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# Faculty Socialization of Graduate Students' Attitudes and Perceptions Toward the IRB

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### **Doctor of Education in Organizational Leadership**

Xee L. Cope

Dr. Joey Cope, Dean of the College of Graduate and Professional Studies

Date: 12/17/18

**Dissertation Committee:** 

Jue Slold

Dr. Linnea Rademaker

H

Dr. Stuart Allen

Trocy Sensor

Dr. Tracy Spencer

Abilene Christian University

School of Educational Leadership

Faculty Socialization of Graduate Students' Attitudes Toward and Perceptions of the Institutional Review Board

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Organizational Leadership

by

Elisa Jolls

December, 2018

#### Dedication

I dedicate this dissertation to my children, Christina, Alejandra, and Maya. When I started this journey, they never doubted that I could achieve it, even when I doubted myself. Their faith and support in me made this possible. *Sí, se puede*.

Maya finished high school while I was in this process and deserves special recognition because of her constant support, encouragement, and editing of my writing.

Frank, my husband, encouraged me every step of the way, taking on more at home to allow me time to pursue my education. He encouraged and loved me, even during those times that I was tired, overwhelmed, and unlovable.

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#### Abstract

Graduate student mistrust and fear of the institutional review board (IRB) is an issue that is commonly encountered at academic institutions. Research has shown that students emulate and are vulnerable to assuming the norms of faculty, which is supported by research that shows that students who have difficult relationships with the IRB often have faculty mentors who also have difficult relationships with the IRB. The purpose of this qualitative case study was to explore how novice researchers' perceptions of the IRB changed through their research submission and IRB interactions required during the IRB approval process, as well as to identify the factors that influenced their attitudes or attitude changes. Novice researchers were recruited from Facebook groups geared toward doctoral students and completed questionnaires to explore participants' expectations and perceptions, as well as to identify the factors that influenced their attitudes or attitude changes. The findings from this small sample suggest that optimistic and positive messages are being conveyed to students by influencers but may not be treated in the same way that negative or cautionary tales are. Further, there are sources of influence on the IRB experience other than faculty that may dilute the faculty's influence.

Keywords: hidden curriculum, IRB, faculty influence

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#### **Chapter 1: Introduction**

All research involving humans in the United States is subject to regulations at the state, local, and institutional levels. Additionally, research may be subject to federal regulations, if applicable or required by the sponsoring institution. There are two principal federal agencies that regulate research at the federal level: the Department of Health and Human Services (DHHS) and the Food and Drug Administration (FDA). Among institutions that received federal funding, 75% to 90% have local policies that require review of all human subjects research (American Association of University Professors [AAUP], 2001; Weil et al., 2010). Faculty often object to this requirement because, they contend, institutions that use these biomedical standards ineffectively evaluate their research. Moreover, they argue, if it is not a funding requirement, then the review should not be required. Many institutions have responded by providing more education and information regarding why reviews are required. During my 10 years of experience as part of an institutional review board (IRB), I have not observed changes in acceptance of IRB authority.

#### Background

Graduate student mistrust and fear of the IRB is an issue I commonly encountered as an IRB director at several institutions. At each of the institutions where I served, graduate students whose faculty mentors had difficult relationships with the IRB often had similar interactions with the IRB. This observation is consistent with results from Shore (2009), who found faculty who share negative feelings and perceptions about the IRB with their graduate students can create expectations of a difficult relationship and process with the IRB. Kramer, Miller, and Commuri (2009) asserted that graduate students emulate their mentors and form their opinions and

expectations of the IRB based on faculty opinions. Graduate students emulate faculty because they tend to assume faculty norms (Harding-DeKam, Hamilton, & Loyd, 2012).

Kohlberg (1976) suggested that moral development is cognitive in nature and individuals develop morals through interactions with their environment. In Kohlberg's view, social interaction and role-taking opportunities directly impact moral development; specifically, as individuals develop cognitively and morally, they can assume the attitudes of others as their own. Similarly, Bandura (1986) posited that people learn by observing the behavior of others and modeling behavior. According to Schein's (1984) model of organizational culture, newcomers to an organization adopt the norms and values of the culture if these are considered valid through historically successful application

It is unlikely that the transfer of norms from faculty to students can be prevented. However, awareness and education can counter the effect of this negative, hidden curriculum as well as reinforce acceptable norms and values (Çobanoglu & Engin Demir, 2014). If a department's organizational culture supports the function of the IRB, then faculty tend to comply and communicate well with the IRB (Kramer et al., 2009). Kramer et al. (2009) affirmed that an organization's social and cultural environments influence the learning of norms and values.

#### **Statement of the Problem**

As IRB director at several institutions, I frequently encountered graduate student mistrust and fear of the IRB. Faculty mentors who had difficult relationships with the IRB tended to transfer similar behaviors and interactions with the IRB to their graduate students. If graduate students accepted these faculty norms, they could take these attitudes with them to other institutions or workplaces, in which case a few bad or deviant employees could influence the workplace norms concerning the IRB (Boddy, 2014). If peers observed or learned poor behaviors from other employees whose bad behavior resulted in positive outcomes, then these deviant employees might influence others to adopt or modify their behaviors (Robinson, Wang, & Kiewitz, 2014). Regarding IRB, these bad behaviors potentially contribute to a culture of increased risk and noncompliance.

#### **Purpose of the Study**

The purpose of this qualitative case study was to explore how novice researchers' perceptions of the IRB changed during research submission and the interactions required during the approval process, and to identify the factors influencing their attitudes. I used qualitative methodology to describe participants' understandings of their experiences with the IRB. Use of this methodology allowed participants to reflect on their prior beliefs and expectations and to juxtapose their thoughts with their experiences. The population consisted of novice researchers, either in their dissertation phase or no more than 1.5 years post doctorate. These participants had submitted fewer than two studies to the IRB. I used purposeful sampling to recruit participants from Facebook social media sites visited by doctoral and postdoctoral graduates. Through these media sites, the recruits completed a qualitative questionnaire. The findings may provide insights to university administrators about social norms, enculturation, and mentoring of doctoral students when working with the IRB.

#### **Research Questions**

**Q1.** What were student's attitudes and perceptions of the IRB before they began the IRB process?

**Q2.** How do students describe the sources of their perceptions or attitudes toward the IRB?

Q3. How was the experience different than the expectation and perception?

#### **Definition of Key Terms**

Attitude. An attitude is a way of thinking about someone or something, usually reflected in an individual's behavior.

**Expectation.** An expectation is a feeling of belief about how something should occur in the future.

**Faculty researcher.** *Faculty researcher* within this paper refers to a faculty member who conducts human subjects research within U.S. higher education. This term is interchangeable with *researcher* or *principal investigator*.

**Graduate students.** For this research study, the term *graduate student* refers to students in the United States who are completing doctoral degrees.

**Higher education.** As defined in this study, *higher education* is postsecondary education in the United States.

**IRB mission creep.** For this study, *mission creep* refers to the expansion of the IRB oversight beyond the minimum requirements of federal regulations through local or institutional policy ("Mission Creep," 2006).

**Minimal or low risk.** Minimal or low-risk research means that the probability of risk to participants is no greater than the individual would encounter in her daily life or routine health care encounters (U.S. Department of Health and Human Services, n.d.).

**Novice researchers.** Novice researchers are individuals who have submitted or who have been part of fewer than two submissions to an IRB. Novice researchers are not individuals who have previously worked as part of a research team and interacted with an IRB or developed submissions to an IRB on behalf of a researcher.

Perceptions. These are a way of thinking about something, as in a belief or opinion.

**Socialization.** Socialization refers to the process of learning and teaching norms or an acceptable way to behave.

### Summary and Preview of the Next Chapter

In this chapter, I raised questions about the transfer of faculty attitudes toward the IRB from faculty to their graduate students, and the challenges created if faculty have had negative interactions with the IRB. The purpose of this qualitative study was to explore how novice doctoral students' or novice researchers' perceptions and attitudes of the IRB changed during the IRB submission process and to identify the factors that influenced them, using the theoretical framework of Kohlberg's theory of moral development.

#### **Chapter 2: Literature Review**

#### Background

IRBs serve to support and protect the interest of the universities, faculty, staff, students, society, and human subject participants in research. All research involving humans in the United States is subject to regulations at the state, local, and institutional levels and additionally may be subject to federal regulations. The DHHS and the FDA are the primary regulating agencies at the federal level. Regulations include the principles of respect for persons, beneficence, and justice.

These principles come from the Nuremberg Code and are the foundation of research ethics. These principles derive from the Nuremberg trials and are accepted worldwide. The Nuremberg Military Tribunal developed 10 principles, known as the Nuremberg Code, to examine Nazi doctors' research during the trials. These principles are the minimum needed to define legitimate medical research (Korenman, n.d.; National Institutes of Health, n.d.; Office of Research Integrity, n.d.). Although it is not law, the Nuremberg Code was significant in the development of medical research ethics. Estimates are that 75% to 90% of institutions receiving federal funding required reviews of human subjects research (AAUP, 2001; Weil et al., 2010).

Revelations about ethically questionable research were the catalyst for the 1974 National Research Act, which resulted in the creation of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (Ferraro, Szigeti, Dawes, & Pan, 2010). In 1979, this organization established the modern system of regulating human subjects research by identifying basic principles of research and publishing these as the Belmont Report (U.S. Centers for Disease Control [CDC], n.d.). In the Belmont Report, the 10 principles developed during the Nuremberg Trials are condensed into three: autonomy, beneficence, and justice. Three core functions where these principles apply are informed consent, assessment of risks and benefits, and selection of subjects. The Belmont Report contains the foundations for human subjects research ethics. However, resulting from the 1975–76 congressional hearings, the FDA created the Bioresearch Monitoring Program, a division of the FDA, with the specific objective of protecting the rights, safety, and welfare of human research subjects and monitoring the conduct of FDA regulated research (Cooper, n.d.).

Using the Belmont Report as part of the foundation, in 1981, the DHHS and the FDA revised their respective human subjects regulations, making the regulations as compatible as possible (Office for Human Research Protections [OHRP], n.d.). In 1991, the DHHS Federal Policy for the Protection of Human Subjects (the Common Rule) codified protections for human subjects under 45 C.F.R. part 46 (Cartwright, Hickman, Nelson, & Knafl, 2013; OHRP, n.d.). Subsequently, 16 federal departments and agencies adopted the policy (CDC, n.d.). The Common Rule's main elements include

- requirements for assuring compliance by research institutions;
- requirements for researchers' obtaining and documenting informed consent; and
- requirements for IRB membership, function, operations, review of research and record keeping (Korenman, n.d.).

The FDA regulations applying to the protection of human subjects research are under federal policy 21 CFR 50; the rules governing IRBs are codified under 21 CFR 56 (Cooper, n.d.). The FDA regulations contain rules for compliance by research institutions, such as the requirements of informed consent use and the IRB organizational structure. The regulations also include biological devices and drugs that fall under FDA purview. In both the DHHS and the FDA regulations, the three principles of respect for persons, beneficence, and justice are key components. Although some research is exempt from the purview of these two regulatory agencies, such as studies involving existing data and clinical specimens, it is common for institutions that receive federal funding to require IRB review of all human subjects research regardless of funding source (Burris & Moss, 2006; Carr, 2015). The IRB reviews the research conducted under the institution's authority and affiliation for the protection of the rights and welfare of human subject participants.



*Figure 1*. Overview of the IRB review process. This figure illustrates the general steps for submitting an IRB application for review.

An assumption is that the IRB and researchers work together harmoniously and collaboratively, sharing a common goal to protect the rights and welfare of human subject participants. However, that is not always the case. The relationship between researchers and the IRB is often tension-filled and strained (Klitzman, 2012; Martin & Inwood, 2012; Musoba,

Jacob, & Robinson, 2014). Some faculty members who conduct research are resistant to the oversight and rules of the IRB (Griebling et al., 2009; Kramer et al., 2009).

Because IRB policies are a response to requirements external to an organization, policies may not align with the mission of the institution and researchers' objectives (Heugens & Lander, 2009). Kramer et al. (2009) asserted that graduate students emulate their mentors and form their opinions and expectations of the IRB based on what they hear from the faculty. The purpose of this qualitative study was to explore how graduate students and novice researchers' perceptions and attitudes toward the IRB changed through research submission and identify the factors that influenced their attitudes.

Researchers have examined the relationship between faculty and the IRB; some researchers approached this topic from the point of researchers or IRB staff, and others sought input from both parties. In the following chapter, I provide a review of the literature, identifying both positive and negative themes associated with common norms and beliefs among some faculty researchers. Some results showed that faculty perceptions of IRB were positive and their interactions with IRB were respectful, beneficial, and useful. The most consistent results from these studies concerned contentious relationships; these disharmonious relationships are attributed to barriers such as bureaucracy, IRB orientation, mission creep, communication, and faculty behavior. I reviewed the recently available literature concerning the influence of faculty attitudes on graduate students and graduate student emulation of these attitudes. The final section contains an overview of the Common Rule, revised as of January 21, 2019. In this section, I discuss whether the revised rule mitigates or minimizes the disharmonious relationship between faculty researchers and the IRB, as revealed by themes found in this study.

The Abilene Christian University and the University of New Mexico reference librarians provided guidance and advice on the keywords and terms used for a literature search. The literature review contains references published in the years 2002 to 2018. The dates set for a search of relevant studies overlapped with a time of significant growth in the number of IRBs; the number of IRBs increased from 491 in 1995 to 2,728 in 2005 (Catania et al., 2008). Keywords included *IRB*, *IRB* and faculty relationship, hidden curriculum, mentoring, faculty mentoring, faculty compliance, higher education mentoring, and higher education hidden curriculum. Databases used were OneSearch and EBSCO. Additionally, I performed a search using ProQuest with the topic word *IRB* for the date range of 2002 to 2018. I completed an examination of the references to identify additional relevant sources.

#### **Theoretical Framework Discussion**

The theoretical framework for this study was Kohlberg's (1976) theory of moral development. Kohlberg suggested theoretical stages of moral development and based the theory on psychological and moral philosophies. According to the theory, individuals develop and demonstrate greater moral reasoning as they advance through stages of cognitive development (L. Patton, Renn, Guido, & Quaye, 2016). Kohlberg proposed that personal values, norms, and moral development are formed from their social and environmental influences. Kohlberg contended that moral judgment was based on how a person reasons and perceives justice, not the judgment itself, and that the core of the "moral component of moral judgment is a sense of yastice" (1976, p. 201). How an individual perceives a situation is an expression of the person's values and norms.

Kohlberg's (1976) theory of moral development includes three levels, and each level contains two stages. Each level represents the distinct ways in which individuals relate self to

societal roles in society and societal expectations for them (L. Patton et al., 2016). Although there are six stages, not all individuals go through all the stages in a fixed order, and not all go through these stages at the same rate (Kohlberg, 1976). In the preconventional level, individuals respond to labels (*good or bad, right or wrong*), and authority figures give labels (Kohlberg, 1971). This stage is typical for individuals younger than 10 years of age. L. Patton et al. (2016) defined the conventional level by individuals' attempts to identify and conform to society, including persons of authority and their expectations. The conventional level comprises where individuals are for most of their lives. In the postconventional level, individuals base their decision-making on morals and principles that they define for themselves (Kohlberg, 1971). Individuals who reach the postconventional level are usually late in life.

In the first stage of the preconventional level, consequences determine actions; the goal is to avoid punishment, and authority or power figures determine if an action is right or wrong (Kohlberg, 1971). As described by Kohlberg, in the preconventional stage, individuals' motives are to avoid getting caught in the wrong and being punished. In this stage, there are no considerations for moral or social order in the community (L. Patton et al., 2016). In stage two, individuals follow rules if they receive personal gain or reward for doing so; individuals in stage two want to satisfy their needs and minimize potential negative outcomes (L. Patton et al., 2016). If people in stage two have concern for others, the concerns are motivated by selfishness and not loyalty or justice (Kohlberg, 1971). The concern in this context is not due to lack of fairness, but it is about creating a quid pro quo situation in which individuals undertake actions with an expectation of something in return (Kohlberg, 1971).

Kohlberg (1971) described the conventional level stage 3 as involving interpersonally normative morality and characterized stage four as concerned with social system morality. Stage

three contains behaviors such as a desire to please others, approval seeking, and conformity to role expectations (Kohlberg, 1971). Conformity is more than adherence to rules; it also means making attitudes and behaviors consistent with a group; thus, conformity can result in groupthink. Stage four consists of individuals confronting a system of authority and rules. Correct behaviors are those used to uphold the rules and respect authority (L. Patton et al., 2016).

In the postconventional level, human rights and social welfare morality underlie stage five; morality of universal, reversible, and prescriptive general ethical principles exemplifies stage six. In stage five, right and wrong are determined by personal values. Moral and legal right are not necessarily equivalent, and sometimes individuals must break rules (Kohlberg, 1971). Sometimes moral rights that benefit society or individuals may take priority over laws because the good of society is a priority. In stage six, there is a morality that applies to every situation. Morals are not concrete and consist of abstract principles of justice, reciprocity, quality of human rights, and respect for an individual's dignity (Kohlberg, 1971). People in stage six understand that the principles of justice, reciprocity, respect for individual persons, and beneficence are inalienable rights and not laws. These are inalienable rights, but people can and will break the law to defend these moral principles, even at risk to themselves. Only at this level do moral reasoning and behavior combine (Kohlberg, Levine, & Hewer, 1983).

A criticism of Kohlberg's theory (1976) is that it does not cross cultures or genders. However, Brown and Treviño (2006) focused on the intersection of ethics and leadership, and their literature review revealed no differences between males and females, having less than 1% variance between genders. The application of theory crossed cultures, once factoring in the varying values of cultures. As consistent with social learning theory, Brown and Treviño suggested individuals learn and emulate the attitudes and beliefs of those whom he or she views as role models. In developing social cognitive theory, Bandura (1986) proposed people learn new patterns of behavior by observing others without the need for direct experience. The idea of emulating and learning from a role model aligns with the theory of moral development because Kohlberg contended that individuals form personal values and norms by looking outside themselves. Thus, moral development is based on social and environmental influences.

Pickens (2005) supported Kohlberg's theory (1976) by putting forth that individuals' attitudes are a combination of personality, beliefs, behaviors, morals, and values that develop over time. According to Pickens, students form attitudes through learning, modeling behaviors, and sharing experiences. An organization's culture is a system of shared beliefs concerning how things should occur within an organization. Organizational culture serves as a control mechanism for employees' behaviors and attitudes (Scott-Findlay & Estabrooks, 2006). In this study, this concept of organizational culture applies to a school or university department. I examined the culture and environment of an organization to explore whether the culture and the faculty researchers contribute to the perceptions and attitudes of novice researchers toward the IRB and research compliance. I considered this aim under circumstances where the norms remained stable, even if the novice researcher experienced expectancy disconfirmation in her IRB interactions.

**General discourse.** In the 1990s, most universities and colleges voluntarily adopted the Common Rule (Federal Policy for the Protection of Human Subjects, 1991), applying it to all research regardless of the presence of funding (Sontag, 2012). IRBs are the bodies providing oversight, and for this reason, IRBs work in partnership with faculty researchers. The reciprocity in the relationship between IRB and faculty researchers is evident in themes of support and collaboration found in research on the topic.

Some researchers have documented struggles between the IRB and faculty, but others have found that faculty hold positive and negative views of the IRB. Whitney et al. (2008) conducted a qualitative study to survey National Institutes of Health (NIH)-funded faculty researchers who were conducting human subjects research, obtaining a response rate of 14% (n =28). The purpose of the survey was to learn about faculty researchers' attitudes and views of the IRB system. Some results indicated participants had positive beliefs about the IRB. Some respondents endorsed that IRB protections extend beyond human subjects and include value and protections for faculty thorough review of research design. This perception supports the need for collaboration between the IRB and faculty researchers so that both contribute to the protection of human subjects and share concerns during the process. The findings demonstrate that the IRB not only imposes rules but also can assist faculty researchers. Among these results, negative comments included complaints about the submission process. These criticisms included complaints of copious amounts of pointless paperwork, questions that seem inapplicable to all types of research, and procedures that did not have the protection of human subjects as a core mission. Although a study limitation was the low response rate, other researchers found similar results (Bach, 2005; Burris & Moss, 2006).

Similarly, in a qualitative study, Burris and Moss (2006) found mixed attitudes of faculty researchers regarding their perceptions of IRB. Burris and Moss conducted interviews with 40 individuals from various institutions across the United States about their experiences and attitudes toward the IRB at their institutions. The results included eight major themes. Positive themes included faculty researchers' staunch support for the IRB and their beliefs that a form of regulatory oversight is necessary and beneficial. Negative themes included that participants did not perceive that IRB administrators were effectively using the potential latitude in regulations to

align the process with the intended purpose. Furthermore, they suggested the IRB is detached from researchers such that the staff does not realize when some changes in the process lead to an increased burden on researchers or are ineffective to achieve the intended purpose. An identified limitation of these results was that there was no participant demographic information regarding the type of research and years of research experience. The small sample size suggested the findings were not generalizable. This study is significant because the results demonstrated that some faculty researchers considered their relationship with the IRB as collaborative and that it benefits the human subjects as well as faculty researchers. Viewing the relationship as collaborative is an attribute of a successful working relationship.

Although many researchers have addressed the point of view of the faculty researcher, Bach (2005) examined the relationship between faculty and the IRB using participant narratives and analyzed the resulting themes through the feminist lens of othering and organizational irrationality. While many faculty researchers recognized and appreciated the function of the IRB, Bach found that they viewed the IRB as an entity rather than as a group composed of individuals or peers. A view of the IRB as a bureaucratic entity carries negative connotations, such as an imbalance of power, distance, and coldness. In the literature review, I examine the issues of the IRB as a bureaucracy. Bach's study differed from some other examples in that the author acknowledged the existence of organizational irrationality. This irrationality is not possible to avoid but may be manageable.

Some researchers supported the findings of Burris and Moss (2006) regarding faculty support for the work of the IRB. Ferraro et al. (2010) conducted a qualitative study regarding attitudes and perceptions of the IRB. In their study, 337 faculty researchers and graduate students, all of whom had previously submitted research to the IRB, completed a survey. The

findings showed faculty researchers perceived the tone of IRB communications was respectful and customer service orientation was satisfactory. All negative evaluations were of IRB communications containing requested revisions to submissions; more faculty researchers than graduate students found the IRB process to be unsatisfactory or very unsatisfactory. On the question, "Do you think that the IRB has treated you fairly?" all graduate students responded they were treated fairly, and 12% of faculty respondents felt that they had not been. On the question of whether the IRB impeded research, 16% of faculty and 11% of graduate students responded that the IRB did impede research. While the results showed that the opinions and beliefs of graduate students could differ from those of faculty researchers, a limitation of the findings was that this study took place at a single institution. Therefore, the results may have reflected the norms of the specific organization at that time and may not be generalizable.

All IRBs work under the same federal rules and guidelines; however, there can be variation in each institution's interpretation, local policies, and procedures. Differences in policies result in a wide range of views toward IRBs because each IRB operates distinctly. Kramer et al. (2009) explored how IRB communications impacted faculty researchers' feelings and reactions. A total of 426 respondents completed a survey, which was composed of four research questions. The authors found that faculty researchers' attitudes toward the IRB were "neutral to slightly positive" (p. 507). Typically, faculty researchers assumed their studies posed minimal risk to participants and they could effectively protect subjects without IRB oversight. Faculty showed greater satisfaction with the IRB when communication was timely, and IRB requests for information were viewed as pertinent to protecting participants. Additionally, researchers reported greater open communication and compliance with the IRB if their department was supportive of the function of the IRB. If faculty was convinced that the IRB was

necessary to protect the rights of human subjects, then their trust in IRB was higher and they were more likely to be compliant. This finding demonstrates that the organizational culture and norms of a department are positively related to compliance. However, because Kramer et al. (2009) limited the study participants to the field of communications, the findings may not be generalizable.

Consistent with other results describing the positive views of researchers toward IRB, Wisner et al. (2011) found that faculty researchers perceived IRB review positively and may foster public trust, a theme not previously reported in earlier studies. In this study, participants were members of the American College of Neuropsychopharmacology (ACNP), and these researchers invited the membership to complete an anonymous survey rating members' IRB experiences. Among these respondents, 75% held that the IRB review enhanced protections and 66% of respondents indicated that the existence of an IRB strengthened public trust for research. Participants' positive comments also included an appreciation for IRB reviews that provided a comprehensive consideration of issues. These identified findings supported the idea of positive benefits and the idea that the relationship between faculty researchers and the IRB was collaborative. The negative comments corroborated themes found in other studies, including regulatory overreach, administrative burden to complete paperwork, time in obtaining review and approval, and disagreements with required modifications for approval. Limitations identified for this study were that the sample population came from a specialized professional organization, and there was a low response rate; these factors could make the findings less generalizable.

Researchers have taken many different approaches when interacting with the IRB. For example, Cartwright et al. (2013) studied the methods used by funded researchers to navigate the

IRB process. These authors conducted an empirical study of researchers involved in palliative and end-of-life research to learn about the individual strategies utilized when working with the IRB. The authors found that participants used four strategies for successfully working with IRBs: (a) cultivating a positive relationship with IRB staff and members; (b) managing bureaucracy by anticipating the process and learning from peers about successful submissions, and influencing the review process by becoming IRB members; (c) avoiding conflict or overwhelming the IRB by reducing details in a submission and increasing pertinent factual information about the research; and (d) when working with multiple IRBs, working with the local IRB for onsite help. Respondents who worked with multiple IRBs indicated that the differences in tone and feelings among IRB communications likely reflected the amount of effort by the IRB staff to build respectful and personal relationships with faculty researchers and foster collaboration. Although restricting the population to faculty researchers involved in palliative and end-of-life research is a study limitation, collaborative working relationships are known to be elements of successful relationships (Mattessich & Monsey, 1992). Efforts to market and build relationships come at a cost because they add to the job functions of the IRB staff and not every staff member has the capacity and resources to make such efforts; the IRB must weigh the opportunity cost (Klitzman, 2012). The benefits of these efforts are not only increased trust and collaboration but also researchers may gain awareness of ethics in research (Burris & Moss, 2006). Although most of the strategies identified were proactive in nature, two negative strategies are (a) intentional deception through reporting too much detail such that it becomes overwhelming for IRB review and (b) omitting information.

While positive attitudes and findings of a harmonious relationship appear in the literature, these results are few and often found as part of mixed attitudes about the IRB process. The studies presented in this literature review have limitations, which include low response rates and narrow study populations; thus, some of these findings may not be generalizable. Themes that are generalizable include fostering collaboration as an element of a successful working relationship and the positive correlation between the organizational culture of a department and compliance. The theme related to organizational culture as correlated with compliance aligns with Kohlberg's theory. In Kohlberg's stage three (i.e., the conventional level), an individual seeks to conform to his or her role and match attitudes and behaviors with those of a larger group. In this study, faculty researchers were the role models and the university department was the larger group.

**Negative discourse.** Aspects of negative discourse are more abundant than positive discourse in the literature when examining the relationship between faculty researchers and the IRB. Five themes concerning this working relationship emerged from this review of the literature. The themes were bureaucracy, communication barriers, mission creep, board orientation, and faculty researchers' reactive responses. I present the themes in no specific order.

*Bureaucracy*. Bureaucracies work under rules and regulations and, according to Babb, Birk, and Carfagna (2017), bureaucracies have standardized communications and methods of decision-making to be efficient. For the IRB, bureaucracy is a necessity. The IRB staff must use regulations and develop a method for tracking and documenting assessments and determinations; the administrators must document the decision-making process (Heimer & Petty, 2010). According to Heimer and Petty (2010), this is inevitable as IRB staff report to other bureaucracies: the university and the OHRP. However, these bureaucracies contribute to disharmonious relationships with those whom they serve.

To understand how IRB staff react to disharmony relationship with faculty researchers, Klitzman (2012) conducted interviews with 46 IRB chairs, directors, administrators, and members from 34 IRBs concerning their interactions with faculty researchers. The interviews included the method of interaction and the tone and formality of discussions. From the results, Klitzman identified four major categories of interactions: protocol review, IRB meeting, memos to researchers, and researcher outreach and education. The methods of interaction varied by IRB, and many of the IRB staff had reasons for the method they used. One institution mandated that the IRB reviewer should reach out to faculty researchers to address questions or clarifications. In another IRB organization, administrators opted to keep the IRB reviewer anonymous with the goal of reducing the potential for friction among reviewers and their peers. However, these IRB members acknowledged that this might make the process clinical or cold. One university IRB encouraged faculty researchers to attend IRB meetings. Although faculty participation might encourage faculty to immediately address their questions and needs for clarification, their attendance also could negatively affect the openness of dialogue at meetings. The results showed that IRB staff outreach and efforts to build positive relationships with the faculty led to a trade-off of time and effort in other activities, which may escalate tension in another area. Klitzman found that faculty sometimes view IRBs as bureaucratic and cold whether or not the IRB staff make efforts at outreach and relationship building. The description of the IRB as bureaucratic is accurate because IRB organizations fit the definition of bureaucracy; that is, IRBs have codified rules and regulations (Kramer et al., 2009). Klitzman suggested IRBs have evolved into overly bureaucratic organizations. Cartwright et al. (2013) supported this an idea and added that the focus of IRBs has shifted from human subject protections to the accuracy and completeness of paperwork.

In an analysis of narratives, Bach (2005) focused on communication research and IRBs and found that in any bureaucratic system, those who depend on the bureaucracy for their organizational survival are in a position of lesser power. In the case of the IRB and faculty researchers, faculty researchers hold less power (Bach, 2005) than IRB administrators. Bach contended that the bureaucratic climate associated with an IRB could result in faculty the feelings of "othering," disempowerment, and disenfranchisement. Bach recognized that the irrationality expressed by those in bureaucratic organizations is unavoidable; however, staff in such organizations should determine ways to mitigate the negative consequences of irrationality associated with compliance with federal regulations.

Musoba et al. (2014) characterized the IRB bureaucracy as having an imbalance of power. Musoba et al. used a case study to examine narratives from their IRB experiences when submitting approximately 30 studies. In support of Bach's (2005) findings, Musoba et al. contended that in any discussion between faculty researchers and the IRB staff, there is a power disparity and the power resides with the IRB staff. Musoba et al. offered no solutions involving changes on the part of the researchers. Assigning responsibility in this way exemplifies the notion that faculty researchers associate tension between themselves and the IRB staff as solely due to the behavior of members of the IRB.

Faculty researchers often view IRB staff as the source of tension even if they have some understanding of competing demands placed on the staff. Martin and Inwood (2012) reviewed the literature to examine specific instances in which the priority of an organization's IRB is not the protection of research subjects. These misplaced priorities may result from the conflicting goals of protecting the institution from risks associated with negative publicity, loss of public trust, and other perceived risks to the institution. In one of the narratives reviewed, participants expressed their belief that the IRB members had overly regulated their research plan. They characterized IRB procedures as bureaucratic and staff as overzealous in their efforts to minimize all risk to the institution. Moreover, they viewed the IRB efforts as not effectively balancing acceptable risk with the potential for generalizable knowledge. Martin and Inwood suggested that it is necessary for universities accept some levels of risk to achieve their mission. The idea of a bureaucratic distance among the IRB, faculty researchers, and the research populations was also a concern; the faculty suggested that the distance impacted the IRB staff's ability to review the research. Martin and Inwood also found that, for some researchers, the distance between faculty researchers and the IRB was such that they viewed their interactions with the IRB as transactional and dehumanizing. Some expressed that they should receive the same respect and consideration as given to research participants. Even when faculty researchers understand the competing interests and demands placed on the IRB, their feelings are the same as those who do not have this understanding.

Burke (2005) examined the issue of distance as a requirement from a regulatory viewpoint. Burke contended that regulations requiring distance are meant to provide perspective on the research, but regulation can contribute to disharmonious relationships between faculty researchers and staff. Distance was a source of problems when assessing research and could lead to negative communications and feelings from faculty researchers. Burke found that communication barriers could be operational, and issues of the tone of correspondence increase as the workload of the IRB staff increases.

*Bureaucratic communication.* For reasons of efficiency, staff working in a bureaucracy typically use standardized communication and decision-making methods. Carline, O'Sullivan, Gruppen, and Richardson-Nassif (2007) identified methods to improve relationships in a study

conducted with representatives from 16 schools and one health service agency. The findings showed that successful relationships required three things: (a) efforts to educate the IRB and the researchers, (b) establishing and maintaining good communications and trust, and (c) structures and procedures to guide faculty in obtaining faster reviews and more satisfaction.

The dynamics of how communication is perceived depends on how individuals view others with whom they are exchanging communications and the balance of power held by each exchanger. According to social power theory, there are five bases of organizational power with the potential for agents to use and effect change in attitudes, beliefs, norms, and behaviors of others in an organization (Pierro, Raven, Amato, & Belánger, 2013). These five power bases are reward power, coercive power, legitimate power, referent power, and expert power. Coercive power and reward power are the perceived ability to monitor and provide positive or negative consequences based on conformity. Legitimate power is having organizational authority; an agent has the power to prescribe behavior based on her position. Referent power is power attributed to the agent based on her organizational association with an individual who has legitimate power. The final power is expert power, which depends on an agent having special knowledge or skills needed by others within the organization. According to Pierro et al. (2013), legitimate, referent, and expert power do not require continuous monitoring for conformity. How faculty researchers perceive the power of the IRB influences how they receive communication and the commitment to compliance.

Poor communication may contribute to instances of intentional noncompliance. In a case study, Keith-Spiegel and Koocher (2005) explored how interactions with the IRB could increase the potential for intentional deceit by researchers. The authors suggested that brisk correspondence can be part of interactional justice. If a researcher receiving negative news felt the IRB staff treated him or her with dignity and respect, it could change the researcher's perception of the person or organization providing the outcome (Keith-Spiegel & Koocher, 2005).

However, communication is more than the tone of correspondence. Enhanced communication includes a description of the IRB process and procedures made available to faculty (Carline et al., 2007). Some faculty researchers expressed a need to know how the IRB operates and how they review research (Babb et al., 2017; Burke, 2005; Griebling et al., 2009). Faculty researchers seek transparency in IRB determinations (Lynch, 2018). In a qualitative study of researchers and IRB members from the University of Cincinnati, faculty expressed frustration about the inconsistency in reviews; they noted that some protocols with particular research designs, methods, and populations received approval, and others that were similar did not (Griebling et al., 2009.) Using 13 years of experience as an IRB member, Burke (2005) conducted a literature search on this topic and concluded that if IRBs were more transparent, the process would be easier for faculty researchers. Specifically, faculty need to know how the IRB reviews material and what the IRB expects in submissions. Burke suggested that if these needs were met, then faculty could improve their submissions and contingencies for approval. This lack of transparency from the IRB and researcher unawareness of requirements for submission may create a feeling of blind justice for the researcher and lack of recourse for appealing negative decisions. Moreover, if there is increased transparency, it may improve the reputation of the IRB (Lynch, 2018) and result in greater compliance (Spellecy & May, 2012).

Effective communication is more than transparency. Drawing on years of service as an IRB chair, Fitch (2005) responded to the call for transparency by citing a need for faculty to read instructions for submission and correspondence from the IRB. Fitch contended that the

information is there, but the faculty do not appear to be taking advantage of the information available to them. Fitch's opinion was corroborated by IRB members in Griebling et al.'s (2009) study, who stated that some faculty researchers do not follow instructions or they submit incomplete material. When the information was present but faculty researchers were unaware or not accessing it, the faculty might still consider the communication ineffective.

Successful communication also requires a level of openness between parties. In a study designed to explore how IRB communications impacted the faculty researcher, Kramer et al. (2009) found faculty researchers viewed successful communication as related to the state of openness or closeness of the IRB. Participants considered the IRB to be open if the IRB responded to questioning and feedback from faculty researchers in an accepting and receptive manner; conversely, they considered IRBs as closed if they were not receptive to feedback or were unwilling to entertain questions about determinations (Kramer et al., 2009). Kramer et al. contended that openness fosters a climate in which faculty researchers are more likely to comply with IRB policies, and faculty researchers reported greater open communication if they perceived their department as supportive of the function of the IRB.

Faculty researchers' perception of IRB openness is limited by their own responsiveness and willingness to engage with the IRB beyond the minimum required. Griebling et al. (2009) found that faculty researchers' tension and conflict with the IRB were due to their perceptions of IRB as possessing a coercive power; in this perception, punishment could occur if they challenged or questioned the decisions of the IRB. Bach's (2005) affirmed these findings using an analysis of narratives concerning researchers' communication with IRB. Bach showed that nontenured assistant professors felt compelled to change their research to align with IRB requirements, even if the IRB went as far as to dictate the research design because these faculty
perceived that they could not question or appeal the IRB determinations. Even though the IRB often invited feedback and questions, some faculty researchers may have avoided engaging in potential conflicts for fear of repercussions and negative impacts on future submissions (Griebling et al., 2009). When people feel heard and can appeal decisions, then they are more willing to accept a negative outcome because they have had an opportunity for procedural justice (Keith-Spiegel & Koocher, 2005). Without an opportunity for procedural justice, faculty may perceive the IRB staff as organizational bullies who psychologically endanger faculty and obstruct them from achieving their goals (Carr, 2015).

Effective communication within any relationship requires efforts from all parties to increase trust (Carline et al., 2007). Some faculty researchers have acknowledged that communication is an issue for both the IRB and for faculty researchers (Carline et al., 2007; Fitch, 2005; Griebling et al., 2009). An IRB review should improve the quality of the research, but whether this can be an outcome depends largely on the communication occurring between the faculty researcher and the IRB (Burke, 2005).

*Mission creep.* Mission creep refers to the local requirements that exceed the federal requirements. Institutions have a low tolerance for risk, and when new regulations or issues at other institutions receive press, many institutions respond by acting defensively and implementing new local requirements. The local institution can require adherence to local policies whenever human subjects research includes institutional resources (Riordan & Riordan, 2009). Gunsalus et al. (2007) described mission creep as an overabundance of precautions that serve as efforts to protect the institution. As demonstrated historically at multiple institutions, including the University of Oklahoma, Marshall (2003) acknowledged that OHRP can shut down research for violations of human subjects' protections. Even the suspension of a single study at a

university can impact the institution involved, creating local regulatory reactions as well as impacting other institutions not directly involved (Heimer & Petty, 2010). The creation of additional local regulations may come about because under the Common Rule, when a faculty researcher violates the requirements of human subjects research, OHRP enforces accountability through the institution and expects the institution to hold those involved accountable (Rivera, 2017).

Concerns of mission creep have long appeared in the literature. Musoba et al. (2014) conducted a case study to examine the authors' personal experiences of submitting approximately 30 studies to IRBs. A theme from their experiences corroborates previous research (Burris & Moss, 2006; Whitney et al., 2008): Mission creep can occur when IRB suggestions exceed the mandated scope concerning how to design the research. Musoba et al. recommended limiting the IRB function to the assurance of ethical research and consideration of institutional reputation when reviewing research is a type of mission creep. Another theme from this case study was that informed consent requirements by the IRB often exceeded federal requirements; thus, these were another area of mission creep. An example of this was the inclusion of federally required language in the participant consent form for non–federally funded studies.

Griebling et al. (2009) conducted an empirical study to gain an understanding of faculty researchers' and IRB staff's views. The authors explored the relationship between faculty and IRB staff and the committee's approach to reviewing qualitative research at the University of Cincinnati. The findings identified a concern of some faculty researchers: The IRB is exceeding its boundaries by evaluating and questioning research design and methods. Griebling et al. identified an IRB representative's response that the IRB committees were mandated to consider scientific validity as part of the protection of human subjects; faculty researchers may not be aware of this issue. This finding corroborated a result found by Burke (2005), showing some IRB staff believed their responsibility was to identify poor design and protect participants from being part of research that might not produce valid or useful results.

The issue of IRB mission creep contributes to an antagonistic environment and does not serve to protect human subjects (Carr, 2015). Moreover, stakeholders may perceive mission creep as creating barriers for even low-risk research (Bach, 2005). Some institutional policies regarding research that appear to protect institutions add to the tension between faculty and the IRB (Cartwright et al., 2013). These additional requirements add to the administrative burden of compliance (Hamilton, Cola, Terchek, Werner, & Stange, 2011), and stakeholders view them as extraneous (Saleem & Khalid, 2011). Faculty researchers feel that mission creep results in the IRB, knowingly or unknowingly, controlling research types and research methods (Carr, 2015).

*Board orientation.* A common theme found in the literature is faculty researchers' perception that social science research does not require IRB review under the Common Rule. Many faculty believe that the regulations are primarily concerned with medical research. Although it is true that no social scientist was part of the development of the Common Rule (Oakes, 2002), Common Rule regulations do not specifically mention biomedical, behavioral, or social sciences (Amdur & Bankert, 2002). This nonspecificity aligns with the 1966 announcement of Surgeon General William Stewart, in which he clearly stated that both social science and medical researchers required oversight (Stark, 2007). According to Amdur and Bankert (2002), the regulations address the characteristics of risk to research participants and are not specific to the type of research; moreover, the potential for social harm to participants is just

as much a threat to the rights and welfare of participants as other harms such as physical threats or loss of confidentiality.

Many faculty researchers believe that IRB administrators set up reviews primarily structured for medical research because it is higher in risk. The design of these submission processes results in excessive paperwork to document the assessment of potential risk to research participants and mitigation of risk (White, 2007). The application of biomedical guidelines and protections to minimal-risk studies in other disciplines is a constant source of frustration (Kramer et al., 2009). Many faculty researchers who perform minimal-risk research advocate for a more streamlined, less rigorous, and less time-consuming review option for their research (Burris & Moss, 2006; Fitch, 2005).

Under a biomedical framework, the IRB requirements conflict with some types of social science research, such as action research. Additionally, these requirements may impose a greater risk for social science research participants by creating a loss of confidentiality through record retention requirements (Carr, 2015; Griebling et al., 2009). Continuing the example, action research uses a progressive, participatory problem-solving approach, which means that the design is fluid; therefore, it is difficult to predict on initiation how the research will evolve, and the nature of this approach is confounding for IRB committees, which require an articulated research plan as a condition of approval (Griebling et al., 2009). IRBs are often most comfortable with a fulsome description of the research, identified risks, and plans for mitigation of risks (Martin & Inwood, 2012).

Some believe that the composition of IRB committees is heavily biomedical. Fitch (2005) analyzed anonymous narratives submitted to a journal call for submissions concerning difficult interactions and experiences with the IRB. Fitch identified two key themes: (a) IRB

interactions with social science faculty researchers are problematic at many institutions because forms and policies are often designed for biomedical research and (b) IRB members do not understand social science research methods and design. Bach (2005) found that faculty believed that IRB composition contributed to the priorities and methodological bias in IRB decisionmaking. Cartwright et al. (2013) supported this idea through the identification of a method utilized by some successfully funded researchers who exert influence on their local IRB review process and understanding of their research area by becoming IRB members, increasing the IRB knowledge of behavior and social science and qualitative research.

An IRB committee may not contain members who understand nonbiomedical types of submissions, such as social science or behavior, and this can negatively impact the reviews (Carline et al., 2007; Cartwright et al., 2013). In an IRB that is composed largely of biomedical faculty who may not understand methods used by a social scientist, due to unfamiliarity, some IRB members might not ask appropriate questions for the research methods (Carline et al., 2007). Many faculty researchers contend that the composition and the design of the review contribute to a slowdown of research progress, which directly impacts and impedes contributions to science (Burris & Moss, 2006).

*Faculty researcher reactive responses*. As previously discussed regarding bureaucratic communication, there is a consensus among researchers as to a call for transparency regarding IRB policies and decision-making as well as increased and faculty understanding of IRB decision-making. If faculty researchers have an adequate understanding of IRB procedures and decision-making, it can result in better-written submissions that contain the elements required through IRB review. Addressing IRB issues from the committee and faculty viewpoints is consistent with proactive goal-oriented behavior as detailed in the dual mechanism of control

model of the cognitive control strategy. According to this model, cognitive control is either proactive or reactive (Braver, Gray, & Burgess, 2007). Braver et al. (2007) stated that proactive approaches are more effective in achieving goals or tasks but require more planning and work, whereas the reactive approach is responding to an event after it occurs, and reminders of the event can precipitate reactive behaviors. In the following section, I discuss faculty researchers' reactive behaviors and possible contributing factors.

A recurring theme in the literature is that IRBs can create professional harm to faculty researchers. Three components are used to evaluate faculty in tenure-track positions: teaching, research, and service. These three components create pressure for faculty to have active, original research (Florczak & Lockie, 2015). As such, research becomes a part of a faculty member's identity, and IRB decisions regarding faculty research reviews can directly impact their career and confidence (Keith-Spiegel & Koocher, 2005). Repeated negative interactions with the IRB not only affect professional development but also may harm faculty researchers' morale and negatively impact their belief in their ability to successfully perform job requirements (Carr, 2015).

When faculty researchers perceive criticism of their work, they often feel a sense of righteous indignation; some faculty researchers blame the IRB rather than considering that the IRB application was poorly constructed (Keith-Spiegel & Koocher, 2005). Bach (2005) found that when asked atypical questions about their IRB submission, faculty researchers engaged in organizational irrationality as a means to save face. This finding by Bach that a sense of self is not limited to an individual's work identity is consistent with findings by Sluss and Ashforth (2007).

This psychological effect may explain why, when the IRB members question research studies, some faculty researchers feel personally attacked. Carr (2015) found that faculty researchers who had had negative interactions with the IRB reported negative impacts on their self-esteem and productivity. Less productive faculty researchers also reported lower levels of morale. Carr contended that due to the imbalance of power, the IRB qualifies as an organizational bully, which may result in negative consequences for faculty. The negative consequences for the faculty researcher include limiting research topics or designs and obstructing the ability to conduct research, limiting their ability to meet the job core component of conducting original research.

Similarly, an employee's perception of negative consequences, the perception of being treated fairly or unfairly, is organizational justice. There are three types of organizational justice: procedural justice, distributive justice, and interactional justice. Procedural justice is an employee's perception of method fairness used in the allocation of resources. Distributive justice concerns perceptions of the fairness of outcomes and the allocation of resources such that those who contribute more should receive more. Interactional justice refers to the perception of individuals' treatment during the decision process (Nwokolo, Ifeanacho, & Anazodo, 2016). Associated with interactional justice, there are two types of treatment for individuals: interpersonal justice, which refers to perceptions of receiving dignity and respect, and informational justice, which refers to the sharing information used in decision-making. A researcher's sense of organizational justice can affect a faculty researcher's behavior in relation to the IRB.

White (2007) explained that some faculty researchers employ IRB avoidance techniques and design their research to receive minimal scrutiny. However, even faculty researchers who put forth the utmost effort to self-censor may still face some degree of scrutiny by the IRB (Lynch, 2018). When employees believe that there is unfair treatment or prejudice in their scrutiny, organizational justice can predict a positive correlation with increased instances of employee misconduct (Keith-Spiegel & Koocher, 2005). When faculty researchers feel treated unfairly, some react by rejecting the control of the IRB and actively circumventing either the review process or a fulsome review (Bach, 2005). These faculty researchers either find ways around the rules or convince themselves that the rules do not apply to them.

There are known behaviors that are engaged in when faculty researchers reach the mentality in which they believe that rules do not apply to them. Behaviors that faculty researchers acknowledged engaging in were evasiveness in answering questions, intentionally overwhelming the IRB with detail, not providing all details of the study to the IRB, and starting or conducting research without approval (Cartwright et al., 2013; Keith-Spiegel & Koocher, 2005). Passive resistance behavior of providing incomplete information was also found in Babb et al.'s (2017) study of 26 sociologists from universities and colleges across the United States. Although Babb et al. did not specifically ask about evasion behaviors in their interviews, 11 respondents reported an awareness of evasive behaviors toward the IRB rules by students or peers. Additionally, 6 respondents reported their evasion of IRB rules. Others have felt justified in acting evasively and dishonestly by taking risks not expected to impact participants (Cartwright et al., 2013).

Tartaro and Levy (2015) conducted a study of 397 criminal justice faculty regarding IRB compliance and satisfaction. Of the respondents, 18.6% admitted to collecting data before obtaining IRB approval, 26.7% said that they made minor changes to the consent form without approval, and 3.6% had made major changes to the IRB-approved research design without

seeking approval. To prevent scrutiny of the IRB to the study, 3.7% admitted to withholding information from the IRB, either in the form of being intentionally vague or intentionally leaving information out (Tartaro & Levy, 2015). Respondents who engaged in this type of noncompliance behavior reported greater dissatisfaction with IRB.

There are consequences of selective compliance behaviors. According to Carr (2015), faculty researcher beliefs about the IRB may cause a loss of innovative and novel research because some feel a loss of academic freedom. Moreover, some portion of faculty researchers might abandon research. Florczak and Lockie (2015) suggested that researchers' avoidance behavior could curtail studies on topics related to societal problems. Avoidance behavior not only negatively impacts faculty researchers but also comes with a social value cost in lost knowledge (Burris & Moss, 2006).

In addition to a disregard for rules, another consequence of IRB bullying is the lack of confidence among faculty researchers. In a study by Wisner et al. (2011), the ACNP membership was invited to complete an anonymous survey rating their experiences with an IRB. Approximately 26% of respondents said that they had not pursued some research because they perceived that the IRB would not approve; for example, some respondents suggested the type of study or IRB staff unfamiliarity with the methods might lead to rejection of the study (Wisner et al., 2011). Along with a loss of confidence in themselves, many faculty researchers felt a lack of confidence in the IRB process itself. In a survey of 204 researchers, Stryjewski, Kalish, Silverman, and Lehmann (2015) found 36% reported declining to pursue clinical research to avoid the IRB process, which may be onerous. Babb et al. (2017) had similar findings. These studies supported the belief that some faculty researchers' views about the IRB result in their limiting types of research to pursue.

The problem of behavioral control among faculty researchers stretches beyond their relationship to themselves. In the higher education context, interpersonal relationships are relationships with other faculty and departmental peer groups (Keith-Spiegel & Koocher, 2005). Some faculty researchers share their frustrations about the IRB with their peers, seeking to malign or undermine IRB authority, or engage in retaliatory behavior against individual IRB members because of feeling personally insulted (Keith-Spiegel & Koocher, 2005; Keith-Spiegel, Koocher, & Tabachnick, 2006). In some instances, the IRB takes the blame instead of faculty researchers acknowledging poor submissions (Bach, 2005). Research shows that this type of blame-shifting behavior helps some to restore an individual's self-image and confidence (Keith-Spiegel & Koocher, 2005). However, no research exists concerning the effects on those who witness this reactive behavior.

#### **Graduate Students' Informal Learning**

The focus of the literature reviews up to this point has been to gain an understanding of the relationship between faculty researchers and the IRB to learn about the norms, beliefs, and underlying assumptions that faculty researchers have about the IRB to understand the types of cultures that may exist. This section focuses on a discussion of the influences of faculty attitudes on graduate students. This section contains an introduction to Schein's model of organization culture, an introduction to workplace deviances and negative workplace deviance causes, and an examination of the literature to form an understanding of the influence of faculty attitudes on graduate students.

**Schein's model of organizational culture.** According to Schein (1984), an organization's culture refers to the basic assumptions, values, and norms that members of the organization have successfully used and that a group uses to deal with the external environment

and the integration of internal practices to ensure continued survival. As these practices have previously worked, the group considers the culture as valid. Newcomers to the organization must work to adjust to and adopt the culture to belong, as people have an innate need for consistency and while they are unadjusted, there can be feelings of stress. This may be difficult, as there are three levels in an organization: artifacts, values, and assumed values. Assumed values are those that are unmeasurable and, therefore, may be unwritten but still impact an organization. Within an organization, there are subcultures that possess the values of the broader organization along with the additional values and norms of the subcultures (Schein, 2010). Examples of subcultures are workgroups, jobs that function across multiple departments, or departments. Schein (2010) advised that if subcultures do not align, there may be problems erroneously attributed to other causes, such as personality conflicts or bureaucracy.

**Negative workplace deviance causes.** In a review of the literature, Appelbaum, Iaconi, and Matousek (2007) found that workplace deviance has two dimensions that each range from minor to serious: organizational and interpersonal. Organizational deviances are those behaviors between the organization and the individual. Interpersonal deviances are behaviors between individuals within the organization. Appelbaum et al. (2007) contended that while there are multiple causes for negative deviant behavior, the largest cause is an organization that encourages and fosters negative deviant behavior. This may occur because of employees who have values and norms that do not align with those of the organization or poor management. Other causes cited included role models who engage in negative deviant behavior that influence others to act similarly, organizational culture, employee perception of organizational injustice, and situational factors.

Faculty influence on student attitudes. Graduate school is a time of socialization in which individuals learn the skills and norms needed for membership in the society and culture of one's discipline (Gardner & Barnes, 2007). Socialization begins during the learning period in which people assume the values and attitudes of the group that they seek to be part of (Anderson & Swazey, 1998; Austin, 2002; Lechuga, 2011). In the field of higher education, this socialization mainly occurs within one's department. Socialization occurs in a variety of ways, one being formal or informal mentorship. Mentoring is a relationship between two people in which a mentee observes a more skilled, experienced person to gain an understanding of how to succeed in a field (Curtin, Malley, & Stewart, 2016; Gammel & Rutstein-Riley, 2016; Holley & Caldwell, 2012). The mentor has authority and power, and this encourages the student to model her actions (Gammel & Rutstein-Riley, 2016). Curtin et al. (2016) suggested that mentees learn implicit and explicit knowledge from mentors. Transfer of such a wide range of knowledge is due to graduate students observing and learning from each action and attitudes of their mentors, from formal lectures to casual remarks (Austin, 2002).

The hidden curriculum is a side effect of education in which the students learn unintended lessons, which include norms, values, and viewpoints (Çobanoglu & Engin Demir, 2014). These are lessons learned without the conscious knowledge of either instructor or learner (Harding-DeKam et al., 2012). As the lessons are unconscious and socialized, they do not undergo examination; however, these are power-filled lessons and convey information to students regarding the accepted organizational values and behaviors (Killick, 2016). According to Çobanoglu and Engin Demir, students accept these norms to conform to expectations within the learning environment, and the influence on students can be both positive and negative learning. Hidden curriculum has worth to students, but as based on their biases, educators can transmit ideas of less value (Killick, 2016).



*Figure 2*. Key features of the hidden curriculum. Adapted from "The Visible Side of the Hidden Curriculum in Schools," by R. Çobanoglu and C. Engin Demir, 2014, *Ilkogretim Online*, *13*, p. 778. Copyright 2014 by Ilkogretim Online. Reprinted with permission.

While research into the hidden curriculum is growing, there is limited research on higher education hidden curricula, with research on doctoral students containing the least information. Harding-DeKam et al. (2012) utilized focus groups to examine the hidden curriculum in doctoral advising. Findings included that doctoral students might be more vulnerable to the hidden curriculum due to a loss of confidence in their new role as doctoral students and their desire to fit into the culture of the academic department (Harding-DeKam et al., 2012). This insecurity contributes to students' willingness to adopt their educator's attitude and other unintended lessons (Harding-DeKam et al., 2012). Doctoral students sometimes seek to demonstrate that they have the accepted knowledge and norms of the faculty to prove their competence in the discipline. Austin (2002) suggested that an individual's understanding of her career does not commence upon her first faculty position but rather during graduate school.

**Graduate student emulation of faculty attitudes.** The transfer of norms and attitudes about the IRB from faculty researcher to graduate students a known phenomenon shown in research findings. Shore (2009) found that when faculty researchers shared negative feelings and perceptions about the IRB with their graduate students, graduate students might expect their own experiences with the IRB could also be difficult. Many graduate students were afraid when approaching the IRB, having heard terror stories from others (Burke, 2005). Kramer et al. (2009) asserted that graduate students emulate their mentors and form their opinions and expectations of the IRB based on what they hear from faculty researchers; the faculty researcher attitude toward the IRB shapes the attitudes and behaviors of graduate students. Emulation is due to graduate students' susceptibility to assuming the norms of faculty researchers due to a need to integrate into the department (Harding-DeKam et al., 2012). Faculty researchers must

think about their attitude about the IRB and how they express it as they may be examples for students (Kramer et al., 2009).



*Figure 3*. Model of faculty researcher-IRB relationships and university communication climates. Adapted from "Faculty and Institutional Review Board Communication," by M. Kramer, V. D. Miller, and S. Communi, 2009, *Communication Education, 58*, p. 509. Copyright 2009 by the National Communication Association. Reprinted with permission.

Negative attitudes by faculty researchers can influence behaviors by students and may be a cause for noncompliance in future faculty researchers (Kramer et al., 2009). In Babb et al.'s (2017) study of 26 sociologists from universities and colleges across the United States, faculty researchers spoke of the need to be evasive in an effort to get their research approved and how "in a really insidious way, it's teaching [graduate students] to lie" or engage in other noncompliant activities (p. 96). If graduate students accept these norms as their own, they can take them to other institutions or workplaces. A few bad or deviant employees can influence the entire workplace (Boddy, 2014). If peers observe or learn of poor behavior by an employee, that results in a positive consequence; these bad examples may influence these peers to adopt or modify their behaviors (Robinson et al., 2014), potentially contributing to a culture of increased risk and noncompliance.

A transfer of norms from faculty researchers to students is not preventable. However, awareness and education can counter the effect of such a hidden curriculum, as can the stated endorsement of norms and values (Çobanoglu & Engin Demir, 2014). Research has shown that faculty researchers have improved communication and compliance with the IRB if the organizational culture of the department supports the function of the IRB (Kramer et al., 2009); this supports that the learning of norms and values can occur from the social environment.

## **Revised Federal Common Rule**

The revised Common Rule was set to become effective on January 21, 2019. The revised rule reduced the administrative burden on researchers by expanding the categories of research that qualify for exemption from the regulation and offers guidance for types of activities that do not meet the definition of research (Coleman, 2017). However, the revised rule did not align the Common Rule with the FDA practice of holding faculty responsible for noncompliance. Rather, when a faculty researcher violates the requirements of human subjects research, OHRP continues to enforce accountability through the institution (Rivera, 2017). Because accountability remains with the university, how local institutions handle new regulations can vary, especially regarding exempt research and limited IRB reviews. Some may choose to implement a more restrictive institutional policy that exceeds the federal guidelines to lower risk to the institution. If faculty researchers' perceptions and attitudes evolved with the revision of the Common Rule, then

concerns of passing norms to graduate students might minimize over time. Although the research community views these changes as positive, none of the revisions directly impact the five identified themes on the tenuous working relationship between the IRB and research faculty presented in this chapter. For this reason, organizational culture and its impact on graduate students' norms remain a concern for investigators. The goals include exploring (a) how positive and negative attitudes are transmitted to graduate students, (b) how they enculturate themselves as researchers, (c) and how we can work to encourage more positive development.

## **Summary**

Higher education institutions are subject to the investigation and oversight of the Department of Justice fraud section and subject to the Federal Sentencing Guidelines for Organizations (Kaplan & Lee, 2014). Currently, there are an estimated 265 federal statutes to which higher education institutions must adhere; these include the regulations for human subjects research (Turner, 2018). Higher education organizations have the motivation for effective versus a symbolic compliance program, as section 8B2.1 of the sentencing guidelines provide for credit that lessens culpability if there is an effective program (Bezanson & Kopp, 2017). Components of an effective compliance program are an organization's efforts to hold its employees accountable for misconduct and the analysis of the cause of misconduct and mitigation of risk (Paul, Weiss, Rifkind, Wharton & Garrison LLP, 2017).

There has been considerable research into the relationship between faculty researchers and the IRB, which serves to identify themes of discourse and types of intentional and nonintentional faculty noncompliance. This literature provides insights into possible causes and how to mitigate some types of noncompliance. However, there has been little research regarding the novice faculty's expectations and perceptions of the IRB before they interact and go through the process. Furthermore, researchers have called for more research concerning whether these perceptions could change based on researchers' experiences and what factors may have influenced these expectations and perceptions.

Kohlberg (1976) stated that values, norms, and moral development are formed from social and environmental influences. Kohlberg contended that moral judgment is based on how a person reasons and perceives justice, not the judgment itself, and that the core of the "moral component of moral judgment is a sense of justice" (p. 201). Environment and organizational culture are known to influence and bias perceptions and attitudes. Departmental knowledge and awareness of faculty predispositions can counterbalance the bias transferred unintentionally to graduate students. But first, researchers should learn about the impact on novice doctoral researchers when faculty model the two types of cognitive control: proactive and reactive.

#### **Chapter 3: Research Method**

The purpose of this qualitative study was to explore novice researchers' attitudes and perceptions of interactions with the IRB, both before and after their actual IRB experiences. I chose a qualitative case study methodology as I wanted to understand their perceptions and attitudes with the IRB and to allow participants to reflect on their prior beliefs and expectations and to juxtapose those thoughts with what they experienced, in order to gain knowledge of how students developed these beliefs and understandings. The study design was a single case study with embedded units. I collected data using questionnaires from a sample of participants who were novice researchers with the goal of exploring participants' expectations and perceptions. Participants for the study came from Facebook social media groups that are for current or recently graduated doctoral students. I used three procedures for coding to explore participants' perceptions and developing emerging themes related to these research questions:

**Q1.** What were the student's expectations and perceptions of the IRB before they began the IRB process?

**Q2.** How do students describe the sources of their perceptions or attitudes toward the IRB?

Q3. How was the experience different than the expectation and perception?

# **Research Design and Method**

The nature of qualitative research is to understand how people interpret situations and events, without necessarily restricting the data to predetermined categories for analysis (M. Patton, 2002). Qualitative research is useful for understanding a phenomenon and allowing for themes to emerge from the data in a way that could not be predetermined (Glaser, 2004). Rather than limiting participants' thoughts and points of views into numbers or highly structured, measurable responses, qualitative researchers utilize a framework in which participants can share their point of view, allowing for greater depth of information (L. Patton et al., 2016).

The case study had embedded units within the context of higher education, allowing for participation by three types of students. The embedded units were the three types of programs in which students may be enrolled: those that are completely online, those in a traditional classroom, and hybrid programs. The boundaries of this study were data collection from individuals who were either current or recent doctorate students (graduated less than 1.5 years ago) and had submitted two or fewer studies to the IRB.

I used a case study design because the study goals were exploratory in nature. These goals included understanding the perceptions and perspectives of participants with knowledge of a specific phenomenon; furthermore, I could not control or manipulate the perceptions or behaviors of participants (Yin, 2009). Asynchronous interactions with study participants allowed for the discovery of informal and relevant information that may not be possible using a quantitative survey (Miles & Huberman, 1994). Using this method, I collected data through a qualitative questionnaire and utilized coding and categorization to identify concepts, themes, and theories about the topic under study. I also considered and interpreted explanations for the basis of perceptions and attitudes. The findings were not expected to be generalizable but may provide naturalistic generalization for the reader by providing insights into the population, which the reader may apply to her own context.

## Population

The population consisted of U.S. doctoral students within 6 months of completing their coursework (who had only their dissertation to complete) or novice researchers (who had attained their doctorate less than 1.5 years ago) who had submitted two or fewer studies to the

IRB. An inclusion criterion was active participation in Facebook groups geared toward doctoral students and doctorate holders, as this was where recruitment occurred. An exclusion criterion was if an individual had participated in IRB submissions for nondoctoral work (e.g., as part of a research team, as a study coordinator, for a bachelor or master degree, etc.). I chose these parameters to have a low rate of memory decay so that responses to the questionnaire could be as accurate as possible.

# Sample

I used purposeful sampling to recruit participants through social media sites intended for doctoral students or graduates. Purposefully sampled participants have the knowledge to help explain the phenomenon of interest (Palinkas et al., 2015)—that is, how graduate students develop perceptions of working with the IRB. Researchers use qualitative research frameworks to allow participants to provide the details of their experiences and their perceptions of the phenomenon. By selecting qualitative research, I chose to focus on an increase of in-depth responses from participants, which resulted in a reduction in the number of participants for the sake of feasibility (M. Patton, 2002).

In Thomson's (2010) literature review of 100 grounded theory studies, the average sample size was 25. According to Thomson (2010), the recommended sample size is 30; this is consistent with the recommendation of a sample size of 20–30 made by Creswell (1998). Glaser and Strauss (1967) recommended researchers sample to the point of saturation, which is when the data collected stops providing new information and begins redundancy. Yin (2009) suggested that a single case design is a method for drawing causal inferences but does not recommend sample size. I sought a sample size of 25 participants.

Although social media groups can provide access to a substantial number of eligible participants, the response rates can be low for a variety of reasons, including respondents' reactions to an Internet survey as impersonal, frequent requests for participation in surveys, and individuals' time constraints (Anseel, Lievens, Schollaert, & Choragwicka, 2010). The use of a web survey may also negatively impact the response rate; web surveys can have a response rate that is approximately 11% lower than other survey methods (Fan & Yan, 2010). I used a cover letter to reduce the impersonal feel of the method, provided convenient online access to the questionnaire, and made clear to individuals who were members of these groups that there was a need to find respondents.

## Material/Instruments

The data collection was in the form of a written questionnaire. An asynchronous questionnaire was useful for several reasons. The first consideration was the demands on the participants' time. These considerations set up the possibility that scheduling interviews and finding participants willing to give a time commitment of 60–90 minutes for a phone or Skype interview could negatively impact enrollment. Also, the response rate of an email survey can be as high as 70% if the topic is of interest to the population (Yun & Trumbo, 2000). Reading posts about the IRB submission process by group members who participate in Facebook groups led me to assume that this population could give responses and reactions to the IRB experience. Another consideration was that an interactive interview would not necessarily give respondents the ability to be as reflective in their answers as they might have been if there were time to consider their answers. The collection of information through writing can reduce the imbalance of power between the researcher and the respondent, and it has the added benefit that participants can respond at their convenience, thus fostering reflectiveness in answers (Mason & Ide, 2014).

Also, it creates more openness by removing any inhibitions audio recordings may create (Mason & Ide, 2014).

There were three parts in the questionnaire. Part A consisted of close-ended, categorical demographic questions about age, gender, program type, school type, and an individual's progress in a program. Part B contained attitudinal questions, and these were open-ended. The questions in Part C were open-ended and provided an opportunity in which respondents could provide any additional information that they chose to provide on the topic.

To develop the questionnaire, I used two instruments as guides: an instrument developed by Ferraro et al. (2010) and the IRB Researcher Assessment Tool (Keith-Spiegel & Koocher, 2005). These original instruments were close-ended in structure, but questions in this study were open-ended. Although close-ended questions lead to better response rates, open-ended questions allow for richer and more diverse responses; open-ended questions do not create bias in answers in the ways that close-ended questions might (Reja, Manfreda, Hlebec, & Vehovar, 2003). Open-ended questions allow respondents to reflect on their perceptions and experiences rather than limit them to choose from provided answers that may not accurately capture their experiences. Moreover, the use of open-ended questions can allow for the learning of unexpected responses and insights (Fowler & Cosenza, 2009).

#### **Data Collection and Analysis**

With the permission of the administrators of each Facebook group, I posted a recruitment sheet (Appendix B) with information geared toward doctoral students and doctorate holders concerning the purpose of the study. If individuals were interested, they could access the questionnaire (Appendix A) and the consent form (Appendix C) through a hyperlink. With an administrator's permission, these groups were included

- Doctor of Education (EdD) Network, with 2,405 members;
- Doctoral Mom Life, with 1,322 members;
- PhD Women's Network, with 2,211 members;
- PhD/EdD Achievers–Women's Support Group, with 1,174 members;
- Doctoral Dissertation Cohort, with 1,833 members;
- Minority Doctoral Network, Inc., with 2,894 members;
- Latinas Completing Doctoral Degrees, with 4,372 members;
- PhinisheD/FinishEdD (Drs./Future Drs.), with 9,681 members; and
- Chicanx/Latinx PhD & EdD Students of Education, with 551 members.

**Analysis.** I developed a codebook and used it to organize, record, and aid in the interpretation of the data as well as categorize themes (M. Patton, 2002). I used two methods for the codebook: (a) a priori coding for variables and inductive methods and (b) open-ended questions to capture participants' words (M. Patton, 2002). Through these methods of coding, identifying concepts, and relationships, the goal was to uncover novel findings of how students formed and solidified their perceptions and attitudes.

According to Ivankova (2015), the in vivo method of coding is a way of using the voices of research participants. In vivo coding is the identification of phrases or words used by participants that connote emphasis if spoken; the use of effective coding demonstrates an understanding of the participants. Because participants were graduate students or those with newly earned doctoral degrees, the quotes contained no specific information that could make participants identifiable; this ensured little possibility for retaliation based on any negative comments that might occur about their program or faculty in the discipline.

I used open coding to begin the analysis. Using open coding, the researcher can make the first pass through the data and identify concepts (Saldaña, 2009). During open coding, there is no specific focus; the goal is to examine data and identify concepts (Corbin & Strauss, 2008). I used color coding as a starting point to identify concepts emerging from the data. During this cycle, I placed phrases or words identified through in vivo coding into concepts and groups.

Axial coding extends from open coding, and researchers use it to select concepts from which to organize the data (M. Patton, 2002). According to Saldaña (2009), the use of axial coding allows a researcher to further refine and relabel concepts. Axial coding is useful to identify dominant concepts and relate concepts to each other (Corbin & Strauss, 2008). Use of axial coding allows a researcher to take the many groups and concepts identified in open coding and create categories or subcategories (Saldaña, 2009).

**Post coding.** I developed the themes after coding the data; identification of themes is an outcome of coding, review, and reflection (Saldaña, 2009). These themes served as a tool to examine data categories and more closely examine the data. In turn, examining the data through the themes created a better understanding of short codes, which facilitated interpretation. After I solidified themes by associating categories with each one, I discussed how I related these categories to each other and under each theme.

**Interpretation.** I identified themes by finding sources of tension and areas of perceived weakness, particularly for comparisons of positive interactions with other IRBs. By collecting disconfirming information, the information served to deepen the understanding of experiences and viewpoints. This information also helped to highlight differences between positive and negative perceptions and distinguish categories of experiences with the multiple IRBs.

**Methods for establishing trustworthiness.** In qualitative research, there are three types of validity that Johnson (1997) emphasized: descriptive, interpretive, and theoretical. This design met criteria for descriptive and interpretive validity; I performed qualitative methods to gather participants' perspectives, perceptions, reflections, and beliefs and used reflexivity to prevent bias. The chapter contains a detailed explanation of the process followed in the study, including replication logic and theoretical validity.

**Researcher's role.** I have a history of working in research compliance and 12 years of experience serving as an IRB member. I recognized that I might be biased against faculty due to some negative interactions with faculty in the past. To help counteract this, I chose an anonymous written questionnaire data collection method to remove myself from the interview dyad. I worked to allow reflexivity, which is the use of systematic examination of self by the researcher during the entire research process to ensure objectivity and to separate personal biases and preconceived notions from data analysis.

To reduce bias, I disclosed my involvement with IRBs to potential participants. Because these participants have experience with the dissertation process or have recently completed a dissertation, they understand the need for nonbiased research. Transparency with these particular research participants may have also served to allow them to recognize and name biases that they perceived.

#### **Ethical Considerations**

The Abilene Christian University IRB approved the study before any activities with participants began. The review included material presented to the potential participant, including a consent form and recruitment material. The Abilene Christian University IRB helped me to understand and behave in an ethically appropriate manner for conducting research; the study participants were treated in an ethical way and I protected their rights.

For this study, the ethical concerns were participants' level of understanding of the purpose of the study and deidentification so that responses could not be attributable to individuals. The latter concern included minimizing the participants' concerns about creating tension or ill feelings with their peers or current or former faculty. Because all participants were doctoral students or individuals holding doctorates, I carried out a fulsome review of the information regarding study purpose and confidentiality, and potential participants made autonomous, informed decisions about their participation.

## Assumptions

An assumption was that participants would answer questions openly and without bias. The risk of this assumption lies in the potential for respondents to lack candor in their responses because former faculty mentors may now be peers with some power or influence over them. As a way of fostering candor and honesty, I carefully explained the purpose of the study to participants and assured them that no names or other personal identifiers would be associated with their responses. I assured them that there would be no link between respondents and questionnaire responses.

#### Limitations

Research participants were within the last 6 months of coursework for their doctorate program to 1.5 years post completion of their doctorate. They participated in Facebook social media. A limitation of the inclusion criteria concerned the phenomenon that doctoral students are six times more likely to experience anxiety and depression compared to the general population (Evans, Bira, Gastelum, Weiss, & Vanderford, 2018); this phenomenon may create a situation in which their recall of any activity during the time period brings forward biased responses that are more negative in nature. Answers about their interactions and expectations may have been negatively biased if they viewed their entire doctorate program negatively. Additional limitations were the potential for overestimating the population size because individuals may be in multiple groups and whether individuals are active users of Facebook.

# Delimitations

I delimited the study using narrow inclusion criteria for participant selection. I used this to counter memory decay so that participants' perceptions were as accurate as possible. Although some degree programs other than doctoral, such as honor college undergraduate or master's degrees, can have a research component and may require submission to the IRB, this study did not include participants in degree programs other than at the doctoral level. I did not include faculty members who were more than 1.5 years post doctorate completion to avoid the potential for memory decay.

# Summary

For this qualitative study, I used a single case study design with embedded units. Throughout the study, graduate students and novice researchers had an opportunity to provide insights and views on their interactions with an IRB, how their experiences may have changed these perceptions, and the factors that most influenced their expectations and perceptions. I used purposeful sampling; semistructured, open-ended questions; and close-ended demographic questions to collect data. To code the data, I used in vivo coding, open coding, and axial coding. I used open coding to identify concepts. The second pass of coding was axial, and I performed this to further refinement of concepts. I used in vivo coding to give voice to participants. From the coded data, themes and categories of concepts emerged.

#### **Chapter 4: Results**

The purpose of this qualitative case study was to explore how novice researchers' perceptions of the IRB changed through their interactions with the IRB during the research submission and IRB approval process, as well as to identify the factors that influenced their attitudes and attitude changes. To address the purpose, I explored the following research questions:

**Q1.** What were student's attitudes and perceptions of the IRB before they began the IRB process?

**Q2.** How do students describe the sources of their perceptions or attitudes toward the IRB?

Q3. How was the experience different from expectation and perception?

In the literature review in Chapter 2, I demonstrated that researchers have devoted considerable effort to understanding relationships between faculty researchers and the IRB. However, there has been little research about novice researchers' expectations and perceptions of the IRB before they interact, whether these perceptions change based on their experiences, and the factors that have influenced their expectations and perceptions. In Chapter 3, I described the case study design and methodology used to study novice researchers' expectations and perceptions of the IRB process. I discuss in detail the qualitative methodology, including the data collection procedures and the steps for analyzing the data. I used questionnaires.

The questionnaire, found in Appendix A, contained three parts: part A consisted of closeended, categorical demographic questions; part B contained open-ended questions concerning attitude; and part C included open-ended questions as an opportunity for respondents to add information that they wanted to share, including advice they might offer to graduate students about experiences with the IRB. In this chapter, I present the results by way of discussing the coding tables for each research question and the emergent themes.

# **Demographic Data**

Twenty-eight individuals responded to the questionnaire; 4 responders did not meet the inclusion criteria. One participant did not appear to meet the inclusion criteria based on the date of graduation provided. However, the respondent made an error when entering the year and typed 2008 instead of 2018. The respondent notified me of the error, and I included him or her in the study.

Thomson (2010) reviewed 100 grounded theory studies and found an average sample size of 25 in these studies. Thomson recommended sample size of 30; this is consistent with Creswell's (1998) recommendation for a sample of about 20–30 participants (1998). Glaser and Strauss (1967) recommended researchers sample to the point of saturation; data saturation is defined by redundancy and lack of novel information as data are collected and analyzed. For this study, 24 participants made up the sample, and the data from this number of participants were sufficient to reach saturation (i.e., the point where no new information emerged during analysis).

Participants were mostly female, and they reported ages above 30 years. The majority of respondents were 30–60 years of age. Twenty (83.3%) reported their gender as female, 3 (12.5%) reported as male, and 1 (4.17%) reported their gender as other. Respondents reported their ages in the following categories: 4 (16.67%) between 20 and 30 years of age, 6 (25.00%) between 31 and 40, 7 (29.17%) between 41 and 50, 6 (25.00%) between 51 and 60, and 1 (4.17%) above 60 years of age.

To better understand participants, demographic questions included presubmission education and training about the IRB and type of program. Of the 24 respondents, 12 (50.00%)

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attended an online doctoral program, 8 (33.33%) attended an in-person school, and 4 (16.67%) attended a hybrid program. Fifteen (62.50%) of participants responded that they had received IRB education or training before submission, and 9 (37.50%) indicated that they had not. A table containing the respondents' demographic information is in Appendix D.

## Results

I collected the data using an online questionnaire. There were three parts on the questionnaire with multiple questions associated with each research question. The results are organized by research question with the responses to questionnaire items presented with the associated research question. In the first round of coding, I used open coding; this was the first pass through of the data using in vivo codes to capture the voice of participants and identify keywords and phrases (Saldaña, 2009). In the next round of analysis, I used axial coding to identify themes. Axial coding is a process of grouping codes together and reducing the number of codes generated from the first pass. This process facilitates a researcher's recognition of emerging themes from the data. I initially read the codes without focus and then reread with focus, with the in vivo in mind to use deductive reasoning in identifying themes. These themes served as a tool to again examine data categories; this process led to closer examination of data and a fuller understanding of short codes. Overall, the process facilitated the interpretation of results. Respondents were assigned a pseudonym so that data could be attributed to specific participants without violating confidentiality. Some answers were brief and included only a few words, but others wrote multiple sentence responses. For the sake of transparency and to capture the meanings of respondents, I used direct quotes where possible. I framed direct quotes appropriately to indicate whether these were a full response to a question or only part of a response. The number of references cited refers to the gross number of times that keywords or

phrases used. The direct quotes are intact as given by individuals with no changes in spelling and punctuation.

Research Question 1: What were the students' attitudes and perceptions of the IRB before they began the IRB process?

*Optimistic feelings.* In the theme of optimism, the participants used favorable and optimistic keywords to indicate a lack of reservation about submitting to the IRB. These included words such as *confident*, *eager*, *excited*, and *high hopes*. Some responses were mixed and contained multiple types of keywords, including trepidation and optimistic feelings. I identified these keywords separately during open coding and described in more detail in the following paragraphs. In the responses to the two questions associated with this research question, there were 15 references to optimistic feelings.

R14 stated he or she was "Somewhat nervous. Not sure what to expect, but confident." Because this individual used the terms *nervous*, *unsure what to expect*, and *confident*, conveying three separate feelings, these words were separated and counted in the most applicable categories. Similarly, R7 indicated feeling "nervous" and "eager." R20 stated that he or she felt "Confident. I felt that I had the surrounding expertise of faculty that I could ask if I wasn't sure how to respond." Similarly, R16 expressed confidence: "I felt very confident about the IRB application." R6 felt "positive that my work would be fairly reviewed and approved."

An example of responses that contained solely optimistic comments were those from R12, who suggested that the IRB "will help you to get your study to pass by providing you good feedback." R16 similarly had optimistic attitudes and perceptions in stating, "I had high hopes for the IRB process whenever it came time for me to submit my project." Other optimistic

responses included comments from R21, who stated, "I was excited to do something I hadn't done before so I was eager."

Some participants also expressed positive perceptions of the role of the IRB. R6 responded, "I felt they would do their job to protect the rights of potential participants," and R20 stated, "I knew they were responsible for protecting individuals and our institution." Similarly, R21 responded, "I knew the importance."

*Trepidation.* In the theme of trepidation, there were negative emotional keywords or key phrases; responses that contained keywords that could be identified as taking away confidence or indicating apprehension or negative emotions were categorized here. These included words such as *problematic, horror stories, scary,* and *fearful.* In the two questions associated with this research question, there were 21 references to this theme.

R15 reported his or her attitudes and perceptions: "not good hearing past horror stories." R17 and R19 each expressed their attitudes and perceptions in single-word responses: "negative" and "fearful," respectively. R18 commented on the length of the IRB process, but his or her use of the word *scary*, as in "long scary process that would hold me up," associated the response with the theme of trepidation.

Several respondents answered the question with a single negative word that connoted his or her emotions. R8 stated he or she felt "anxious." R18 replied with the word "scared." R19 answered the question about his or her feelings with the word "afraid." Some respondents used words implying negative emotions combined with lacking information about the IRB process. For example, R3 wrote, "I was a little nervous. I didn't know what to expect, and honestly, I had heard horror stories about how long it would take at my school. . . . I didn't feel like I was prepared enough." Similarly, R17 stated feelings of being "unprepared. Nervous. Had only heard how awful the process was." Similarly, R12 expressed a combination of emotions and apprehension about the process, and he or she stated, "Fearful as I did not even know what questions the IRB manager will ask."

*Ambivalent.* I used the term *ambivalent* for words connoting inconclusiveness and uncertainty. Words and comments placed in this category were not definitively optimistic or trepidatious. Examples included words such as the *process being challenging, minimal revisions*, and *review time* because these suggest statements of fact but do not indicate emotions such as fear, hesitation, optimism, and hope. In the two questions associated with this research question, there were five references under the category of ambivalent.

Responses that included *challenge* or *challenging* in this theme included those given by R24: "This was going to be a major challenge but a necessary step." R24's response illustrated feelings of uncertainty, which were expressed by several participants. R7 reported, "My perception was that this will be a very challenging process and it was." R8 stated, "It will take a while to get approved," which I interpreted as a neutral statement of fact. Similarly, R2 reported his or her attitudes and perceptions as follows: "I thought it was a step to get to the dissertation process, but I didn't have an understanding to what was involved or how its timing could impact me." It was unclear whether R2 and R8 were indicating good or bad experiences; therefore, I placed these under the theme of ambivalent.

Overall, there were more expressions of trepidation in the attitudes and perceptions of the IRB before beginning the process than optimistic feelings. While students were unsure of the process of how to gain IRB approval and expressed negative words or phrases, there were a significant number of expressions of hope and optimistic emotions, attitudes, and perceptions.

# Research Question 2: How do students describe the sources of their perceptions or attitudes toward the IRB?

*Sources of influence.* Respondents indicated the sources that influenced their perceptions and attitudes and were mostly concise. These were faculty, students, a combination of faculty and students, and prior exposure to the IRB. Keywords included words such as *professor*, *advisors, other students,* and *dissertation committee*. Respondents, such as R16, stated their source of influence was "hearing other doctoral learners experience."

Similarly, R14 indicated that his or her source of influence was "a facebook [*sic*] group for grad students." R9 referred to "advisers, classmates" when indicating that faculty and classmates were influential. Similarly, R10 indicated "other doctoral students and faculty." In a review of the responses, most of the influence related to a combination of faculty and other students (36.84%), followed by solely faculty (26.32%), solely students (21.05%), and prior exposure to the IRB through training or workshops (15.79%) (see Table 1).

## Table 1

# Sources of Influence as Reported by Respondents

Source	Percentage of responses
Faculty only	36.84%
Students	26.32%
Faculty and students	21.05%
Prior exposure to IRB through training and workshops	15.79%
Percentage of total responses that mentioned faculty	63.16%
Percentage of total responses that mentioned students	57.89%

*Unbiased experiences.* Under the theme of unbiased experiences, I placed keywords or key phrases that participants used that did not have qualifiers and I interpreted as not showing bias or as value-free experiences. I interpreted some of these as a statement of fact due to a lack of additional context. Keywords and key phrases under this theme included *process length*, *detailed*, *major hurdle*, and *revisions*. There were 22 references to unbiased experiences.

R16 reported hearing from faculty about their interactions with the IRB that "some faculty member stated that the IRB was a major hurdle." Similarly, R19 indicated hearing "difficult experiences," and R10 stated, "It can take a long time and many students need revisions." R18 also reported hearing about the length of time, stating simply, "Long process." R3 responded, "Constant request for revisions," and R5 reported hearing "that it took a long time." These words I interpreted as a statement of facts. R24 stated, "Challenging in general, most had to resubmit, most more than one resubmission."

*Cautionary experiences.* I associated the theme of cautionary experiences with words and phrases that respondents used to express cautionary tales of negative experiences. Words included keywords or key phrases that relayed warnings and had negative connotations. There were 12 references under this theme.

R20 reported hearing that faculty interactions with the IRB were "necessary, sometimes evil, but just part of the research process." R7 used words that evoked a need for caution: "Be careful of your comments." R8 shared, "They ask a lot of questions, IRB is tedious . . . a stickler." *Tedious* is a keyword associated with this category because it is defined as burdensome and irksome. R17 shared a single word to describe the experiences he or she heard: "negative."
R1 reported hearing it was "a nightmare, and that it ended some individual's doctoral careers." Other responses were single words, such as from R17 who responded with "Negative," and R18 who responded, "Confusion." Others, such as R7, had negative-emotion keywords in their responses. R7 reported, "Some students describe the experiences as being a long waiting process, only to be rejected." Similarly, R16's use of the word *frustrated* put the comments in this category: "Some of the students have been frustrated with the whole IRB process."

From the participants' perceptions, the greatest influence on students' perceptions and attitudes was a combination of faculty and students, followed by solely faculty and then solely students. Respondents reported hearing largely neutral, unbiased experiences regarding the process. Other comments were cautionary tales of negative experiences. There were no reports of positive experiences from either source of influence (i.e., students or faculty).

**Research Question 3: How was the experience different than the expectation and perception?** To explore this question, I examined two more specific questions, "What were your attitudes and perceptions of the IRB before beginning the IRB process?" and "How was your experience of submitting your research to the IRB for review and approval different than your expectations or perceptions prior to submitting?" Because I failed to ask respondents to categorize or label their experiences, I had to consider the whole response rather than do keyword coding. Therefore, quotes from respondents in this section are the total response given.

I used the same themes that were applicable for other research questions: optimistic feelings, trepidation, and ambivalent. The theme of optimism contained favorable or hopeful responses, indicating a lack of reservation about submitting to the IRB. In the theme of trepidation, there were negative and emotional responses; these suggested a loss of confidence and apprehension, or negative emotions. I termed as ambivalent responses that represented inconclusiveness or uncertainty in feelings, responses from which I could not ascertain feelings. Comments that were either not definitively optimistic or trepidatious fell in this category.

*No change.* The majority of responses indicated no change in their expectations and attitudes versus their experience. In the responses, 61.11% of respondents had no change. Within that group, 33.33% I categorized as ambivalent in expectation and perception and in experience (see Table 2).

#### Table 2

The Change B	etween Expecta	tion/Perception	and Experience
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Category	Percentage change
Total: No change between expectation/perception and experience	61.11%
Ambivalent-ambivalent	54.55%
Optimistic-optimistic	27.28%
Negative-negative	18.19%
Total: Change between expectation/perception and experience	38.89%
Negative-optimistic	71.43%
Positive-ambivalent	14.29%
Ambivalent-negative	14.29%

R1 is an example of an individual whose responses I categorized as ambivalent– ambivalent. In response to the question about attitudes and perceptions before beginning the process, R1 responded, "Fine, not preconceived." In response to how was the experience different than expectation or perceptions, R1 said,

I realized without proper guidance; it can be a showstopper. I have since done another irb [*sic*] approval for the University of Pennsylvania, for a multi-university study, and it was so much easier now that I understand the process. Upenn's process was also online vs. my university paper process which also made is [it] streamlined and easier.

R8 was another whose responses were ambivalent with no change. R8 reported the expectation and perception that "it will take a while to get approved" and the experience that he or she "thought there would be a lot of back and forth and approval would be hard." I categorized R8's experience as ambivalent because I could not tell if the experience was hard for the respondent.

Within the group of no change, I categorized 16.67% of responses as having an optimistic expectation and perception and an optimistic experience. R12 is an individual with optimistic expectations and perceptions, illustrated by the response, "That they will help you get your study to pass by providing you good feedback." R12's response about his or her experience was, "It validated my perceptions." Similarly, R6 reported an optimistic expectation and perception:

I had a positive experience submitting my IRB application. I believe this was due to the support and information/feedback received from faculty and the IRB while putting my application together. I had minimal previous experience with IRB, thus perceptions were limited and based on information received from my coursework and faculty.

The third group with no change consisted of respondents whom I categorized with the label *trepidation* in expectation and perception and in experience. R14 is an example of a participant whose responses fit into this category; this participant reported the expectation and perception "that IRB was necessary, but could be problematic," and described his or her experience as follows: "I think it was largely the same. The changes requested felt very nitpicky and in my opinion, had no bearing on my study or its success/failure." R15 gave another example of a response fitting the category: "Not good hearing past horror stories." In response to how the experience of submitting was different than expected or perceptions, R15 responded, "Same . . . my IRB was picked apart with minimal edits."

*Change.* Among those respondents I interpreted as changing their attitudes and perceptions after the experience of IRB submission, 14.29% of those who had a differing experience went from optimistic to ambivalent, and 14.29% had a negative experience after having ambivalent expectations and perceptions. An example of an individual whose responses fell in these categories was R20, who reported his or her attitudes and perceptions about the IRB before beginning the process: "I had experience with another regularity board (Animal Care & Use Committee) so I knew they were responsible for protecting individuals and our institution." I interpreted this response as ambivalent because it was neutral and appeared to be a statement of fact. R20 reported his or her experience as different by stating it was "efficient, thorough, and communicative. I was required to make a couple of revisions and the staff were very helpful." Based on his or her responses, I placed R20 in the category of change from ambivalent in his or her attitudes and perceptions before beginning, and optimistic because he or she used favorable words to describe his or her experience.

Within the category of change, the largest group of participants was those who originally had attitudes and perceptions that reflected trepidation of the IRB process before beginning and then described their experiences with optimism. An example of a participant whose responses fell into this category was R5. This participant reported attitudes and perceptions as follows: "Definitely negative. I based my perception of the IRB on what I had been told by others." R5's perception is distinct from his or her experience:

I was very surprised to find that my study was approved in ten days from submission date. It didn't take long at all and the person working my study kept in great contact with me throughout the process. In addition, I even heard from the research director in clarifying an issue. It was a pleasant experience.

Another participant whose responses I placed in the change category was R18, who reported his or her attitudes and perceptions—"Long scary process that would hold me up"—and his or her experiences as "simple due to assistance from IRB office." R17 was similar, reporting attitudes and perceptions as "negative" and experience as follows: "The process was much easier than expected. Didn't take as long. IRB staff were extremely helpful."

Additional information. In part C of the questionnaire, I included two questions that were not tied to any of the three research questions. One concerned the advice respondents would give to a graduate student if asked about the IRB, and a second was whether there was additional information that respondents would like to offer on the topic. For these responses, I returned to the use of open coding, which was the first pass of data using in vivo codes to capture the voice of participants and identifying keywords and phrases without focus (Saldaña, 2009). The next step was axial coding to identify themes.

*Understand the IRB.* A question asked of respondents was what advice they would give a graduate student if asked about the IRB experience. This question gave insight into the knowledge that they had gained from the experience that they may not have had before beginning the process. The goal was to explore those experiences that they viewed as important for others to know. From these responses, I developed the theme of understanding the IRB. This theme came from the large number of references (16) in which respondents indicated a need for students to understand the role, process, and purpose of the IRB.

Based on responses to the demographic question regarding training, which indicated that only 15 (62.5%) of respondents reported having IRB education or training before IRB submission, I interpreted these to mean that the experience improved if the expectations and perceptions were formed with knowledge about the IRB role and process. In other words, having that knowledge of the IRB before beginning the process was correlated with experience. R20's response included that he or she would tell graduate students to "take the training." R6 felt that understanding the role of the IRB was part of designing the study, stating, "Understand the role of IRB (protect participants) and design your study to do that." R16 stated, "The process is rigorous, but very important."

Responses about the need to understand the IRB process were plentiful. Responses indicated a need to understand the length of time, the need for detail, and the approval process. R3 stated, "It's a process, expect revisions or that it won't be approved." R17 stated, "Allocate time to thoroughly complete forms, which are detail oriented." R21 also addressed a need to understand process time, stating, "Get started early on the application . . . wayyy before you need it." Similar to R17, R7 also wrote about providing required information and stated, "Read the IRB form very carefully."

*Seek assistance.* This identified theme came from phrases that indicated individuals should seek assistance, from either a person who has experienced the process or from the IRB staff. Some, such as R1, did not specify from whom to seek help, stating, "Ask the right questions up front," and R2 said, "Ask lots of questions." R7 suggested "have someone who has had experience proof your work also before you submit." Others specified seeking help from experienced students. R12 suggested, "Seek out peers who went through the process to help you." R24 suggested the possibility of obtaining help from faculty: "Hopefully your program and dissertation advisor can direct you to the major elements you need."

R21 said, "Make contacts with a representative." R6's response included, "Ask as many questions as you can, especially from IRB consultant." R20 did not explicitly name the IRB, but from these remarks, I assumed that the reference to forms was about the IRB: "Take the training,

fill out the forms completely, and remember there are human beings just a phone call away that can help."

# Summary

The purpose of this study was to explore how novice researchers' perceptions of the IRB changed through their research submission and IRB interactions required during the IRB approval process, as well as to identify the factors that influenced their attitudes or attitude changes. In this chapter, I presented the findings and recurrent themes. In the next chapter, I discuss findings and research questions as related to the extant literature, the implications of these findings, and the limitations and recommendations.

#### **Chapter 5: Discussion, Conclusions, and Recommendations**

The study was a response to a personal observation drawn from work experience and supported by findings from the literature: Students who had difficult relationships with the IRB staff and procedures often had faculty mentors who had similar relationships. The findings from other researchers showed that peers who observe or learn of poor behavior by employees that results in positive outcomes for these employees, may adopt the poor behaviors as their own. Using the framework of Kohlberg's theory of moral development, I explored how novice researchers' perceptions of the IRB changed through submission and the interactions required during an approval process. In addition, I identified factors influencing the participants' attitudes and attitude changes. I addressed the following research questions:

**Q1.** What were student's attitudes and perceptions of the IRB before they began the IRB process?

**Q2.** How do students describe the sources of their perceptions or attitudes toward the IRB?

**Q3.** How was the experience different than the expectation and perception?

This chapter includes interpretations of the data and the limitations of the study as well as recommendations for future research. The chapter concludes with a summary.

#### **Discussion of Interpretations**

**Theoretical model.** In the theory of moral development, Kohlberg (1976) stated that individuals develop and demonstrate greater moral reasoning as they advance through stages of cognitive development (L. Patton et al., 2016). Kohlberg stated that personal values, norms, and moral development form from social and environmental influences. Kohlberg contended that moral judgment is based on reasoning and conceptualizing justice but not on judgments. Kohlberg stated that the core of the "moral component of moral judgment is a sense of justice" (p. 201). How an individual reacts is an expression of the person's values and norms.

Kohlberg's theory of moral development has three levels, with each level having two stages. Each level represents a different way in which the individual relates her self, her role in society, and the expectations that society has of her (L. Patton et al., 2016). Although there are six stages, not all individuals go through all the fixed-order stages and not all go through the stages at the same rate (Kohlberg, 1976). At the preconventional level, individuals respond to labels, such as *good or bad* and *right or wrong*, as given by authority figures (Kohlberg, 1971). According to L. Patton et al. (2016), at the conventional level individuals seek to conform to society, including authority figures and their expectations. In the postconventional level, individuals base their decision-making on morals and principles that they define (Kohlberg, 1971). In this dissertation, this concept of social and environment influence applied to a school or university department, and faculty were the authority figures. The Kohlberg level that was being assessed was the conventional level, which corresponds to Schein's model of organization culture, to examine hidden curriculum and mentoring.

**Research Question 1: What were students' attitudes and perceptions of the IRB before they began the IRB process?** Researchers have found that the transfer of norms and attitudes about the IRB can come about from faculty researchers to graduate students. Shore (2009) found that when faculty researchers share negative feelings and perceptions about the IRB with their graduate students, graduate students may expect that their own experiences with the IRB will also be difficult. Many graduate students are afraid when approaching the IRB because they have heard terror stories from others (Burke, 2005). Kramer et al. (2009) asserted that graduate students emulate their mentors and form their opinions and expectations of the IRB based on what they hear from faculty. Because graduate students need to integrate into the department, they are susceptible to assume the norms of faculty researchers; thus they emulate faculty (Harding-DeKam et al., 2012). They may also be seeking the mentor's approval.

The attitudes and perceptions of the response group before beginning the IRB process contained three themes. The first was trepidation, which included keywords or phrases connoting the taking away of confidence or apprehension. There were 21 references to this theme. Using the lens from the literature and Kohlberg's theory, there was an expectation that influencers would be the basis of beliefs for students. This emulation was consistent with findings from Shore (2009), who found that when faculty shared negative feelings and perceptions about the IRB with their graduate students, it created an expectation by a graduate student of a difficult relationship and process. As in prior findings, no participant reported expecting a positive experience.

The second theme was optimistic feelings. If the identified keywords connoted hopeful or optimistic emotions, or if individuals expressed adjectives related to optimistic emotions, then the coded items were categorized into an optimistic feelings theme. There were 15 references to optimistic feelings. Optimism was an unexpected theme as it did not mirror in any way the shared experiences of reported influencers. Research results showed that some faculty have positive perceptions of the IRB. However, the contentious relationship between faculty and the IRB is the focus of most research findings. No individual reported hearing an optimistic IRB experience from the influencers, students and faculty, or any combination of the two.

The third theme was ambivalence (ambivalent). Words that were inconclusive or uncertain and not definitively optimistic or trepidatious comprised this category. Examples included the process being challenging, minimal revisions, and review time, as these may be statements of fact. There were five references under the category of ambivalent.

I anticipated the themes of ambivalence and trepidation based on the type of information reported as heard from influencers. Kramer et al. (2009) asserted that graduate students emulate their mentors and form their opinions and expectations of the IRB based on what they hear from faculty researchers. Emulation is due to graduate students' susceptibility to assuming the norms of faculty researchers and their need to integrate into the department (Harding-DeKam et al., 2012). The theme of optimistic feelings was unexpected because I did not see similar statements reported by the influencers, neither the faculty nor the students. However, some published findings reflected this type of optimistic discourse and optimistic attitudes of faculty researchers toward the IRB. The findings of this study add to the literature suggesting that students are not as strongly influenced by optimistic and positive messages as they are by negative or cautionary tales. Because negative information involves more thinking, humans process it differently. The result is that people pay more attention and have greater recall of negative information; moreover, they form stereotypes more quickly than when processing information perceived as positive (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

Research Question 2: How do students describe the sources of their perceptions or attitudes toward the IRB? Graduate school is a time of socialization in which individuals learn the skills and norms needed for membership in the society and culture of the program and academic department (Gardner & Barnes, 2007). Socialization begins during the learning period, in which people assume the values and attitudes of the department community (Anderson & Swazey, 1998; Austin, 2002; Lechuga, 2011). Socialization occurs in a variety of ways, including formal and informal mentorship. Mentoring is a relationship between two people in which a mentee observes a more skilled and experienced person to gain an understanding of how to succeed in a field (Curtin et al., 2016; Gammel & Rutstein-Riley, 2016; Holley & Caldwell, 2012). The mentor has authority and power, which encourages the student to model her actions (Gammel & Rutstein-Riley, 2016).

In the field of higher education, these students' socialization mainly occurs within their department. Transfer of knowledge through departmental socialization is due to graduate students observing and learning from the actions and attitudes of their mentors, from formal lectures to casual remarks (Austin, 2002). To prove their competence in a discipline, doctoral students often seek to demonstrate that they have the accepted knowledge and norms of the faculty.

Respondents indicated that sources of influence on their attitudes and perceptions of IRB were faculty and other students (36.84%), followed by faculty only (26.32%) and solely students (21.05%). The reported influences were not consistent with the literature that stated students, as mentees, learn implicit and explicit knowledge from mentors (Curtin et al., 2016). Faculty, peers, and other sources of information influenced the participants.

Based on other results, faculty are a source of influence on students' perceptions and attitudes toward the IRB. However, for this small sample, other student peers were part of the environmental influencers. These other sources of influence may have diluted faculty influence by providing broader information from which judgments were made, moderating the claims of previous researchers.

**Research Question 3: How was the experience different than the expectation and perception?** When comparing how the expectation and perception were different from the experience, using the lens of Kohlberg's theory, I expected respondents' descriptions of experiences to be similar to their expectations and perceptions. According to Kohlberg's theory, expectations and perceptions are formed from students' social and environmental influences (Kohlberg, 1976). Because these respondents were not far removed from graduation, I expected their descriptions of expectations and experiences to be based on values given by authority figures (e.g., faculty) versus their actual experiences. I assumed the participants had remained in Kohlberg's (1971) conventional level. My interpretation was reinforced in view of Schein's model of organization culture: Respondents adopted the culture of the department out of a need to belong (Schein, 1984).

Kramer et al. (2009) asserted that graduate students emulate their mentors and form their opinions and expectations of the IRB based on what they hear from faculty researchers; thus, faculty researchers' attitudes toward the IRB shape the attitudes and behaviors of graduate students. Because graduate students need to integrate into their department, they tend to be susceptible to emulating faculty and assuming the faculty norms (Harding-DeKam et al., 2012). Based on these findings, participants in the study who took on the norms and values of the faculty were predicted to retain their norms and values over time, even if their experience was different from that of faculty.

I found when categorizing expectations and perceptions and the description of experiences, using the same themes, that respondents were not locked into categorizing their experience the same way they did for their expectations and perceptions. Among the participants, 38.89% described their experiences as distinct from their expectations; thus, I categorized these stated experiences as changed from their expectations. The majority of change, but not all, was from trepidation to optimism. This meant that those respondents who initially had expectations and perceptions of trepidation, which may have been formed in part from hearing experiences of influencers, were not adherent to these beliefs. When respondents experienced something different than what they expected, they articulated it. This supported the idea that students did not remain tied to their original norms and beliefs, and when faced with cognitive dissonance, they may have adjusted their beliefs accordingly. In contrast to themes found in the literature pertaining to faculty researchers' negative discourse on IRB, student researchers made few mentions of bureaucracy and none concerning mission creep, board orientation, or organizational or informational justice.

A change in beliefs is not necessarily in conflict with Kohlberg's (1971) theory of moral development. Other findings also support the idea that students form opinions based on what they hear from the faculty. According to Kohlberg's theory, there are three levels of moral development. In the preconventional level, individuals react to labels (*good or bad* and *right or wrong*) and authority figures give these labels. According to L. Patton et al. (2016), at the conventional level, individuals identify and seek to conform to society, including authority figures and their expectations. In the postconventional level, individuals base their decision-making on morals and principles that they define for themselves (Kohlberg, 1971).

Hidden curriculum changes as factors such as age, culture, and situations change (Gaughan, 1997). Additionally, older students have gone through their primary formative socialization (Orón Semper & Blasco, 2018). Because respondents were mature (83.33% of total respondents were over the age of 30 and 58.34% were over the age of 40), it may be reasonable to assume that some respondents were in the second stage of the conventional level. This stage concerns individuals' respect for authority and valuing of institutional order and following rules versus the first stage in which students find norms and values through acceptance by the group.

#### Limitations

The questionnaire contained a limitation of the study. I did not provide a definition of terms for the respondents, and I asked them to self-categorize their expectations, attitudes, and experiences. Due to the phrasing of the questions and failing to have individuals self-categorize their experiences, in order to categorize these answers and compare them, I did not perform open or axial coding. Instead, I considered and categorized whole responses under themes of optimistic feelings, trepidation, and ambivalent feelings. I termed responses as ambivalent if the content represented inconclusive or uncertainty in feelings, or if I could not ascertain feelings. Comments that contained words that were not definitively optimistic or trepidatious fell in this category. This may have resulted in the categorization of responses in ways some respondents did not intend. A lack of context for the responses may have resulted in the miscategorization of responses.

The sampling approach was another limitation. The participants provided information on a topic of interest to them, and because of this, particular individuals were likely attracted to participate. Therefore, the sampling method may have led to volunteer bias. This bias could weaken the generalizability of the findings. However, the use of respondents' words may provide naturalistic generalization by providing insights into this particular group of people. Through this, the reader may, or may not, be able to apply to her own circumstances.

The recruitment method was another factor potentially creating a sampling limitation. Participants were limited to individuals who were active on Facebook as members of groups geared for doctoral students. The memberships allowed members from any country, and some groups were specific to minorities. The population was of an indeterminate population size, as individuals might have belonged to multiple groups. In a review of Facebook demographics, it was reported that most account holders are older females, who represented 56% of active accounts in 2015; furthermore, the participants in the United States comprised 12% of Facebook users (Pew Research Center, 2016). The participant demographics showed mostly older females: 55% were over the age of 41 and only 12.5% were males. This did not reflect typical graduate students, who are 25–34 years of age and about 40% of whom are male (U.S. Census Bureau, 2017). If the sample had reflected the average U.S. doctoral students' demographics and degree programs, the results may have provided additional insights; a representative sample would have allowed for greater generalizability.

Another limitation was the self-reporting of emotions. Self-reporting of emotions can lead to bias because some individuals are unaware of or unwilling to report their emotions (Mauss & Robinson, 2009). Possibly, participants' perceptions and attitudes may have been emotional for them, but due to lack of context, I recognized these as ambivalent.

A final acknowledged limitation was the selection of the theoretical framework. According to Kohlberg's theory of moral development, individuals develop morally through social and environmental interactions (Kohlberg, 1976). Within the theory, there are three levels and the majority of an individual's life is spent in the conventional level. I designed the study using the framework of this single level of Kohlberg's theory. Upon reflection, I found that Bandura's (1986) social cognitive theory, briefly discussed as part of the theoretical framework, could have been a more appropriate theoretical framework. In social cognitive theory, Bandura encompassed the ideas of Kohlberg's conventional level but also extended the conventional level of moral development by affording individuals self-regulation of their behavior, even within an unfavorable environment (Bandura, 1986). Within Kohlberg's conventional level, individuals' norms, values, and beliefs are set by the environment and respect for authority and rules. Although Kohlberg's postconventional level contains some self-regulation of behavior and values, Kohlberg suggested that ethical decisions serve as a catalyst for the movement to the postconventional level.

Compared to Kohlberg's theory, Bandura's (1986) social cognitive theory could be more applicable across a lifetime because Bandura accounts for the constant flux and diversity of an individual's environment at distinct points in life as well as how individuals build on earlier experiences and observations. This is important when considering doctoral students, each of whom comes in with her own life experiences and influencers; yet during their program of study, many will have their environment narrowed, and there are common characteristics in the environment that will occur across all students and fields of study. The ability to capture the common characteristics of the doctoral student environment, being able to discern what captures attention, what is retained, what motivates, and what is reproduced would provide insights into how universities could improve education and training to foster increased compliance.

#### **Implications and Recommendations**

Graduate school instruction depends on a facilitated learning process in which students take personal responsibility for their learning and are guided by assignments and faculty (Regmi, 2012). According to Regmi (2012), students using facilitated learning discover how to overcome problems and find solutions along with their peers. The two identified and related themes pertain to facilitated learning situations such as graduate school.

According to Hu, Wu, and Gu (2017), there are two types of problems: analytical and interactive problems. Analytical problem-solving requires structure and consistency, as in a straightforward process. Interactive problems can vary in every instance, which means that

initial information cannot be relied on. Historical experience is often useful for successfully solving interactive problems.

Although regulations guide IRBs, the review process differs among institutions, and the forms are not discipline or study-type specific. IRB administrators do not structure forms for the exact information needed for every type of study. Two common complaints by faculty are (a) the information collection is often aimed toward high-risk studies (Kramer et al., 2009) and (b) review quality varies and may depend on the reviewer (Griebling et al., 2009).

Unlike experienced researchers, students who are working more independently on IRB applications do not have the benefit of knowing what a successful submission entails. The IRB process is, by definition, nonanalytical and interactive. For these reasons, the IRB process may be more difficult for facilitated learners, such as doctoral students.

**Recommendations for practical application.** The identified themes found under the questionnaire section of additional information were related to a need to provide more information and increase understanding of the IRB process and guidance for doctoral students during the process. Respondents had optimistic feelings of their attitudes and perceptions of the IRB before they began the process, but there were many more keywords that fell into themes of trepidation and ambivalent feelings. The findings add to the literature by suggesting that influencers can convey optimistic messages to students. People process these optimistic sentiments differently than pessimistic messages; for this reason, they recall pessimistic messages and stereotypes more vividly. Based on this information and the finding that approximately 60% of respondents received IRB education or training, I made the following recommendations:

- Departments could provide training to supplement that provided by IRB staff.
  Training should focus on the mechanics of submission and applicant expectations and use examples from specific disciplines showing successful applications and common pitfalls. Finally, in the training, the staff should encourage collaboration between graduate students and the IRB staff.
- IRBs can increase outreach to graduate students by focusing on the mechanics of applying and submitting, what to expect, examples of successful applications, and common pitfalls in applications from the discipline. Outreach and service-forward efforts may serve to mitigate negative stereotypes.
- 3. The IRB administrators could remind faculty mentors of their responsibilities to provide support and guidance to students during the submission process.

**Recommendations for future research.** I make two recommendations for future research:

- Repeat this study by finding an alternative way to capture perceptions and attitudes instead of self-reporting and in the process gain a more accurate picture the perceptions, attitudes, and experiences of students. If researchers use interviews, they can create an interactive exploration of issues and allow for consistency checks in the answers.
- 2. Address the limitations of this study by repeating it in two settings: universities where faculty and the IRB staff provide training and assistance for doctoral students on the mechanics of the submission process, and universities where there is no additional training and assistance on the mechanics of the submission process. Using these two scenarios for comparison, researchers could assess the types of training for

effectiveness, satisfaction, and return on investment for the university, and the impacts of such training on attitudes, perceptions, and expectations.

#### Conclusions

Based on Kohlberg's (1976) theory of moral development and the literature, graduate students base their norms on their social and environmental influences; that is, they conform their attitudes to the group (Austin, 2002; Curtin et al., 2016; Gammel & Rustein-Riley, 2016; Harding-DeKam et al., 2012; Kramer et al., 2009). The findings from this small sample supported other findings by suggesting that influencers convey optimistic and positive messages to students; however, these messages may not be treated in the same way that negative or cautionary tales are. Also, there are sources of influence other than faculty, which may dilute the faculty's effect on students' perceptions of IRB. When respondents experienced cognitive dissonance (e.g., they noted something different than expected), they adjusted their beliefs accordingly. This contrasts with Kohlberg's theory of moral development at the conventional level–interpersonally normative stage and Schein's model of organizational culture in which Schein endorsed that individuals steadfastly adopt the norms and values of a group or culture to find acceptance.

The messages that students recalled hearing from influencers, including faculty, about IRB experiences, lacked optimism. These kinds of messages potentially created unintended bias in some students. This learned bias could lead to noncompliance behaviors. The findings revealed that doctoral students expressed a need for greater understanding and support during the IRB submission process for improved expectations and experiences. Educating faculty and students and increasing support during the IRB application process may be key to improving compliance and positive experiences. In this study, the results suggested that there were multiple sources of influence on students concerning the IRB experience, which may lessen the faculty's influence. These messages included optimistic and positive information; however, positive messages are processed differently, often resulting in less recall of positive messages compared to the more significant recall of cautionary or negative experiences. When respondents experienced something different from their expectations (e.g., when faced with cognitive dissonance), they adjusted their beliefs accordingly. Reflecting on the IRB process, respondents expressed a greater need for an understanding of the purpose of the IRB and support during the submission process for improved expectations and experience.

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## Appendix A: Questionnaire

## **Demographic:**

- 1. What type of school do you attend: online, in-person, or a hybrid?
- 2. What is your age range? 20–30, 31–40, 41–50, 51–60, 60+
- 3. What is your gender?
- 4. How many IRB submissions have you done?
- 5. Did you complete IRB education or training prior to submitting your application?
- 6. How many predoctorate IRB submissions have you been involved in (working as a research assistant, grad student for PI, work for a different degree, etc.?
- 7. If you have earned your doctorate, when (month/year)?

# Think back to before you began the IRB process. These questions are about your

#### expectations and perceptions *before* you engaged with the IRB.

- 1. How did you feel about submitting your research to the IRB for review/approval? Please explain.
- 2. What types of experiences have you heard from other faculty about their interactions with the IRB?
- 3. What sort of experiences or interactions have you heard about that other students have had with the IRB?
- 4. What were your attitudes and perceptions of the IRB before beginning the IRB process?
- 5. What sources influenced your perceptions and attitudes toward the IRB?

# Think back about your IRB experience in gaining IRB approval. The following questions are about your perceptions and attitudes about the IRB, *after* you received IRB approval.

1. How was your experience of submitting your research to the IRB for review/approval

different then your expectations or perceptions prior to submitting? What made you feel that way (either change your mind or retain your previous perceptions)?

2. If a graduate student would ask you about the IRB experience, what would you tell them?

# **Additional information**

Are there any thoughts that you would like to share on the topic of the faculty role in the socialization of graduate students' attitudes and perceptions towards the IRB? Is there any additional information that you would like to provide?

# Appendix B: Recruitment Material

Faculty role in socialization of graduate students' attitudes and perceptions towards the IRB

My name is Elisa Jolls and I am a doctoral student at Abilene Christian University. I am conducting a study to learn about the faculty role in socialization of graduate students' attitudes and perceptions towards the IRB. I am seeking participants to complete a questionnaire on attitudes and perceptions about the IRB before beginning the IRB process and how these changed after the process.

This anonymous questionnaire will take approximately 30 minutes of your time and will be completed online.

To be eligible to participate, you should be:

- A current doctoral student within six months of completing all coursework and being all but dissertation or a novice researcher, having attained your doctorate less than 1.5 years ago;
- Have had 1–2 IRB submissions for your work and received approval;
- Have not been involved in an IRB submission previously to your doctorate submission (e.g., part of a research team, study coordinator, for a non-doctorate degree, etc.)

#### Appendix C: Consent Form

Dear Participant,

I am currently enrolled in the Organizational Leadership doctorate program with a focus on Higher Education at Abilene Christian University and I am in the process of my dissertation. I am inviting you to participate in a study to examine the expectations and attitudes of graduate students and novice researchers, before and after they experience the IRB process, to learn about how faculty researchers influence students' expectations and attitudes and how they change for students after the IRB experience.

To be eligible to participate, you should be:

- A current doctoral student within six months of completing all coursework and being all but dissertation or a novice researcher, having attained your doctorate less than 1.5 years ago;
- Have only been involved in and had 1–2 IRB submissions

Your participation in the research is completely voluntary and should take approximately 30 minutes. You may decline to answer any questions that you do not want to answer and withdraw from the study at any time. There are no expected risks to being involved in the study, beyond what you may encounter in your daily life. Your responses will remain confidential and you will not be identified in any reports or papers.

If you agree to participate, please proceed to the questionnaire. Your participation is greatly appreciated.

If you have any questions about this project, please feel free to contact me at (xxx) xxxxxxx or <u>xxx@acu.edu</u>. If you have questions about your rights as a human subject participant, you can contact the Abilene Christian University IRB at 325-674-2885 or orsp@acu.edu. Thank you for your assistance.

Elisa Jolls

Respondent	Gender	Age range	School type	IRB training
				prior to submission
R1	Female	51-60	In-person	No
R2	Female	41-50	Online	Yes
R3	Female	41-50	In-person	Yes
R4	Female	51-60	Online	Yes
R5	Female	31-40	Online	Yes
R6	Male	31-40	Online	Yes
R7	Female	51-60	Online	No
R8	Female	41-50	Online	Yes
R9	Female	31-40	Online	No
R10	Female	31-40	Hybrid	No
R11	Female	41-50	Online	Yes
R12	Female	51-60	Online	Yes
R13	Other	20-30	In-person	No
R14	Male	31-40	Online	Yes
R15	Female	51-60	Hybrid	Yes
R16	Male	31-40	Online	Yes
R17	Female	41-50	Hybrid	No
R18	Female	41-50	In-person	Yes
R19	Female	60+	Online	Yes
R20	Female	41-50	In-person	Yes
R21	Female	20-30	In-person	No
R22	Female	20-30	In-person	Yes
R23	Female	20-30	In-person	No
R24	Female	51-60	Hybrid	No
## Appendix E: IRB Approval

### ABILENE CHRISTIAN UNIVERSITY Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs 320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103 325-674-2885

August 13, 2018

Elisa Jolls

Department of Education

Abilene Christian University



On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Faculty role in the socialization of graduate students' attitudes and perceptions towards the IRB"

(IRB# 18-051 ) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D. Director of Research and Sponsored Programs



Our Promise: ACU is a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.

# Appendix F: Permissions

2/17/2019

My ACU powered by Google myACU Mail - Permission

Elisa Jolls <xxxx@acu.edu>

### Permission

Rahime Cobanoglu <XXX@gmail.com> To: XXX@acu.edu" <XXX@acu.edu> Sun, Feb 17, 2019 at 1:14 PM

Dear Elisa,

You can use the figure from our article entitled as "The visible side of the hidden curriculum in schools" by providing reference in your dissertation.

Regards Rahime

Rahime Cobanoglu, PhD Assistant Professor of Curriculum and Instruction Sinop Universitesi Sinop/Turkey



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