.3% of variance explained), and the number of years working as a certified educator, prior to working as a PSC ($r = .117, p < .05$; 1.4% of variance explained). Both correlations were small and indicated a positive relationship (Cohen, 1988). A simultaneous regression revealed that approximately 5% of the variance in school counselors' generalized locus of control scores ($N = 280; F_{2, 278} = 6.75, p < .001$) was explained by professional membership and number of years as a certified educator. Further inspection of the statistically significant beta weights indicate that school counselors score increased on the ANSIE-C by .183 if they did not belong to a professional counseling organization. Additionally, as the number of years a PSC worked as a certified educator prior to becoming a PSC increased, so did their ANSIE-C score by .149. Therefore, the findings indicate PSCs may be more external the longer they were a previous educator and do not belong to a professional organization. Further, the potential exists for school counselors to be more external, the longer they were employed as previous educators. Thus, it may be concluded that as school counselors transform from teacher

to counselor without support from a professional counseling organization, the tendency appears to result in greater external locus of control.

Although no studies were found that reported significant correlations in general locus of control (ANSIE-C) and demographic variables, the findings suggest that the more years spent as a classroom teacher and in the education system, the greater the chance of PSCs was more external. These findings supports that the more external an individual, the more difficult it is to cope with stress on a daily basis, and less effective with clients (Capel, 1987; Hurrell & Murphy, 1991; McIntyre, 1984; Salkind, 1987). In addition, the findings that identified PSCs who are not members of a professional organization tend to be more external, suggesting that PSCs who are more internal, held professional memberships and therefore may be receiving additional information or support.

Work Locus of Control. The Pearson product-moment correlation (two-tailed) indicated a statistically significant relationship between the school counselors' work locus of control scores (as measured by the WLCS) and their reported student caseload ($r = .155, p < .001$; 2.4% of variance explained). The correlation was small and indicated a positive relationship (Cohen, 1988). Further analyses of a simultaneous multiple regression identified that approximately 5% of the variation in work locus of control scores ($N = 280; F_{1, 300} = 7.38, p < .01$) was explained by the counselors' student caseload. Further inspection of the statistically significant beta weights indicated that PSCs' work locus of control scores increased by .155 for each increase in student caseload. Therefore, with these data the results indicate that as PSCs' increase in student caseloads, they move higher on external state of locus of control.

An additional simultaneous regression analysis was conducted to examine the relationship between all of the school counselors' Likert score responses on the demographics

survey (e.g., all 7 Likert-scaled items regarding ethical and systemic influences) and their work locus of control scores (WLCS; Spector, 1988). The overall linear composite of the independent variables entered into the regression procedure explained approximately 10% of the variance in WLCS scores ($F_{6, 293} = 5.482, p < .001$). Further inspection of beta weights suggested for every increase in perceived level of stress by the school counselor, there was a .117 unit increase toward externality on the WLCS (Spector, 1988). Additionally as the frequency of meeting with other PSCs increased, their WLCS score decreased toward internality by .160. Moreover, as PSCs increased their perceived ability to vocalize to those in authority (e.g., administration, direct supervisors); there was a .181 decrease toward internality on WLCS scores. Therefore, the results suggest that the more PSCs were given ample opportunity to meet and discuss with others and were comfortable in their ability to vocalize their opinions to other, they scored at a more internal locus of control orientation. Consequently, the results also suggested that as PSCs experience greater levels of occupational stress, they tend to score at a more external locus of control orientation. Thus, it may be beneficial for PSCs to receive opportunities to meet with others to promote internality, as research has supported the association between internality and effective service delivery (Abdul-Kadhir, 1994; Martin & Shepel; 1974; Salkind, et al., 1987).

No studies were found that examined the relationship between school counselors' caseload and their work locus of control, as this was the first study found to investigate the WLCS (Spector, 1988) with PSCs; however, the findings appeared consistent with ASCA's (2005) position that reducing student-counselor ratios would decrease PSCs' level of stress and potentially allow them to effectively serve each student on their caseload. Additionally, the findings appear to be consistent with previous research examining student caseloads effecting PSCs' levels of stress (McCarthy, et al., 2010; Moracco, Butcke, & McEwen, 1984). Both

Moracco and colleagues (1984) and McCarthy and colleagues (2010) found larger caseloads to be the greatest contributor to PSCs' levels of stress. Additionally, research support that a more internal locus of control is associated with greater coping abilities in handling stress (Karasek, 1979; Muhonen, 1999; Spector & O'Connell, 2004;), it may be concluded that PSCs scoring at lower levels on the WLCS may be more equipped in handling large student caseloads.

The findings related to the WLCS (Spector, 1988) with systemic influences, is noteworthy. As noted in the literature, greater externality of locus of control in the work environment is related to levels of stress and burnout, and ultimately job dissatisfaction (Muhonen & Torkelson, 2004; Leung, Siu, & Spector, 2000; Spector, 1982). Therefore, it may be inferred that the statistically significant correlation between WLCS and PSCs' perceived levels of stress, may lead to burnout. The findings that school counselors whom reported having more than adequate opportunities to meet with other PSCs were more internal was encouraging. Therefore, the frequency for which school counselors meet with other counselors may serve as a moderator in stress level and externality, and therefore reduce the perceived level of stress in preventing burnout. Lastly, the school counselors who reported possessing the ability to vocalize their opinions to supervisors and administration, scored more internally on the WLCS. Therefore, it may be inferred that PSCs with a greater internal orientation of locus of control may be able to advocate for systemic change (ASCA, 2005). In conclusion, the findings of the WLCS (Spector, 1988) are consistent with the literature that demonstrates greater levels of internality is related to overall wellness and employees' functionality (Fox & Spector, 1999; Spector & O'Connell, 1994). The findings further support that work locus of control may act as a mediating variable in relation to job stress (Spector & O'Connell, 1994), and future explorations may want to examine this closely with the current population.

Exploratory Research Question Four

Is there a statistically significant relationship between practicing schools counselors' levels of ethical and legal knowledge (as measured by the ELICQ-R; Lambie et al., 2010c) and their demographic variables (age, ethnic classification, gender, level of education, length of experience as a school counselor, program of study, CACREP program, geographic location,)?

The Pearson product-moment correlation (two-tailed) analyses supported a statistically significant relationship between ethical and legal knowledge (as measured by the ELICQ-R) and age ($r = -.262, p < .001$; 6.9% of variance explained); gender ($r = .120, p < .05$; 1.4% of variance explained); ethnicity ($r = -.170, p < .001$; 2.9% of variance explained); previous certified education experience ($r = .236, p < .001$; 5.6% of variance explained); the number of years working as a certified educator, prior to being a PSC ($r = .229, p < .001$; 5.2% of variance explained); the number of years working as a PSC ($r = .178, p < .001$; 3.2% of variance explained); current school level ($r = -.114, p < .05$; 1.3% of variance explained); and whether school counselors were current members of professional counseling organizations ($r = -.119, p < .05$; 1.4% of variance explained). All correlations were small and indicated both positive and negative relationships (Cohen, 1988). Positive relationships (Cohen, 1988) were identified between ELICQ-R scores and gender, previous education experience and number of years employed as an educator, and number of years employed as a PSC. Negative correlations were found between ELICQ-R scores and age, ethnicity, and current school level.

In further examination, all variables with statistically significant relationships were entered into a simultaneous multiple regression to examine the influence in predicting levels of ethical and legal knowledge. Results from this data analysis indicated that approximately 18% of the variation in ethical and legal knowledge scores ($N = 241$; $F_{7, 234} = 7.43, p < .001$) was

explained by the identified demographic variables. Further inspection of the beta weights suggest statistical significance with ethnicity ($\beta = -.165$), number of years as a previous educator ($\beta = -.195$), and school level ($\beta = -.120$). Therefore, as PSCs increased in number of years working as a previously certified educator, their ethical and legal knowledge decreased by .195. Additionally, as ethnicity changed, there was a .165 decrease (Caucasians scored the highest in externality, $M = 51.6$; Other [e.g., Asian American, Native American, and Mixed] scored the lowest in internality, $M = 42.74$) in ethical and legal knowledge. Similarly, results suggested that as school level changed, there was a .120 decrease in ethical and legal knowledge scores (Elementary school counselors scored the highest in externality, $M = 51.63$; Mullin-Level counselors scored the lowest in internality, $M = 48.02$).

The relationships identified between with ELICQ-R (Lambie, et al., 2010) and demographic variables were consistent with previous research. Lambie and colleagues (2010b) reported a negative, statistically significant relationship between the ELICQ (Lambie, et al., 2008) scores and reported age ($r = -.196$, $p = .015$) and school counseling experience ($r = -.152$, $p = .045$). Therefore, the counselors that reported being younger with less school counseling experience scored at higher levels of ethical and legal knowledge than the counselors that were older with more school counseling experience. Since, PSCs receive their ethical and legal training at the preparation level, it may be inferred that as time elapses, PSCs may experience difficulty in retaining the ethical and legal knowledge on the job. Nevertheless, these findings support the need for PSCs to receive ongoing professional development, specifically in relation to current legal and ethical issues. Further, professional development may want to address specific needs and concerns per school level and ethnicity in relation to ethical and legal knowledge.

In summary, the current investigation offers new information regarding the practicing school counselors' levels of social-cognitive development, ethical and legal knowledge, and locus of control and the relationships. Additionally, the results support previous research that identified a statistically significant relationship between social-cognitive development and ethical and legal knowledge. The findings also support the relationship between locus of control and ethical and legal knowledge, in which the more internal a PSC, the higher his or her score on ethical and legal knowledge. Although all analyses revealed small effect sizes (Cohen, 1988), the findings suggest a significant relationship between social-cognitive development and locus of control. Therefore, supporting that PSCs' who score at higher levels of social-cognitive development, score at lower levels on locus of control (more internal), and hence possess a greater ability to manage stress. Furthermore, the findings offer insight to some systemic influences (e.g., large caseloads, infrequent meetings with other PSCs, limited professional involvement) that may potentially shape PSCs movement toward a greater external locus of control orientation.

Limitations of the Study

The results of the study should be interpreted with caution as there are limitations with the research design, sampling, and instrumentation. Through the acknowledgment of the limitations, researchers may gain insight regarding the direction for future research.

Research Design

The research design for this study was descriptive, correlational. The nature of correlational research has inherent limitations. While correlational research provides strengths of relationships between variables, it is unable to explain the causality of the variables (Frankel &

Wallen, 2009). Additionally, correlational research may contain threats to internal validity, in which the relationships found may have alternative explanations, including extraneous variables that may influence the correlations (e.g., age, reading ability, intelligence). Further, when correlations exist between two or more characteristics of the participants, the possibility exists that there are other characteristics, outside the scope of the study that may explain the relationships. Lastly, locations may vary in correlational research when administering instruments, in which the conditions can alter or even effect participants' responses.

Sampling

Purposive sampling was employed in this study with practicing school counselors. Although purposive sampling is used to capture one or more specific predefined groups (e.g., PSCs; Frankel & Wallen, 2009), there are noted limitations with this type of sampling. Since purposive sampling is a deliberate effort to obtain representative samples by including subgroups within the population (e.g., level of school setting and geographic representation), the probability exists that those who participated in the study may be different from the actual population, introducing a potential of source bias (Gall, Gall, & Borg, 2005). Further, even though specific states were chosen to represent regions across the country and areas of population, results may not be generalizable to the general population, and therefore may comprise population validity. In addition, since majority of the participants were Caucasian females, even though from different states and regions across the country, the homogeneity of the sample may affect the results. Lastly, all of the participants who completed research packets volunteered, which may denote that the PSCs in the sample were more likely to already have increased levels of social-cognitive development and possess internal tendencies.

An additional limitation was the potential lack of sufficient power. At least 383 participants were needed for a $p < .05$ for the population of approximately 103,823 practicing school counselors (NCES, 2009). Achieving a sample size of 301 participants may have affected the generalizability of the findings as well as the significance of the hypothesized relationships within the path model. Therefore, the sample size may have limited the findings.

Instrumentation

A few instrumentation limitations are noteworthy. First, the number and length of instruments may have affected the response rate of those who did not complete the research packets, limiting the number of participants. Due to the uncontrollable nature of data collection, the variations in data collection settings may produce a different number of counselors completing packets due to insufficient amount of time. Next, although the WUSCT (Hy & Loevinger, 1996), the WLCS (Spector, 1988), and the ANSIE-C (Nowicki & Duke, 1974) have strong reliability and validity, the ELICQ-R (Lambie, et al., 2010c) is a fairly new instrument and the psychometric properties of the ELICQ-R had not been established beyond what was noted in Chapter 3. Additionally, it is the first study using this instrument and has not yet been validated with this population. Therefore, results may not accurately reflect the anticipated results. Further, even with data collection instruments with acceptable psychometric qualities (e.g., validity and reliability), there is the potential for social desirability and results may be inaccurate. Lastly, the statistically significant findings had small effect sizes, potentially reducing the power of the findings.

Although there are noted limitations of the study, it was the first study to examine the relationships between the three constructs: social-cognitive development, ethical and legal knowledge, and locus of control. The study contributed to the counseling literature regarding

school counselors' levels of social-cognitive development, and the contribution to PSCs ethical and legal knowledge and locus of control orientation. Findings related to PSCs' social-cognitive development and locus of control orientation are consistent with previous research with different populations. Future research which investigates how each construct relates when making an ethical decision may provide further insight and lead to more significant findings.

Recommendations for Future Research

Based on the findings from this study, future studies may provide additional information on the contributions of social-cognitive development, ethical and legal knowledge, and locus of control to the school counseling profession. Future research should include a larger and more diverse sample across the United States, reflecting a more accurate representation of the school counseling population. Additionally, a larger and more diverse population may result in greater statistical significance in data analyses and hypothesized relationships, and therefore results may be more generalizable.

In terms of exploring the interaction of social-cognitive development, locus of control, and ethical and legal knowledge, future researchers may want to further examine the relationships. For example, since social-cognitive development contributed significantly to locus of control, and both constructs have demonstrated the abilities to cope and handle stress, future research may want to use both constructs as moderating variables in examining the prevention of burnout of PSCs. Further investigations, through an experimental design, might want to explore the specific causes (e.g., multiple job demands, role ambiguity, case loads, and lack of clinical supervision) that lead PSCs to experience higher levels of stress. In addition, since the findings of this study support that school counselors scoring at more internal locus of control orientation

seek out information (and have higher levels of ethical and legal knowledge), further exploration may be beneficial in identifying key factors that influence school counselors' decision to hold membership in professional counseling associations and attend professional conferences, where PSCs receive the most pertinent information to the profession. Future researchers may also want to conduct a mixed method (quantitative and qualitative) study to see how these three constructs may contribute to PSCs' ethical decision-making process, and potentially identify systemic factors that may affect the decisions, based on their levels of social-cognitive development, ethical and legal knowledge, and locus of control orientation. Additionally, it may be helpful to replicate the same study with students in the public school system as it may provide insight to PSCs and educators in the K-12 system.

Moreover, all three constructs are desirable counselor qualities (e.g., Abdul-Kadhir, 1994; Lambie, et al., 2010b; 2010c; Zinn, 1995), at the preparation level, future research may want to explore best practices in supporting and fostering the development of counselors-in-training in all three areas. Further, a longitudinal investigation tracking students' retention of their ethical and legal knowledge as well as their developmental levels throughout their program of study and into their professional practice may offer greater insight for counselor education. At the practice level, future studies may want to see how these desirable attributes may impact the delivery of a comprehensive school counseling program as well as the possible impact of these constructs on PSCs' service delivery and student outcomes.

In terms of instrumentation, future research is warranted to further validate and strengthen the ELICQ-R (Lambie, et al., 2010). Additional research may want to closer examine the relationship between the WLCS (Spector, 1988) and ANSIE-C (Nowicki & Duke, 1974) to further validate each instrument. Using all three instruments, it would be beneficial to see if there is

a difference among the counseling professions (e.g., school counselors, marriage and family counselors, and mental health counselors). Results may provide significant feedback for counselor educators in exploring the development among the three specialty areas, as well as for the supervisors who provide clinical supervision in each counseling setting.

In order to increase the strength of the results from this study, recommendations for future research have been discussed. Revisions in the research design, sampling, and instruments may confirm or challenge the findings and contribute further to the school counseling profession.

Implication for School Counseling and Counselor Education

The findings from the present investigation offer implications for practicing school counselors and counselor educators who are deemed with the task of training future school counselors. The following section presents implication for school counselors and counselor educators.

Professional School Counselors

The findings from the current study provided support that higher levels of social-cognitive and a greater internal locus of control contributes to less reported occupational stress and higher levels of ethical and legal knowledge. In relation to ethical and legal knowledge, overall scores on the ELICQ-R were acceptable; however, the negative correlation that ethical and legal knowledge decreases with age suggest a need for required professional development for PSCs, particularly in the area of ethical and legal knowledge. School counseling certification bodies (states' departments of education) may want to require for certification renewal for counselors to participate in annual or semi-annual professional development workshops specific to the delivery of ethical counseling services within a school setting. Thus, because PSCs' levels

of ethical and legal knowledge appeared to decrease with age and school-based counseling experience, on-going professional development may increase PSCs' internal locus of control and consequently increase PSCs' levels of ethical and legal knowledge.

Additionally, the findings indicated that being a member of a professional organization and attending conferences, increases internal locus of control. In contrast, PSCs who are experiencing higher level of stress on the job, feeling like they don't get an opportunity to meet with other PSCs, and experience large number of caseloads possess a more external locus of control. Therefore, PSCs supervisors and colleagues may want to encourage professional membership and provide opportunities to attend conferences to support a more internal locus of control in PSCs. Since professional organizations like ASCA, are aimed at supporting and advocating for PSCs and the school counseling profession, may promote greater internality. Thus, professional organizations offer professional development opportunities and literature regarding current best practices, as well as current ethical and legal issues, and therefore may promote internality.

The findings from this study and previous research (Mason, 2008; Shillingford, 2010) indicate that PSCs who have a more external locus of control have difficulty challenging and voicing their opinion to those in authority positions. Therefore, PSCs may want to participate in advocacy training, or increase their knowledge of ethical and legal standards by joining a professional organization and attending national, local, or state conferences specific for school counselors.

Counselor Educators

Counselor educators are in a position to foster the social-cognitive growth and

development of counselors-in-training. Research supports that higher social-cognitive maturity is related to higher levels of empathy, adaptivity, wellness, and self-care (Borders, 1998; Lambie et al., 2009; Sheaffer et al., 2008). Additionally, the findings from the current study support that school counselors functioning at higher levels of social-cognitive development, are more internal across the locus of control continuum, and possess a greater ethical and legal knowledge; which are all desirable counselor qualities. Therefore, school counselor preparation programs may want to design curriculum and field-based experiences to promote students' social-cognitive maturation. Counselor educators may assist in fostering counseling students' development by structuring their classroom, supervisory, and clinical experiences to allow students to experience cognitive dissonance. Providing continual feedback while simultaneously allowing students opportunities to reflect on those experiences can further facilitate social-cognitive developmental growth. Lambie and Sias (2009) provide a supervision model that may be helpful as it delineates specific developmental activities to help foster social-cognitive developmental growth for school counselors-in-training.

The findings related to the influence of social-cognitive development to locus of control may provide insight to counselor educators. Specifically, related to the work environment, PSCs who score at higher levels of social-cognitive development and a more internal locus of control perceive less stress, feel more supportive in their work environment, and feel they possess a greater ability to voice their opinions to supervisors. Since, PSCs are called to be leaders of systemic change (ASCA, 2005) in a work setting conducive to stressful encounters and where PSCs serve as advocates for all stakeholders, it is imperative for school counselor educators to prepare students for the various job demands that are required when implementing a comprehensive school counseling program. Therefore, counselor educators should provide

developmental opportunities to have students examine the systemic complexities that are inherent in an educational work setting, allowing them to reflect about how they perceive their role, the students, and the system and to make meaning of their encounters.

In relation to ethical and legal knowledge, counselor education programs accredited by CACREP (2009) require that all students be able to demonstrate a mastery of the ethical standards. Since research supports counseling students' ethical and legal knowledge may be significantly increased based on their participation in counseling ethics courses (Lambie, et al., 2010b), the acquisition of a solid foundation of ethical and legal knowledge must be implemented at the preparation level. Additionally, these findings suggest that the development should continue through the program, since the findings support that retaining ethical and legal knowledge decreases with age and years working as a PSC. Finally, PSCs' professional identity is positively related to their knowledge and ethical practice (Stone, 2005), therefore school counselor educators may also want to encourage students to join a professional organizations (e.g., ASCA, ACA) and attend national, state, and local conferences; professional organizations disseminate literature and professional development opportunities, which may aid in PSCs' retention of ethical and legal knowledge.

Conclusion

This study investigated the contributions of school counselors' social-cognitive development to their levels of ethical and legal knowledge and locus of control orientation. The findings provide a baseline of current PSCs in regards to their social-cognitive development, ethical and legal knowledge and locus of control. In addition, the findings supported the tested path model, where school counselors at higher social-cognitive development scored at higher

levels of ethical and legal knowledge, and at more internal levels along the locus of control. Furthermore, the findings between demographic variables and the three constructs support the overall need for PSCs to engage in school counseling and ethical and legal professional development activities in order to increase their social-cognitive development and consequently, their ethical and legal knowledge and internal locus of control; and therefore maintain the ability to provide a comprehensive school counseling program to a diverse population of students.

APPENDIX A: INFORMED CONSENT FORM

University of Central Florida
Department of Child, Family, and Community Sciences
Counselor Education Program

Consent to Participate in Research

Title of the Study:

The Contribution of Professional School Counselors' Social-Cognitive Development on their Locus of Control and Levels of Ethical and Legal Knowledge

Principal Investigator: Kara Ieva, M.Ed.,
Faculty Advisor: Glenn W. Lambie, Ph.D.

Dear School Counselor,

My name is Kara Ieva and I am a Doctoral Candidate in the Counselor Education Program at the University of Central Florida. I am working on my dissertation, a research study investigating school counselors' levels of ethical and legal knowledge, locus of control, and social-cognitive development. You are being asked to participate in this study. Approval to conduct this study was obtained from the University of Central Florida Institutional Review Board (IRB). Additionally, we have the permission of your school district to conduct this research study.

Purpose of the study

The purpose of this study is to investigate school counselors' levels of ethical and legal knowledge, locus of control, and social-cognitive development.

Procedures

During your school district, county-wide meeting of school counselors, you will be given an envelope containing a consent to participate in research form and four data collection instruments ([a] general demographics survey, [b] the *Washington University Sentence Completion Test* [WUSCT; Hy & Loevinger, 1996], [c] *Nowicki-Strickland Locus of Control Scale* [ANSIE; Nowicki & Strickland, 1974], [d] *Work Locus of Control Scale* [WLCS; Spector, 1988], and [e] *Ethics & Legal Issues in Counseling Questionnaire* [Lambie, Hagedorn, & Ieva, 2008].

If you volunteer to participate in this study, I ask that you are at least 18 years of age and complete all the data collection instruments at the county-wide meeting. Your identity and responses will be anonymous (no identifiers or identification numbers). It will take 30-45 minutes to complete the questionnaires. This research project was designed solely for research purposes and no one except the research team (e.g., principal investigator) will have access to any of your responses. Again, your identity and responses will be anonymous.

Participants will also receive index cards that ask if participants would be willing to provide follow-up information about previously encountered ethical dilemmas, and allow the researcher to contact them by phone at a later date. This is strictly voluntary and just gives the researcher more insight. The information received at a later date, does not need to match any of the current survey information.

Risks

There are no anticipated risks for participating in this study. There are several measurement instruments to complete and some of these questions in regard to ethical conduct may be considered sensitive. Therefore, no



University of Central Florida IRB
IRB NUMBER: SBE-09-06376
IRB APPROVAL DATE: 8/12/2009

names of identifying information will be gathered and if any question makes you feel uncomfortable you are free to skip it or discontinue participation at any time.

Benefits

There may not be direct benefits to you for participating in this study; however, it is hoped that your participation will lead to knowledge that may help other counseling and educational professionals.

Cost/Compensation

You will not receive any money or other compensation for participating in the study

Confidentiality

Your participation in this study is anonymous. Your name or other identifying information will not be collected. All information will be stored in locked cabinets in the primary investigator's office. The data collected will be used for statistical analyses and no individuals will be identifiable from the pooled data.

The information obtained from this research may be used in future research and published. However, your right to privacy will be retained. All data will be presented in group format and no individuals will be identifiable from the data.

Voluntary Participation

Your participation in this research project is entirely voluntary. You do not have to participate. You do not have to answer any question(s) that you do not wish to answer. Please be advised that you may choose not to participate in this research study, and may withdraw from the study at any time without consequence. Your county administrator will not be notified of whether or not you participated.

If you have any questions or comments about this research, please contact my faculty advisor Dr. Glenn Lambie (407/823-4967; glambie@mail.ucf.edu), University of Central Florida, College of Education, Counselor Education Program, Orlando, FL 32816-1250.

Questions or concerns about research participants' rights may be directed to the UCF IRB Office, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL, 32826-3246. The telephone numbers are 407-823-2901 or 407-882-2276.

Sincerely,

Kara P. Ieva, M.Ed, NCC, NCSC
Doctoral Candidate, Counselor Education
University of Central Florida

I understand my rights as a research participant, and I understand what the study is about and how and why it is being done. By completing the data collection instruments, I consent to participate in this research study.

APPENDIX B: DEMOGRAPHIC QUESTIONNAIRE

General Demographics Survey

Professional School Counselors' level of ethical and legal knowledge, locus of control, and social-cognitive development: An exploratory investigation

Directions: Please complete the following general demographics survey (all responses are anonymous).

Envelope #: _____

Gender: Male or Female or Other Age: _____

Ethnicity: _____ Caucasian /White (Non-Hispanic); _____ African-American; _____ Hispanic;
_____ Asian-American; _____ Pacific/ Islander; _____ Native-American; _____ Other

Marital Status: Single Divorced Married/Partner Cohabitate Other

EDUCATION:

Highest Degree Completed: _____ Bachelors; _____ Masters; _____ Specialist; _____ Doctoral;

What university/college did you complete your school counseling certification requirements at?
College/ University: _____ Year: _____

What percentage of your degree was completed online? _____

To the best of your knowledge, did you complete a Legal and Ethical Issues course specific for school counselors as part of your preparation program? (PLEASE CIRCLE) YES or NO

EXPERIENCE:

Where you a Certified Educator (e.g., Teacher, Administrator, School Personnel) prior to working as a School Counselor? (PLEASE CIRCLE) YES or NO

If yes, how many years did you work as a certified educator prior to working as a Licensed / Certified School Counselor? (Years) (Position title[s]) _____

How many years have you been working as a Licensed / Certified School Counselor? _____

What is your current title/ position (e.g., school counselor)? What is your current level (e.g, elementary, middle school, high school)

Current Position Title: _____ Current level: _____

What is your current student caseload? _____

Are you currently a member of a national counseling association (e.g., ACA, ASCA)? YES or NO

Have you attended a state or national conference in the past three years? YES or NO

(PLEASE TURN OVER)

ETHICAL & SYSTEMIC INFLUENCES:

How would you rate your current level of stress on the job? *(Circle appropriate number)*

1	2	3	4	5
Limited Stress				Very Stressful

How important do you think a counselor's legal and ethical knowledge-base is to his or her practice?

1	2	3	4	5
Not Important				Very Important

How frequently do you meet with other counselors *(both in & outside your school)?*

1	2	3	4	5
Rarely Never				Very Frequently <i>(daily to weekly)</i>

How supportive do you consider your current work environment to be? *(Circle appropriate number)*

1	2	3	4	5
Not At All Supportive				Very Supportive

How would you rate your ability to voice your opinion to persons in high positions *(e.g., your principal, supervisor, etc.)?*

1	2	3	4	5
Limited Ability				Strong Ability

How would you rate your Principal's knowledge of school counseling?

1	2	3	4	5
Limited Knowledge				Very Knowledgeable

How consistent is your present school counseling program with how you believe your program should be implemented?

1	2	3	4	5
Not very consistent				Very involved



APPENDIX C: WASHINGTON UNIVERSITY SENTENCE COMPLETION TEST

WASHINGTON UNIVERSITY SENTENCE COMPLETION TEST (Form 81)

Instructions: Please complete the following sentences.

1. When a child will not join in group activities

2. Raising a family

3. When I am criticized

4. A man's job

5. Being with other people

6. The thing I like about myself is

7. My mother and I

8. What gets me into trouble is

9. Education

10. When people are helpless

11. Women are lucky because

12. A good father

13. A girl has a right to

14. When they talked about sex, I

15. A wife should

16. I feel sorry

17. A man feels good when

18. Rules are

Fall 2009

APPENDIX D: ETHICAL AND LEGAL KNOWLEDGE QUESTIONNAIRE

**Ethical & Legal Issues in Counseling
Questionnaire – Revised
ELICQ-R ©
Glenn W. Lambie, Ph.D.
Kara P. Ieva, M.Ed.
W. Bryce Hagedorn, Ph.D.**

The *Ethical & Legal Issues in Counseling Questionnaire – Revised* (ELICQ-R©; Lambie, Ieva, & Hagedorn, 2009) is designed to assess practicing counselors' and counseling students' knowledge of ethical and legal issues relating to counseling practice in mental health, family, and school settings. The 10 primary areas assessed by the *ELICQ-R* include the following: (a) professional identity, (b) ethical and legal terms/concepts; (c) ethical decision-making; (d) confidentiality; (e) suicide and client violence; (f) abuse and neglect; (g) counseling and educational records; (h) educational and civil rights laws; (i) counselor development and wellness; and (j) discrimination laws and ethics.

PLEASE complete your responses on the attached Scantron Sheet.

PLEASE do not write in the Test Booklet.

All responses are anonymous.

ELICQ-R

Please choose the best response to your knowledge.

- _____ 1. The primary professional association for all counseling professionals is:
A. American Counseling Association
B. American School Counselor Association
C. American Guidance and Counseling Association
D. American Community Counseling and Family Therapy Association
- _____ 2. Which of the following would be an example of counselor malpractice?
A. Counseling a recently divorced parent
B. Visiting a child at home
C. Attending a Individual Education Plan (IEP) meeting
D. Using hypnosis without training to treat eating disorders
- _____ 3. When professional counselors are confronted with an ethical dilemma regarding confidentiality, the moral principle that should guide their decision-making is:
A. Justice
B. Beneficence
C. Nonmaleficence
D. Privileged communication
- _____ 4. According to the legal term “privileged communication,” who has the right to waive the privilege and allow the professional counselor to testify?
A. The counselor
B. The agency / school supervisor
C. The attorney
D. The client
- _____ 5. This court case is most commonly related to a professional counselor’s “duty to warn and protect”:
A. *Davis v. Monroe County Board of Education*
B. *Tarasoff v. Board of Regents of California*
C. *Eisel v. Montgomery County Board of Education*
D. *Grant v. Board of Trustees of Valley View School District*
- _____ 6. All professional counselors have the right to, and must (ethically and legally) break confidentiality in the case of:
A. Suspected child abuse and neglect
B. Knowledge of a drug deal that your adult client is involved in
C. Your client expresses that his or her partner is HIV positive
D. Your client expresses that he or she does not like you
- _____ 7. Access to a client’s educational records must be in accordance with:
A. *The Family Educational Rights & Privacy Act of 1974*
B. *The No Child Left Behind Act of 2001*
C. *The Education for All Handicapped Children Act of 1975*
D. *The Health Insurance Portability and Accountability Act of 1996*

ELICQ-R

- _____ 8. The name of the Act that is used currently that allows special needs children and adolescents to receive exceptional education services under federal education law:
- A. *The Americans with Disabilities Act of 1990*
 - B. *Section 504 of the Rehabilitation Act of 1973*
 - C. *Education for All Handicapped Children Act of 1975*
 - D. *Individuals with Disabilities Education Improvement Act of 2004*
- _____ 9. The most common ethical complaint and primary reason for lawsuits against counseling professionals is:
- A. Not reporting suspected cases of child abuse and neglect
 - B. Failing to keep clients from suicide
 - C. Sexual misconduct
 - D. Ineffective service delivery
- _____ 10. _____ is the primary national credentialing organization for professional counselors.
- A. ACA (*American Counseling Association*)
 - B. CACREP (*Council for Accreditation of Counseling and Related Education Programs*)
 - C. NBCC (*National Board of Certified Counselors*)
 - D. NCATE (*National Council for Accreditation of Teacher Education*)
- _____ 11. _____ are the minimum standard society will tolerate.
- A. Ethics
 - B. Laws
 - C. Professional competencies
 - D. Licensing and credentials
- _____ 12. The ethical principle relating to a counselor's obligation to treat all clients fairly:
- A. Justice
 - B. Neglect
 - C. Beneficence
 - D. Veracity
- _____ 13. Which of the following persons does NOT have the legal right to review a child's education records without appropriate consent?
- A. Custodial parent/guardian
 - B. Noncustodial parent
 - C. Stepparent
 - D. Child's school counselor
- _____ 14. To be eligible to receive services under *Section 504 of the Rehabilitation Act of 1973*, an individual must:
- A. Have a low socioeconomic status
 - B. Be diagnosed with a specific learning disability
 - C. Have a physical or mental impairment that limits one or more of his or her major life activities
 - D. Be diagnosed with a psychological and/or interpersonal disorder
- _____ 15. Counselor supervision can provide professional counselors with opportunities for:
- A. Continued clinical-skill development
 - B. Ongoing consultation regarding legal and ethical issues
 - C. A professional support system
 - D. All of the above

ELICQ-R

_____ 16. The _____ is a national assessment used to certify professional counselors.

- A. *National Counselor Examination (NCE)*
- B. *American Counseling Comprehensive Examination (ACCE)*
- C. *Accreditation of Counseling Examination (ACE)*
- D. *Counselor Preparation Comprehensive Examination (CPCE)*

_____ 17. When a professional counselor is gossiping about a client's behavior in a social gathering, this may be considered:

- A. Malpractice
- B. Defamation
- C. Abandonment
- D. Loco parentis

_____ 18. When counseling a minor, the legal right to confidentiality belongs to:

- A. The minor client
- B. The parent(s) / legal guardian
- C. The counselor
- D. The agency / school

_____ 19. Regarding whether professional counselors have a duty to protect potential victims where HIV is a factor, a counselor *might* consider breaking confidentiality only:

- A. When there is an identifiable partner and the client says they are only practicing safe sex
- B. When the client's HIV test is positive, partners are identifiable, and the client is engaging in high risk behaviors, and the client is adamant about not telling his or her partners
- C. When the client is HIV positive and in a long-term committed relationship
- D. Anytime the client is HIV positive and has a partner(s)

_____ 20. When a professional counselor suspects child abuse and/or neglect, he or she should first call:

- A. The police department
- B. Child protective services
- C. The agency/school supervisor
- D. An attorney

_____ 21. Well written case notes provide all of the following EXCEPT:

- A. Liability against malpractice suits
- B. Support the delivery of appropriate services
- C. Support to professional decision-making
- D. Accountability

_____ 22. The primary issue that the *Americans with Disabilities Act of 1990* addressed was:

- A. Discrimination against individual with disabilities
- B. Remediation and accommodation of children and adolescents' different learning styles
- C. Helping children and adolescents who lack academic skills and achievement
- D. Diagnosing and treating children and adolescents with disabilities

ELICQ-R

- _____ 23. A professional counselor is working with an adolescent who is addicted to cocaine. The counselor does not have specific training and/or supervised experience in addictions counseling. Ethically, this counselor should:
- A. Work with the adolescent, but on other-than-addiction issues
 - B. Begin addictions counseling training immediately
 - C. Refer the adolescent to a qualified addictions counselor
 - D. Tell the adolescent that he or she cannot work with him or her
- _____ 24. Multiculturally competent and ethical counselors are committed to acquiring:
- A. Knowledge that is essential to working effectively with diverse client populations
 - B. Knowledge and skills that are essential to working effectively with diverse client populations
 - C. Knowledge, skills, personal awareness, and sensitivity that are essential to working effectively with diverse client populations
 - D. Knowledge and personal awareness to work effectively with diverse client populations
- _____ 25. When conflicts occur between the law and professional ethics, the _____ takes priority for professional counselors.
- A. Ethics
 - B. Law
 - C. Agency / School policy
 - D. Professional opinion
- _____ 26. If a professional counselor has direct knowledge of a colleague who is acting in an unethical manner, the counselor should first:
- A. Pretend he or she never saw “unethical” behavior
 - B. Deal with the individual first informally but in a direct fashion, and then move on to more formal methods
 - C. Report the “unethical” behavior to the professional ethics board immediately
 - D. Tell all the clients about the observed unethical behavior and provide them with referral sources
- _____ 27. _____ is both a legal and ethical principle requiring professional counselors to adequately disclose to clients’ potential risks, benefits, and alternative to proposed counseling service.
- A. Confidentiality
 - B. Privileged communication
 - C. Informed consent
 - D. Professional counselor position statement
- _____ 28. A primary goal of this Act was to assure that individuals’ health information is properly protected while allowing the flow of health information needed to provide and promote high quality health care, and protect the public's health and well-being.
- A. FERPA
 - B. IDEIA
 - C. ADA
 - D. HIPAA
- _____ 29. Exceptional education services may include:
- A. Academic services
 - B. Counseling services
 - C. Transportation services
 - D. All of the above

ELICQ-R

- _____ 30. Ethically, all professional counselors should monitor their:
- A. Professional effectiveness
 - B. Need for continuous education and maintained competencies
 - C. Professional and personal well-being
 - D. All of the above
- _____ 31. Based on the ACA (2005) *Code of Ethics*, sexual or romantic relationships are prohibited between a counselor and former clients for how long following the termination of counseling services?
- A. There is no set time limit
 - B. One (1) year following last professional contact
 - C. Five (5) years following last professional contact
 - D. Never (not ethical to ever have a sexual or romantic relationship with a former client)
- _____ 32. Confidentiality in group counseling:
- A. Can only be assured on the part of the group facilitator / leader
 - B. Is based on group interactions
 - C. Presents no ethical dilemmas
 - D. Can be guaranteed for the group members at the first group session
- _____ 33. Susan is quite distressed after finding out that her husband has been unfaithful and tells her counselor that she is so angry that she feels like killing him. In this case, the professional counselor needs to:
- A. Question Susan to determine whether she is likely to do physical harm to her husband
 - B. Warn the husband that he is in potential danger
 - C. Involuntarily commit Susan to a hospital until she can overcome her anger
 - D. Warn Susan that she can be arrested for making threats against her husband.
- _____ 34. A client is seeking abortion counseling from a professional counselor who has been actively involved in the pro-life movement. The counselor has extreme discomfort with the client's values and doesn't think he or she could maintain objectivity. Ethically, it would be best if the counselor:
- A. Doesn't share his or her values with the client and works within the value system of his or her client
 - B. Refers the client to a professional who shares similar values to the client and can be more objective
 - C. Helps the client understand his or her values so the client can make a different decision concerning her pregnancy
 - D. Sets firm boundaries with the client on what she can discuss in regards to her pregnancy
- _____ 35. Which of the following skills is NOT a characteristic of the culturally skilled counselor?
- A. He or she understands that one counseling approach can be used equally and effectively with all clients
 - B. He or she is able to send and receive both verbal and non-verbal messages accurately and appropriately
 - C. He or she possesses specific knowledge about the values and traditions of the group with which he or she is working
 - D. He or she understands the impact that oppression and discrimination may have on his or her clients

THANK YOU FOR COMPLETING THIS ASSESSMENT ☺

APPENDIX E: ADULT NOWICKI-STRICLAND SCALE-COLLEGE

Adult Nowicki-Strickland Locus of Control Scale

Please circle yes or no to the following statements.

- [Y or N] 1. Do you believe that most problems will solve themselves if you don't fool with them?
- [Y or N] 2. Do you believe that you can stop yourself from catching a cold?
- [Y or N] 3. Are some people just born lucky?
- [Y or N] 4. Most of the time, do you feel that getting good grades means a great deal to you?
- [Y or N] 5. Are you often blamed for things that just aren't your fault?
- [Y or N] 6. Do you believe that if somebody studies hard enough, he or she can pass any subject?
- [Y or N] 7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
- [Y or N] 8. Do you feel that if things start out well in the morning that it's going to be a great day, no matter what you do?
- [Y or N] 9. Do you feel that most of the time parents listen to what their children have to say?
- [Y or N] 10. Do you believe that wishing can make good things happen?
- [Y or N] 11. When you get criticized, does it usually seem it's for no good reason at all?
- [Y or N] 12. Most of the time do you find it hard to change a friend's (mind) opinion?
- [Y or N] 13. Do you think that cheering, more than luck, helps a team to win?
- [Y or N] 14. Do you feel that it is nearly impossible to change your parents' mind about anything?
- [Y or N] 15. Do you believe that your parents should allow you to make most of your own decisions?
- [Y or N] 16. Do you feel that when you do something wrong there's very little you can do to make it right?
- [Y or N] 17. Do you believe that most people are just born good at sports?
- [Y or N] 18. Are most of the other people your age and sex stronger than you are?
- [Y or N] 19. Do you feel that one of the best ways to handle most problems is just not to think about them?
- [Y or N] 20. Do you feel that you have a lot of choice in deciding whom your friends are?

[PLEASE TURN OVER]

- [Y or N] 21. If you find a four leaf clover, do you believe that it might bring good luck?
- [Y or N] 22. Do you often feel that whether or not you do your homework has much to do with what kinds of grades you get?
- [Y or N] 23. Do you feel that when a person your age is angry with you, there's little you can do to stop him or her?
- [Y or N] 24. Have you ever had a good luck charm?
- [Y or N] 25. Do you believe that whether or not people like you depends on how you act?
- [Y or N] 26. Will your parents usually help you if you ask them to?
- [Y or N] 27. Have you ever felt that when people were angry with you, it was usually for no reason at all?
- [Y or N] 28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
- [Y or N] 29. Do you believe that when bad things are going to happen they just are going to happen no matter what you do to try to stop them?
- [Y or N] 30. Do you think that people can get their own way if they just keep trying?
- [Y or N] 31. Most of the time, do you find it useless to try to get your own way at home?
- [Y or N] 32. Do you feel that when good things happen, they happen because of hard work?
- [Y or N] 33. Do you feel that when somebody your age wants to be your enemy, there's little you can do to change matters?
- [Y or N] 34. Do you feel that it's easy to get friends to do what you want them to do?
- [Y or N] 35. Do you usually feel that you have little to say about what you get to eat at home?
- [Y or N] 36. Do you feel that when someone doesn't like you there's little you can do about it?
- [Y or N] 37. Do you usually feel that it is almost useless to try in school because most other students are just plain smarter than you are?
- [Y or N] 38. Are you the kind of person that believes that planning ahead makes things turn out better?
- [Y or N] 39. Most of the time, do you feel that you have little to say about what your family decides to do?
- [Y or N] 40. Do you think it's better to be smart than to be lucky?

APPENDIX F: WORK LOCUS OF CONTROL SCALE

Work Locus of Control Scale							
Copyright Paul E. Spector. All rights reserved, 1988							
The following questions concern your beliefs about jobs in general. They do not refer only to your present job.							
		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1. A job is what you make of it.	1	2	3	4	5	6	
2. On most jobs, people can pretty much accomplish whatever they set out to accomplish	1	2	3	4	5	6	
3. If you know what you want out of a job, you can find a job that gives it to you	1	2	3	4	5	6	
4. If employees are unhappy with a decision made by their boss, they should do something about it	1	2	3	4	5	6	
5. Getting the job you want is mostly a matter of luck	1	2	3	4	5	6	
6. Making money is primarily a matter of good fortune	1	2	3	4	5	6	
7. Most people are capable of doing their jobs well if they make the effort	1	2	3	4	5	6	
8. In order to get a really good job, you need to have family members or friends in high places	1	2	3	4	5	6	
9. Promotions are usually a matter of good fortune	1	2	3	4	5	6	
10. When it comes to landing a really good job, who you know is more important than what you know	1	2	3	4	5	6	
11. Promotions are given to employees who perform well on the job	1	2	3	4	5	6	
12. To make a lot of money you have to know the right people	1	2	3	4	5	6	
13. It takes a lot of luck to be an outstanding employee on most jobs	1	2	3	4	5	6	
14. People who perform their jobs well generally get rewarded	1	2	3	4	5	6	
15. Most employees have more influence on their supervisors than they think they do	1	2	3	4	5	6	
16. The main difference between people who make a lot of money and people who make a little money is luck	1	2	3	4	5	6	

APPENDIX G: IRB APPROVAL FORM



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Exempt Review Status

From: UCF Institutional Review Board
FWA00000351, Exp. 10/8/11, IRB00001138

To: Kara Ieva

Date: August 12, 2009

IRB Number: SBE-09-06376

Study Title: **The Contribution of Professional School Counselors' Social-Cognitive Development on their Locus of Control and Levels of Ethical and Legal Knowledge**

Dear Researcher:

Your research protocol was reviewed by the IRB Vice-chair on 08/12/2009. Per federal regulations, 45 CFR 46.101, your study has been determined to be **minimal risk for human subjects and exempt** from 45 CFR 46 federal regulations and further IRB review or renewal unless you later wish to add the use of identifiers or change the protocol procedures in a way that might increase risk to participants. Before making any changes to your study, call the IRB office to discuss the changes. **A change which incorporates the use of identifiers may mean the study is no longer exempt, thus requiring the submission of a new application to change the classification to expedited if the risk is still minimal.** Please submit the Termination/Final Report form when the study has been completed. All forms may be completed and submitted online at <https://iris.research.ucf.edu>.

The category for which exempt status has been determined for this protocol is as follows:

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures, or the observation of public behavior, so long as confidentiality is maintained.
 - (i) Information obtained is recorded in such a manner that the subject cannot be identified, directly or through identifiers linked to the subject, **and/or**
 - (ii) Subject's responses, if known outside the research would not reasonably place the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability or reputation.

The IRB has approved a **waiver of documentation of consent** for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet. For online surveys, please advise participants to print out the consent document for their files.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

On behalf of Joseph Bielitzki, M.S., DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 08/12/2009 03:17:20 PM EDT

IRB Coordinator

APPENDIX H: EMAILED PERMISSION TO USE THE WLCS

From: "Paul Spector (PSY)" <spector@shell.cas.usf.edu>
To: Kara Ieva <kieva@mail.ucf.edu>
Date: 4/22/2009 1:48 PM
Subject: Re: Permission for Instrument Use and Modification

Dear Kara:

You have my permission to use the WLCS in your study. I don't mind if you change item wording, but I would caution against it. The scale is designed to assess beliefs about jobs in general and not a particular job. If you focus their attention on their current kind of job, you might actually assess perceived control at work, rather than the personality variable of locus of control.

Best,

Paul E. Spector
Department of Psychology
University of South Florida
Tampa, FL 33620
(813) 974-0357 Voice
(813) 974-4617 Fax
spector@shell.cas.usf.edu
website <http://shell.cas.usf.edu/~spector>

APPENDIX I: EMAILED PERMISSION TO USE THE ANSIE-C

From: "Nowicki Jr., Stephen" <snowick@emory.edu>
To: Kara Ieva <kieva@mail.ucf.edu>
Date: 4/30/2009 4:21 PM
Subject: RE: Instrument Use
Attachments: ANSIE -- Form C.doc; ANSIEwith scoring key.doc; loc2006l.doc

Hi Kara,

Thanks for the interest in the loc. I'm attaching a copy of the ANSIE and the ANSIE manual for your information. Good luck in your research and let me know if I can be of any further help.
Steve

-----Original Message-----

From: Kara Ieva [mailto:kieva@mail.ucf.edu]
Sent: Thursday, April 30, 2009 3:08 PM
To: Nowicki Jr., Stephen
Subject: Instrument Use

I hope that your school year is going well.

I am Kara Ieva, a Doctoral Candidate at the University of Central Florida. I am currently in the planning phase of my dissertation which is to alter a current pilot study I am conducting in the Central Florida area and to use a national sample of practicing school counselors. Specific states have been chosen based on state legislation and geographic location.

Currently, I am working with Dr. Glenn Lambie, faculty member in the Counselor Education Program at the University of Central Florida. We are collaborating on a research study investigating practicing school counselors' levels of ethical and legal knowledge as measured by Ethics and Legal Issues in Counseling Questionnaire [Lambie, Hagedorn, & Ieva, 2008], ethical decision-making as measured by the Ethical Decision- Making Scale-Revised ([EDMS-R], Dufrene, 2000), and social-cognitive development as measured by the Washington University Sentence Completion Test [WUSCT; By & Loevinger, 1996].

I am hoping to eliminate the ethical-decision making construct and replace it with locus of control. I am writing to request permission to use the Norwicki-Strickland Locus of Control Scale. I am hoping for an N of approximately 500.

If you have any questions about the project, please feel free to contact me (772)-708-3094 &/or kieva@mail.ucf.edu].

Thanks again for your consideration in advance.

Kara Ieva, M.Ed, NCC, NCSC
Doctoral Candidate
TEACH Grant Graduate Assistant
Research Assistant- Counselor Education
University of Central Florida
Email: kieva@mail.ucf.edu
Web: www.karaieva.com
Phone: (772) 708-3094

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