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Where to Next? Undergraduate Uncertainty Regarding Life After College

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Where to Next?
Undergraduate Uncertainty Regarding Life After College

A senior thesis submitted to
The Department of Psychology
College of Arts & Sciences

In partial fulfillment of the requirements
for a Bachelor of Arts degree in Psychology

by

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Abstract

Uncertainty is arguably a universal human experience that transcends culture. One threat

to existential meaning identified in the literature was the experience of personal

uncertainty, defined as either an aversive feeling experienced when one feels uncertain

about the self or as a neutral cognitive state created when an individual is unable to

determine meaning, categorize or assign value to an event, or predict outcomes, with

positive or negative reactions influenced by individual perception. Thus far, literature

regarding uncertainty has focused disproportionately on medical uncertainty while

studies of uncertainty in college students have yielded mixed results. The current study

sought to answer the question, "How do undergraduate college students experience living

with existential uncertainty regarding where to go next after university (i.e., career,

higher education, or exploration)?" Utilizing Interpretive Phenomenological Analysis

(IPA), a single-subject case study of a Caucasian, female student with a declared major

attending Concordia University in Portland, Oregon was conducted. Primary themes

found in this study were money, family, and anxiety reported to fall under the higher-

order theme of external influences. This theme was found to interact with the subtheme

of intrapersonal considerations to shape student experience of uncertainty. Study results

were compared against theoretical understandings of uncertainty reported in the literature

and implications for career counselors were discussed. Strengths and limitations of the

present study were then explored.

   Keywords: existential uncertainty, undergraduate college students, Interpretative

Phenomenological Analysis (IPA)

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Where to Next? Undergraduate Uncertainty Regarding Life After College

Uncertainty is arguably a universal human experience that transcends culture (Penrod, 2007). As such, it has been studied by psychologists using an existential phenomenological framework to analyze subjective perceptions of individuals living through a phenomenon with the assumption that individuals attempt to make meaning out of life (Amundson, Borgen, Iaquinta, Butterfield, & Koert, 2010; Smith, Flowers, & Osborn, 1997). A core threat to existential meaning-making is the experience of personal uncertainty, defined in the literature as either an aversive feeling experienced when one feels uncertain about the self or as a cognitive state created when an individual is unable to determine meaning, categorize or assign value to an event, or predict outcomes (McCormick, 2002; Van den Bos, 2009). Concepts related, though not synonymous, to uncertainty in the literature have included ambiguity, vagueness, unpredictability, unfamiliarity, loss of control and confidence, inconsistency, lack of information, and insecurity (McCormick, 2002; Mishel et al., 2005; Van den Bos, 2009). Though some researchers have found uncertainty to inhibit one's ability to make decisions, reduce psychosocial adjustment and quality of life, and create psychological distress and anxiety, others have suggested uncertainty is a "neutral cognitive state" that may be normative or adaptive, with positive or negative reactions influenced by individual perception (McCormick, 2002; McGregor, Zanna, Holmes, & Spencer, 2001; Mishel et al., 2005; Penrod, 2007; Van den Bos, 2009).

An overwhelming majority of studies have examined medical uncertainty as related to different types of cancer or uncertain experiences of nurses, primary care physicians, and family caregivers (Halldórsdóttir & Hamrin, 1996; McCormick, 2002;

Mishel et al., 2005; Penrod, 2007; Starks & Trinidad, 2007). Studies that have advanced

the conceptual understanding of uncertainty expanded beyond concept analysis by

asking, "What is the nature of the lived experience of uncertainty?" (Penrod, 2007, p.

660). Phenomenological research findings have enabled scholars to uncover

discrepancies between theory and real-world experience (Penrod, 2007). Authors of

phenomenological studies have made significant contributions to the profession of

nursing by using thematic analysis to find a central theme for living with cancer was

"experiencing existential changes" that included feelings of uncertainty, allowing

professionals to more fully understand the patient experience (Halldórsdóttir & Hamrin,

1996). High uncertainty has been found to be related to emotional distress, anxiety, and

depression with a lack of research on positive aspects of uncertainty such as growth

opportunity (McCormick, 2002). Furthermore, randomized controlled studies have

yielded that uncertainty management for fears of recurrence resulted in numerous

benefits for long-term cancer survivors (e.g., improved cognitive reframing, cancer

knowledge, patient–provider communication, and coping skills) (McCormick, 2002;

Mishel et al., 2005). Such results suggest that managing uncertainty though interventions

may help alleviate negative impacts identified in phenomenological studies, thus

supporting the value of initial, descriptive phenomenological research efforts.

Despite advancements in understanding medical uncertainty, there exists a large

gap in the literature concerning non-medical forms of uncertainty, such as existential

career uncertainty, and an underrepresentation of college student participants. Few

studies have addressed the transition of university graduates to the workforce or students

who have yet to establish a career direction and struggle with the ability to make career

choices (Amundson et al., 2010; Perrone & Vickers, 2003). Researchers have found that many college students, both with declared and undeclared majors, expressed uncertainty about career direction yet reported mixed results on the differences between the two groups, suggesting a need for further study (Orndorff & Herr, 1996). Value-based career counseling for multipotential college students was found to affirm career goals and increase certainty, demonstrating real-world applications for the study of uncertainty (Kerr & Erb, 1991). However, many vocational programs that assist individuals with career exploration, decision-making, and job performance have ignored the process of how decisions are made by focusing more on the choices themselves, suggesting that the phenomenology of uncertainty may reveal potential reasons current management interventions succeed or fail (Betz & Hackett, 1986; Starks & Trinidad, 2007; Van den Bos, 2009). Since human agency to make decisions was found to be related to interpersonal, intrapersonal, and contextual factors, career and vocational counselors must assist clients to better understand the subjective world of personal goals, values, interests, attitudes, and emotions (Chen, 2006).

To provide insight into how counselors may best assist uncertain undergraduate students, uncovering relevant themes related to uncertainty may reveal considerations to be addressed at universities. As Interpretive Phenomenological Analysis (IPA) has been demonstrated as useful for the study of uncertainty in health psychology, suggesting applications beyond nursing (Smith et al., 1997), the methodological framework has been applied in this study of uncertainty in an undergraduate sample. In my phenomenological case study, I sought to answer the question, "How do undergraduate college students experience living with existential uncertainty regarding where to go next after university

(i.e., career, higher education, or exploration)?" Secondary considerations included 1) comparison of the theoretical conceptualizations of uncertainty with identified phenomenological themes found in this study and 2) possible implications for career counselors.

Literature Review

Qualitative research methodologies have enabled researchers to examine subjective meaning through analysis of first-hand participant accounts. One such method, phenomenology, aims to make meaning of lived experiences to gain a more complete understanding of common truths that underlie human phenomena (Starks & Trinidad, 2007). Following the examination of philosophical assumptions underlying phenomenology and why the method best suits the study of uncertainty, similar descriptions of Interpretative Phenomenological Analysis (IPA), a variant of phenomenological study, are given. Currently debated definitions of uncertainty are discussed along with subsequent studies of medical uncertainty and related emotional outcomes. Results of IPA health psychology studies are also detailed. After the need for further phenomenological study is demonstrated for career uncertainty and career counseling, I advocate for the ability of the present study to address gaps in the literature surrounding undergraduate, existential career uncertainty.

Phenomenology

Qualitative research methodologies offer a unique opportunity for researchers to examine individual, subjective meaning through analysis of first-hand accounts at a level of depth and description quantitative tests do not provide (Starks & Trinidad, 2007).

Through the examination of participant life experiences, researchers have sought to understand how individuals give experiences meaning (Byrne, 2001). In qualitative research, three common methodologies are discourse analysis, grounded theory, and phenomenology. While discourse analysis focuses on how language is used to accomplish personal objectives and grounded theory seeks to explain basic social processes, phenomenology aims to make meaning of lived experience (i.e., immediately processed, conscious awareness of life) to gain a more complete understanding of common truths that underlie human phenomena (Starks & Trinidad, 2007; Van Manen, 2016). When studying a concept such as the experience of uncertainty, it can be argued that phenomenology serves as the optimal method to make sense of lived human experience and shed light on limited or overlooked theoretical understandings of the phenomenon in the literature.

It has been argued that phenomenology was the most significant philosophical movement of the 20th century (Priest, 2003). Philosophically, phenomenology is rooted in specific assumptions that deeply influence the way in which the methodology is carried out. The father of phenomenology has been cited as Edmund Husserl, a German philosopher and mathematician who rejected the idea that the empirical scientific method was the ultimate way to understand reality (Byrne, 2001; Priest, 2003). Rather, Husserl believed that access to knowledge about the world was available only through consciousness, and developed new methodology to measure the essential structures, or "essences," that make up consciousness (Byrne, 2001; Priest, 2003). Uncovering essences can be understood as understanding the ultimate nature or reality of a phenomenon that is mediated through individual perceptions of that reality (Priest, 2003). According to this

phenomenological philosophy, the world can only be understood through lived

experience and the way to knowledge comes through individual perspectives and

subjective meaning-making (Byrne, 2001; Fade, 2004; Priest, 2003).

Husserl further asserted that to obtain this knowledge of essential structure, one

must attempt to view the phenomenon free from any preconceived assumptions based on

past experiences, requiring the researcher to "bracket out" these assumptions to properly

understand the essences (Amundson et al., 2010; Byrne, 2001; Fade, 2004; Priest, 2003).

In phenomenology, the researcher attempts to put aside preconceptions and biases and

enter the world of the participant without judgment to reveal elements of phenomena

previously overlooked or taken for granted (Starks & Trinidad, 2007). The primary

philosophical assumptions underlying phenomenology are that human truth can only be

accessed through inner subjectivity and that individuals actively engage with their

environments when interpreting what they experience (Flood, 2010).

Following Husserl, Martin Heidegger modified this phenomenological method,

adding that humans co-develop meaning through shared experience and, because of this,

contextual factors like culture are inseparable from an individual's experience (Byrne,

2001; Priest, 2003). Heidegger, therefore, found it impossible to bracket all assumptions

of the world, but urged researchers to use honest reflection during the research process to

acknowledge ways in which personal assumptions and background impact the

interpretation of data (Byrne, 2001; Priest, 2003). From these figures' contributions, two

main phenomenological approaches have been repeatedly differentiated in the literature:

descriptive and interpretative phenomenology.

Authors have associated descriptive phenomenology with Husserl in that researchers assume the existence of a universal nature of phenomena for all who experience it, yet champion human freedom to impact one's environment (Flood, 2010). Researchers are encouraged to set aside prior assumptions and overcome bias to follow Husserl's focus on universal essences underlying human experience (Flood, 2010; Wojnar & Swanson, 2007). Alternatively, authors have associated interpretative phenomenology with Heidegger as researchers adhere to his assertions that humans are inescapably embedded in contexts that influence their perceptions of reality and can only make meaning within these contexts, making true bracketing impossible (Flood, 2010; Wojnar & Swanson, 2007). Humans, in this view, create meaning in social dialogue with each other, thus the researcher and participant create the interpretation of the phenomenon together as some level of interpretation is essential to understanding the internal world of another human's experience (Fade, 2004; Flood, 2010; Larkin, Watts, & Clifton, 2006; Smith et al., 1997)

Interpretative Phenomenological Analysis (IPA)

One variant of phenomenology that has combined elements of both descriptive and interpretative methodologies is Interpretative Phenomenological Analysis (IPA), an approach to experiential research that has risen in popularity over the past decade (Pringle, Drummond, McLafferty, & Hendry, 2011). As with phenomenology in general, IPA has been distinguished from other qualitative methods such as discourse analysis (DA). DA researchers study how language is used by individuals to meet personal goals yet remain skeptical about the interpretation of underlying cognitions from interview data (Smith et al., 1997; Starks & Trinidad, 2007). In contrast, IPA draws upon human self-

reflection by thoroughly analyzing interview transcripts to uncover underlying cognitive

processes involved in making meaning out of an experience (Pringle et al., 2011; Smith et

al., 1997).

To better understand the cognitive processes of meaning-making, IPA involves

intensive analysis of a comparatively small sample size (i.e., 1-10 participants) to

understand the inner world of each participant (Larkin & Thompson, 2012). Interview

transcripts are read, reread, and analyzed to uncover the meaning behind the accounts,

coding for themes that emerge from the participants' own words to describe the lived

experience of the phenomenon being studied (Fade, 2004). After coding individual

interviews, themes taken from each transcript are compared, synthesized, and

summarized into a cohesive report of shared themes across all transcripts to reveal a

fuller understanding of the phenomenon in general (Flood, 2010; Larkin et al., 2006).

Throughout this process, interpretations must be updated as new themes arise and

relevant conceptual literature is considered (Flood, 2010). Techniques used by

researchers to enhance rigor, transparency, and trustworthiness of data include reflexively

acknowledging one's role in interpretation, member checking that allows participants to

comment and correct interpretations made by researchers, and detailed description of the

contexts in which interview data is imbedded (Carlson, 2010; Fade, 2004; Larkin &

Thompson, 2012).

Smith et al. (1997) used a study of chronic pain to demonstrate IPA's applicability

to both single-subject case studies and research using multiple participants. After

thoroughly reading and re-reading a single interview transcript, researchers in-vivo coded

frequently discussed words and phrases articulated by the participant and drew

connections between codes to arrive at higher-order themes. Authors noted patterns of

expression that included: "frustration," "lack of understanding," "trying to make sense

of," "social comparisons with others," "loss," and "bereavement and shock" and sorted

these codes based on connections between them within context of the larger narrative

(Smith et al., 1997). Primary themes descriptive of participant experience of chronic pain

were then concluded: "Searching for an explanation," and "Self-evaluation and social

comparison," informing the question of participant attitudes towards their chronic pain

(Smith et al., 1997). Though this could be presented as a case study itself, IPA has also

been used to compare the lived experience of a phenomenon across multiple participants,

replicating thematic analysis for each individual transcript and consolidating overlapping

themes into a master list characterizing the lived experience of all participants (Smith et

al., 1997). If every participant, for example, described social comparison behavior, "Self-

evaluation and social comparison" would be a primary theme presented in the final

narrative write-up to describe the lived experience of chronic pain (Smith et al., 1997).

This process is conducted with the intent to approximate a complete

understanding of stable features of a phenomenon that participants interpret and make

sense of through subjective perceptions (Fade, 2004; Pringle et al., 2011). IPA is

phenomenological in that it seeks to gain an insider's view into the lived experience of

participants by giving them a voice to share their stories in their own words (Fade, 2004;

Larkin et al., 2006; Smith et al., 1997). IPA is interpretative in that it acknowledges

one's inner world cannot be understood directly or fully by the researcher without some

level of interpretation to frame and make sense of the data in context (Fade, 2004; Larkin

et al., 2006; Smith et al., 1997). IPA is analytical in that it follows rigorous

methodological guidelines that direct researchers in deconstructing participant accounts into themes that are compared, contrasted, and modified to inform conceptual understanding of phenomena (Fade, 2004; Flood, 2010). Though often difficult to generalize findings due to small sample size, the rich and in-depth data obtained through IPA has been used to develop and advance theoretical understandings of the phenomenon of human uncertainty (Fade, 2004). Additionally, IPA has been used to provide the foundation for intervention development (Smith et al., 1997).

Uncertainty

Before the lived experience of uncertainty can be examined phenomenologically, uncertainty must be defined and advanced as a concept. As observed by Downey and Slocum (1975), uncertainty is often used in daily conversation without a full understanding of what the term means. Despite some authors' assertions that uncertainty is a universal experience grounded in human nature that inherently seeks meaning, researchers have struggled to reach a singular definition of uncertainty. This lack of clarity is due to debate whether uncertainty can be separated from its emotional outcomes (Downey & Slocum, 1975; McCormick, 2002; Penrod, 2001; Penrod, 2007). While some authors have attested that uncertainty and accompanying emotions cannot be separated, others have argued that uncertainty is a neutral cognitive state distinct from emotional outcomes that arise from individual perceptions of the uncertainty (McCormick, 2002; McGregor et al., 2001; Penrod, 2007; Van den Bos, 2009).

Among researchers who have argued that the definition of uncertainty should include related emotional factors, uncertainty has been defined as an aversive feeling experienced when one feels uncertain about the self (Van den Bos, 2009). This definition

involves a distinction between informational uncertainty (having less information than desired upon which to make a judgment or decision) and personal uncertainty (related to self-regulation and existential meaning) (Van den Bos, 2009). Informed by the philosophical tradition of existentialism, Van den Bos (2009) argued that if one experiences personal uncertainty, strong negative emotions are inherent with the threat to one's sense of who they are and what they are capable of.

In contrast, many authors have advocated for viewing uncertainty as a neutral cognitive state created when an individual is unable to determine meaning, categorize or assign value to an event, or predict outcomes, with emotional reactions influenced by individual perception; thus, emotions are an epiphenomenon, rather than the phenomenon of uncertainty itself (McCormick, 2002; McGregor et al., 2001; Penrod, 2007). Under this definition, perception – a cognitive, not an emotional, process – plays a major role in determining emotional reactions and interpretations of uncertainty (McCormick, 2002). Understanding uncertainty through individual perception suggests that living with uncertainty is dynamic with fluctuations in the types of uncertainty and emotional responses experienced (Penrod, 2007). According to McGregor et al. (2001), possible contributing factors as to why uncertainty may be perceived as a threat include individual perception of self-consistency and self-worth as uncertainty induces an identity crisis when one recognizes inconsistent or unclear self-relevant thoughts that threaten feelings of adequacy, adaptability, stability, and coherence of the self. When one feels unsure about self-conceptions, one may feel a threat to mastery and feel unable to sense a clear path to direct goals and behaviors (McGregor et al., 2001).

Other notable factors that have contributed to the wide-ranging conceptualization of uncertainty include an internal versus external locus of control, with the former inclining a person to view uncertainty as an opportunity while the latter may produce a sense of threat or a danger (McGregor et al., 2001). Downey and Slocum (1975) also proposed that individual variability in interpretation may be influenced by environmental factors, individual thinking and experience, and social expectations. Viewing the environment as a neutral set of stimuli perceived and then reacted to by individuals, authors have asserted that individual tolerance for ambiguity, one's past experiences, and one's socialization may influence individuals to react to uncertainty in learned, socially expected ways (Downey & Slocum, 1975).

Additionally, in factor analyses of scales that measure intolerance of uncertainty (IU), Birrell, Meares, Wilkinson, and Freeston (2011) found that intolerance of uncertainty related to appraising uncertainty negatively with a desire for predictability, seeking of certainty, and cognitive and action paralysis. The authors reported that individuals high in intolerance of uncertainty tend to interpret situations as threatening, feel anxious, and become less confident in their decisions, which heightens their worry over possible ramifications of actions (Birrell et al., 2011). Phenomenological studies, however, are needed to determine if such theories are transferable to a variety of real-world experiences. The Birrell, Meares, Wilkinson, and Freeston's (2011) study was applied to worry as a symptom of Generalized Anxiety Disorder (GAD). Additional research is needed to explore the role of intolerance of uncertainty among nonclinical population.

In the process of defining uncertainty, researchers have also cited numerous concepts closely related, yet not synonymous with, the experience of uncertainty. Though Van den Bos (2009) asserted that personal uncertainty may be closely related to confidence, control, meaningfulness, and insecurity, the author contested these cannot be equated to personal uncertainty as someone may feel uncertain in ways that do not involve all these concepts. If one accepts the neutral-state definition of uncertainty, feeling as though one has lost control is an emotional reaction rather than a required feature of the phenomenon (McCormick, 2002). Likewise, uncertainty does not require meaningfulness or confidence because some individuals may not be afforded the chance to consciously pursue self-actualizing meaning, and not all persons who experience uncertainty feel insecure in their ability to handle or act upon the situation (Van den Bos, 2009).

Uncertainty may also involve ambiguity, vagueness, unpredictability, unfamiliarity, and a lack of information, yet these are not required for uncertainty to be present (McCormick, 2002). For example, it is possible for an individual to know information about what a major life change will entail yet still feel uncertain about the change because it feels unfamiliar and has not yet been experienced. Thus, the presence of unfamiliarity and the absence of vagueness shows that vagueness and a lack of information are not essential for uncertainty to occur. Therefore, these concepts can be viewed as situational types of uncertainty rather than fundamental components of the phenomenon (McCormick, 2002). Considering the lack of consensus in defining uncertainty as a construct, along with numerous concepts related, but not equated, to uncertainty in the literature, there exists a need for phenomenological researchers to

examine real-world experiences that test theory. Therefore, the present study of the lived

experience of undergraduate uncertainty presents an opportunity to inform present debate

regarding whether uncertainty can be separated from accompanying emotions.

Early Studies: Medical Uncertainty and Emotional Outcomes

The benefits of using phenomenology to study the lived experience of uncertainty

have been extensively shown in the medical literature regarding living with cancer and

making decisions as nurses, primary care physicians, and family caregivers

(Halldórsdóttir & Hamrin, 1996; McCormick, 2002; Mishel et al., 2005; Penrod, 2007;

Starks & Trinidad, 2007). Such studies have revealed discrepancies between theory and

real-world patient experience to better inform the way medical practice is carried out

(Penrod, 2007). Supporting the definition of uncertainty as a neutral cognitive state,

phenomenological studies of medical uncertainty have yielded both positive and negative

outcomes related to the phenomenon.

Some authors reported findings that personal uncertainty evoked helpful

contemplation and introspection and provided chances for individuals to have "a second

chance at life," become more mindful, or appreciate things they typically took for granted

(McCormick, 2002, p.130; Van den Bos, 2009). McGregor et al. (2001) further

suggested that the recognition of uncertainty may discourage ambivalence and prompt

action to resolve it, and that a locus of control focused on a higher power may decrease

the sense of danger in uncertainty. Despite these findings, however, a lack of research on

the positive impacts of uncertainty, such as the opportunity for personal growth, is

evident in the literature (McGregor et al., 2001).

Mishel et al. (2005) reported that for older breast cancer survivors, uncertainty related to fears of symptom recurrence reduced sense of control and resourcefulness and increased emotional distress and the tendency to view the world as uncontrollable. In other studies of adjustment to uncertainty in illness, high uncertainty was found to be related to emotional distress, anxiety, and depression (McCormick, 2002). When Starks and Trinidad (2007) conducted a phenomenological interview study of 25 primary care physicians (PCPs), they also found that decision-making in the face of uncertainty led to feelings of angst, confusion, frustration, and resentment. Uncertain in how to guide clients due to insufficient evidence on which to base recommendations for action, PCPs expressed in interviews that uncertainty put a strain on the doctor-patient relationship as patients looked to doctors as experts who should be giving clear advice (Starks & Trinidad, 2007).

Authors of phenomenological studies have also benefited the profession of nursing by using thematic analysis to find a central theme for living with cancer was "experiencing existential changes" and feelings of uncertainty, allowing professionals to more fully understand the patient experience (Halldórsdóttir & Hamrin, 1996). Randomized control trials played a role in uncovering ways in which medical professionals might assist patients in managing negative outcomes of such existential uncertainty. 509 recurrence-free breast cancer survivors, 360 Caucasian and 149 African–American women with a mean age of 64 years, were randomly assigned to a four week, over-the-phone management program or a care-as-usual control group (Mishel et al., 2005). This management program resulted in numerous benefits for long-term cancer survivors including improved cognitive reframing skills (e.g., calming self-talk),

cancer knowledge, patient–provider communication, and behavioral coping skills (e.g., using social interaction as a distraction from ruminating on worry), suggesting that managing uncertainty though interventions may help alleviate negative impacts identified in phenomenological studies (Mishel et al., 2005).

Health Psychology: An Example of the Utility of IPA

Beyond the fields of primary care, nursing, and caregiving, Interpretative Phenomenological Analysis (IPA) has been demonstrated as useful in the study of health psychology with close connections to social psychology theory (Yardley, 1997). Historically, qualitative methods were overlooked in health psychology until advocates argued that IPA offers supplemental data to quantitative findings needed to understand the complex relationship between the meaning patients attribute to conditions and the course of illness (Brocki & Wearden, 2006). To more completely understand the trajectory of illness physically, cognitively, and emotionally, health psychologists now recognize the unique role IPA serves in understanding ways individuals make sense of and describe health and illness (Brocki & Wearden, 2006; Yardley, 1997). As IPA assumes that objective bodily states exist, individuals subjectively think about these states, and what they say about them in verbal accounts reflects internal processes, IPA can uncover subjective ways in which objective illness are interpreted and given value by those living with them (Yardley, 1997).

These perceptions and interpretations of bodily processes uncovered through IPA have allowed researchers to understand experiences of conditions like chronic pain and chronic illness (Brocki & Wearden, 2006). In IPA studies of chronic lower back pain (CLBP), persons often felt a threat to identity as they asked questions such as, "Why is

this happening to me?" that caused emotional distress (Yardley, 1997, p. 68). In

preventive behavioral studies, IPA further benefited the study of uncertainty by revealing

potential factors that contribute to the expression of negative versus positive outcomes of

illness uncertainty (Yardley, 1997).

According to Yardley (1997), health psychology has been closely tied to the

theory of social comparison. Humans socially compare themselves to others out of desire

for stable self-appraisal when other ways of self-understanding are absent (Yardley,

1997). Phenomenological studies of chronically ill persons that applied this theory to

lived experience found comparisons were detrimental in the face of illness uncertainty

(Yardley, 1997). When participants compared their current condition to others who were

in a worse bodily state, the comparison created fear because, as two female participants

explained, they did not know whether they might arrive someday in that same position,

promoting a bleak outlook of the future (Yardley, 1997).

In total, IPA has advanced practitioner understanding of how patients make

subjective meaning of objective illness, offered predictive factors related to emotional

outcomes of illness uncertainty, and informed uncertainty prevention and intervention

(Yardley, 1997). Similarly, IPA appears to be an appropriate framework for the

exploration of uncertainty beyond illness, both conceptually and phenomenologically.

By utilizing IPA to examine undergraduate experiences of uncertainty, this methodology

may yield discrepancies between theory and real-world experience, explain differences in

emotional outcomes, and inform uncertainty management interventions for uncertain

students.

Career Uncertainty and Career Counseling

      Despite disproportionality in attention given to medical uncertainty in the literature, phenomenology has also been used to bridge gaps between the practice of career counseling and current conceptual understandings of career uncertainty (Finlay, 2011). Some researchers have linked career uncertainty to poorer academic achievement, anxiousness, and identity confusion (Orndorff & Herr, 1996). Stress, loneliness, depression, and low self-worth may also be experienced following university graduation (Perrone & Vickers, 2003). In a case study conducted by Perrone and Vickers (2003) with a male, Australian university graduate, life after graduation was described as an uncomfortable, "uncertain" time. According to the participant, life after university felt unfamiliar and uncertain as the predictability of university life was replaced by larger life decisions (Perrone & Vickers, 2003). As this study focused on the transition from university to the workforce and did not consider higher education or exploration, further study is needed regarding the post-university transition.

      Phenomenology has also been used to inform career counseling by asking career choice deciders, "What is your experience of making career decisions?" (Amundson et al., 2010, p. 338). The resulting thematic analysis of 17 interviews of employed adults yielded 3 factors participants considered when making career choices: relational life, personal meaning, and economic realities (Amundson et al., 2010). Considering participants valued subjective fulfillment of personal goals as well as a sense of relational belonging in the workplace, career counselors may need to take a more relational, contextual, and meaning-based approach when assisting uncertain clients (Amundson et

al., 2010); however, this study did not include undergraduate students who have yet to establish a career path or join the workforce.

A late twentieth century mixed method study involving undergraduates still attending university found many college students, both declared and undeclared, expressed uncertainty about career direction (Orndorff & Herr, 1996). Orndorff and Herr (1996) recruited 189 freshman and sophomore students from Penn State University and found that while undeclared students receive more career development assistance at universities, both declared and undeclared students reported uncertainty, suggesting the perceived divide may be detrimental to declared students. Despite the fact declared students had lower levels of career uncertainty, they were not found to have higher levels of career development behavior, suggesting both declared and undeclared students may benefit from services that help them engage in more meaningful self-reflection and exploration of career information (Orndorff & Herr, 1996).

In addition, value-based career counseling for multipotential college students was examined by Kerr and Erb (1991) and found to affirm career goals and increase certainty, demonstrating real-world applications for the study of uncertainty for universities. Academically talented college students with the ability to develop skills in numerous career domains may have a particularly difficult time establishing existential identity and purpose, which can lead to frustration and delayed career choices (Kerr & Erb, 1991). While traditional career counseling matches student abilities and interests to various jobs, this may serve as little help to students who are highly capable in a wide range of domains (Kerr & Erb, 1991). Though the intervention in this study benefited gifted

students in establishing informed career choices, the question remains whether such interventions could apply to non-multipotential students.

Scholars have also suggested that many vocational programs designed to assist uncertain students have ignored the process of how decisions are made by focusing more on the choices themselves, suggesting phenomenological study of uncertainty may reveal reasons current management interventions succeed or fail (Betz & Hackett, 1986; Starks & Trinidad, 2007; Van den Bos, 2009). Rather than focusing on the job search itself, counselors have been encouraged to focus on the search for meaning that underlies a job search to better benefit uncertain students (Kerr & Erb, 1991). Conceptually, self-efficacy theory and career choice behaviors were examined by Betz and Hackett (1986). According to Bandura's social cognitive theory, self-efficacy is a key mechanism that enables individuals to enact human agency (Chen, 2006). Supporting this theory, authors found that diminished self-efficacy regarding perceived ability to select goals, act upon them, and solve problems was predictive of career indecision (Betz & Hackett, 1986).

Rooted in Bandura's social cognitive theory of human agency, vocational and career psychologists have also suggested that human agency to make decisions is related to interpersonal, intrapersonal, and contextual factors, suggesting career counselors must assist clients to better understand the subjective world of personal goals, values, interests, attitudes, and emotions (Chen, 2006). Since career counselors seek to promote self-management and growth, individualized considerations are needed to assess subjective factors that help clients maximize their potential to create a satisfying life (Chen, 2006). For one to feel capable of exercising control over life, Bandura proposed that forethought, self-regulation, self-awareness, and motivation are essential to gain meaning

and shape one's direction (Chen, 2006). As cognitive and emotional beings that make

meaning of life based on their subjective inner worlds, phenomenological aspects of life

such as personal experience, goals, purposes, values, attitudes, and interests must be

addressed in career counseling if individuals are to be equipped to intentionally build and

enact career goals that give their personal life purpose (Chen, 2006).

Current Study

In summation, phenomenological methodologies, specifically Interpretive

Phenomenological Analysis (IPA), have been shown useful and beneficial for studies of

medical uncertainty and health psychology. However, a disproportionate amount of data

has been applied to the medical literature while neglecting study of other forms of

uncertainty, such as existential career uncertainty. Furthermore, a lack of study on

college student participants who have yet to establish a career direction or struggle with

the ability to make career decisions is evident (Amundson et al., 2010; Perrone &

Vickers, 2003). In studies that did address career decision-making and uncertainty in

declared and undeclared undergraduates, career counselors were encouraged to

reexamine the ways in which career and vocational services are carried out (Betz &

Hackett, 1986; Chen, 2006; Starks & Trinidad, 2007; Van den Bos, 2009).

To provide insight into how counselors might best assist uncertain students,

uncovering relevant themes related to uncertainty may reveal considerations to be

addressed at universities. Based on compatibility with research objectives, Interpretive

Phenomenological Analysis (IPA) was applied in this study of uncertainty in an

undergraduate sample. In my phenomenological case study, I sought to answer the

question, "How do undergraduate college students experience living with existential

uncertainty regarding where to go next after university (i.e., career, higher education, or exploration)?" Secondary considerations included 1) comparison of the theoretical conceptualizations of uncertainty with identified phenomenological themes found in this study and 2) possible implications for career counselors.

Method

Participants

Participant population. The selected participant was an undergraduate university student attending Concordia University, a small, private, liberal arts university in Portland, Oregon. The participant was a Caucasian, female senior approaching graduation from the university. Religion and sexual orientation were not disclosed.

Researcher-participant relationship. I am a student at Concordia University Portland. I had access to the population I recruited because my participant was a student who also attended Concordia University Portland. Prior to this study, I was acquainted with the participant but did not possess a friendship or relationship with the student deep enough to provide knowledge of participant character, current life circumstances, family life, or personality that could bias interpretation of data. My knowledge of the student before the study was highly situational and did not extend far beyond demographic information such as major status or where the student was from. I was not familiar with the participant beyond occasional interactions on campus.

Having acquaintance with the participant before the study, the possibility exists that familiarity influenced the willingness of the participant to enroll in the study or influenced my selection of the student for enrollment from the pool of interested students. However, I held no power or authority over the participant beyond a peer relationship.

My selection of the student was based on early interest in my study and a high level of

self-reported uncertainty. Being acquainted with the participant prior to research may

also have helped or hindered her honesty during the interview process. However, the

depth and nature of participant responses did not appear to reflect a hinderance of honesty

during data collection.

Participant Recruitment

      Recruited population included/excluded. Recruitment attempted to mirror the

same demographic distribution as the undergraduate student population at the host

university, with no bias related to the recruitment method. Recruitment yielded a

distribution of interested students that was predominantly Caucasian, female, and

declared (major). Enrollment of a Caucasian, female student with a declared major

reflected this pattern. The participant was required to be an adult. See: Appendix A

      Inclusion and exclusion criteria. As this was a study of a college student living

with uncertainty regarding life after university, the participant was required to be

undergraduate university student, age 18 – 25, currently feeling uncertain about post-

graduation direction, and willing and able to discuss and convey personal perceptions of

the experience of living with uncertainty. Only declared students responded to

recruitment as no undeclared students responded. A declared student was therefore

enrolled for this single-subject case study.

Sampling

      Sampling procedures. Initially, purposive quota sampling was to be used to

obtain both declared and undeclared participants experiencing uncertainty about life after

university. However, screening yielded only declared students. Enrollment was

therefore based on age requirements and self-reported levels of uncertainty. The final participant selected for this case study reflected the distribution of interested students, the majority of which were white, female, and declared (major). Informed consent was obtained before the start of the study and the aims of the study were fully disclosed to the participant (see Appendix B). Participant rights were explained including the right to stop participation at any time, confidentiality, and the right to access study results.

Sampling method. To address the primary research question of the lived experience of existential uncertainty about life after college, a qualitative study utilizing Interpretative Phenomenological Analysis (IPA) was conducted. This methodology best suited the purposes of this study because phenomenology is the study of consciousness and experience, and IPA seeks to understand how persons make meaning of experience and relate to the things that matter to them (Larkin & Thompson, 2012; Starks & Trinidad, 2007; Van Manen, 2016). IPA seeks to understand the significance of an experience to a given participant rather than what occurred objectively (Fade, 2004; Pringle et al., 2011). Using evidence from verbatim transcript data to make sense of participant experience, the rigorous and careful analysis of this methodology was optimal for understanding the experience of a college student living with existential uncertainty about life after university.

Sample size. Phenomenology values the quality of data over quantity with an average of 1-10 participants per study. Using requirements for age and presence of uncertainty regarding life after university, one participant was enrolled in this single-subject case study. The depth of analysis conducted for the interview transcript justified a smaller sample size. Practices to enhance rigor were employed to compensate for small

sample size including consistent reflexive journaling to minimize interpretation bias and a balanced attention to detail, coding process, and phenomenological theory.

Data Collection Procedures

   Setting for data collection. Research was conducted on the campus of Concordia University in Portland, Oregon. Data was collected through an interview scheduled in advance at a designated time and held in a predetermined library study room to promote privacy.

   Data collection and identification. The interview was conducted on a one-on-one basis. Persons present during the interview were myself (the interviewer) and a single participant. No other individuals were present during data collection. One unstructured, in-depth, face-to-face interview was conducted with the participant. The interview lasted 42 minutes. The interview began with a predetermined, broad question regarding the experience of living with uncertainty about life after college. This initial prompt was: "Can you describe to me your personal experience of living with uncertainty about your next life decision following university?" Throughout the interview, more specific questions were spontaneously generated to clarify participant responses and reach a deeper level of understanding.

   Recording and data transformation. The interview was audio-recorded and later transcribed verbatim into a digitally-stored visual transcript.

   Plan to deal with withdraw, "loss-to-follow-up," or some reason to stop study. If the participant needed to withdraw from this study, data provided up to the point of withdraw was used unless the participant requested that the information be thrown out. Consent forms clearly explained the right to withdraw at any point and the need to contact

the researcher to retract contributed data. The participant did not withdraw at any point from this study.

Declaration on Conflicts of Interest or Lack Thereof

I had no conflict of interest as the participant in this study was my peer. I am a student at Concordia University Portland, and the study participant was also a student at Concordia University Portland. I held no authority over my participant and utilized no coercion in the recruitment of voluntary participants.

Data Analysis Procedures

Data management procedures.

Data entry. The interview was first audio-recorded and transcribed verbatim into visual format, stored digitally on a password-protected computer. The digital transcript was run through MAXQDA computer software during thematic data analysis.

Data cleaning. After the interview was transcribed from audio to visual format, the visually transcribed data set was reviewed and checked against the audio recording to ensure that the visual transcription matched the audio recording verbatim.

Missing data. I was prepared to conduct an as-needed second interview had the majority of the audio-recorded interview been inaudible, or if the data obtained was not extensive enough for deep analysis. The purpose of a second interview would have been to replace missing data or to explicate further into the participant's experience of uncertainty. This provision was not used in this study. Any inaudible segments of data were noted in the visual transcript. Inaudible

segments of data were not long enough to disrupt participant narrative or warrant

a second interview. Information obtained in the interview was extensive enough

for deep analysis.

Data-analytic strategies. After the interview recording was transcribed and

checked for accuracy, the transcript was systematically analyzed in a coding process of

thematic patterns. Detailed, line-by-line in vivo coding within the data was used to

identify patterns of meaning called themes. Multiple thorough readings of the transcript

occurred. In the margins of the transcript, notes were taken on potential emerging

patterns that later developed into thematic categories. Abstracting and naming themes

within a transcript had to be grounded in the participants' words yet allow for deeper

consideration of the processes behind these words (interpretation). Once the entire

transcript had been coded, themes were arranged and rearranged into categories and

subcategories based on connections between them.

When new themes emerged, the transcript was referenced again to check for

missed themes. A master list of themes across the interview was compiled and dominant,

central themes were reported according to the evidence. A narrative write-up explained

how the common themes contribute to an understanding of the lived experience of

uncertainty as a phenomenon. During thematic analysis, MAXQDA computer software

was used to organize, categorize, and analyze themes.

Methodological Integrity. To ensure methodological integrity, an ethic of

transparency was practiced throughout the analytic process. As researcher, I

acknowledged my role in interpretation of data, communicated my own perspectives and

influences during the research process, and explicated my efforts to remain open to the

phenomenon and collected data. Contextualization of collected data was given along with explanation of the ways in which I selected my procedures and my rationale for why they adhere to the phenomenon under study. Member checking was employed to allow the participant opportunity to approve my interpretations of her interview transcript. When this occurred, the participant was provided a clear set of directions and predetermined options for checking procedures (i.e., hard copy, electronic copy, having the data read to her) and was told the extent of the transcript she was going to review, what language to expect in the transcript (i.e., verbatim or condensed), and which transcript sections were likely to be presented in the final report.

Data Protection and Security Plan

Data was kept confidential. Only myself (and occasionally my research supervisor, Reed Mueller) had access to collected data. As interviewer, I had the ability to identify the participant, but maximized confidentially by using identifiers such as male/female (M/F) and declared/undeclared (D/UD). The transcript contained no names and provided information did not connect the participant to her responses. Digital transcript data was secured on the researcher's password-protected computer. Stored data was accessed only by the researcher (myself) and shared only with the research supervisor.

Following audio-to-visual transcribing and data cleaning, the audio data was permanently deleted in its entirety. Following the completion of this thesis project, the digital interview transcript was destroyed. Consent forms will be retained for three years. I understood I had to report any serious threat a participant posed to the self or others, but no such threats arose.

Risks and Discomforts

This study posed minimal psychological, social, and physical risk to the participant as questions were not of a sensitive nature and the release of data would not jeopardize employment, social, or legal standing. Participation in this study was no more painful, stressful or embarrassing than a physical exam or participation in a regular classroom discussion. During the unstructured interview, there was potential for discomfort if the student discussed negative feelings, emotions, and thoughts relating to feeling uncertain. However, these discussions were offered up freely at the discretion of the participant, and it was clearly stated that she may stop participation at any time.

Benefits

It is possible that the participant directly benefited from participation in this study by growing in self-knowledge and having a space to express herself and think deeply about her experience of uncertainty. Indirect benefits of this study included the potential for filling gaps in the literature regarding the understanding of the phenomenon of uncertainty as it relates to college students. University career counselors may also benefit from a deeper understanding of the subjective world of a student living with uncertainty and develop more effective ways to assist students in the career decision-making process.

Ethical Considerations

During the interview process, I recognized that the participant utilized a particular word often. To protect participant privacy, the word will not be specified here. Responding to researcher questioning regarding her frequent use of the term, the participant freely disclosed information regarding her mental health. This presented the potential for distress. However, the consent form clearly stated the potential for

emotional discomfort, the right to withdraw from the study at any time, and the right to decline to answer any question. The participant offered this information freely. I asked one follow-up question and turned the conversation back to uncertainty to remain on topic and not trigger harmful distress. The decision to proceed with the interview was made in observation that the client did not appear distressed at offering up this information. In future study, it may be helpful to provide contact information for mental health services should the need for use arise.

Additionally, certain demographic and personal information (e.g., age and major), was masked or withheld during narrative write up to protect participant anonymity and prevent identification of the participant by persons teaching, attending, or working at the small university. Any potentially revealing information was substituted with bracketed modifications. A frequent example of bracketing was the substitution of her major title with [current major].

Results

Primary Themes

Three primary themes emerged in this phenomenological case study: money, family, and anxiety. Listed in order of how frequently the concepts occurred in discussion during the interview, these themes were noted as the most talked-about factors related to the participant's experience of uncertainty. Following these sections, a potential overarching theme to make sense of the relationship between themes is explored. A related subtheme found to interact with the major themes is also discussed. Below, each major theme is discussed in relation to the larger transcript narrative. While

my interpretive thoughts are often explicated within the discussion of each theme,

additional researcher reflexive journaling memos and participant member checking are

separately explicated for each theme to demonstrate the interpretative process.

      Money. The participant recurrently expressed that money was an influential

factor in her decision-making process and current experience of uncertainty about life

after college. Many times, after the topic of conversation shifted away from money, her

dialogue would return to the consideration of her options in terms of their relation to

money. As researcher, I had an intrinsically interpretive role in understanding the

significance of money to the participant both in my formulation of follow-up questions

during the interview and in my after-the-fact transcript coding. Rooting my interpretation

as much as possible in the student's own words within the context of the interview, I

concluded that the issue of money was, overall, a consideration related to survival and

necessity for the participant, such as when she expressed, ". . . do I *want* to pay rent or do

I want to eat? That *becomes* a choice you have to think of." Her choice of wording,

"have to think of," suggested a lack of personal choice and a more survival-oriented

consideration.

      More specifically, money shaped the way the participant conceptualized her

available options, using money as a factor to eliminate the option of exploration

following university:

      Researcher: . . . so when you think about the- the grad school versus exploration

            versus career thing, is there any that you're leaning towards more or is it pretty

            even right now in your mind?

Participant: Um… probably between experience and grad school. I'd love to just pack up and travel, but it's definitely not… feasible.

Further, as the remaining options of either attending graduate school or entering the workforce were articulated, money continued to complicate the process of choosing one over the other. As expressed by the student, money became a "con" for both of her remaining options:

Participant: Con is definitely money. It's expensive to do so [go to grad school] . . . a pro of getting more experience is . . . I'll feel more comfortable [in the location of employment] . . .

R: Um-hm.

P: Con is I need to live, and, like, minimum wage is, especially here, is [sic] really hard to have an apartment . . .

As interpretative researcher, I saw money expressed here as a contributor to her uncertainty because money is an important factor for her survival, yet both options posed a problem related to money. Higher education costs money and is expensive. Entering a career may not pay a lot of money. This made it difficult for the student to feel certain about which option to choose.

In fact, this consideration of money was often at odds with her personal desires or interests, playing a somewhat obligatory role as a reminder of previously mentioned "feasibility:"

Participant: . . . I think that's one reason why I'm stuck . . . between if I wanna

just go get a job or if I wanna go to grad school. I mean, I love school, that's just

something- I think that's a part of me. I love learning . . . but I'm also frugal . . .

Here, the participant appears to experience a dissonance that leaves her feeling "stuck"

between what she would "love" to do, and what makes financial sense. Part of her loves

learning while another aspect of her identity, she reported, is frugality. A difference

emerges between "liking" an option and having money to enact that choice:

Participant: . . . Money is a huge factor in everything that happens [pause] Um, so

if I like it, I probably won't do it if I can't afford it.

Researcher: Um-hm.

Participant: Whereas, in a perfect world, liking it and having money for it, if it

was the same, I would go for liking it.

Lastly, there was the consideration of, as I interpreted from the following statement, time

and money that had already been invested in her undergraduate education: "And, like, I

didn't go to school for four years to get paid minimum wage the rest of my life. Which

sounds terrible but … I need more income than that." Even here, money is connected to

survival and making ends meet, yet closely connected to the investment she has already

made to reach her current position.

Reflexive processing. Prior to member checking, reflexive journaling was

conducted by the researcher throughout data analysis to promote transparency of

interpretation, reveal researcher bias, and explicate rationale behind thematic conclusions.

Reflexive memos included the following entries. Following a section of dialogue in

which the participant expressed she tried to weigh the "pros and cons" when making the decision of where to go next after university, I asked the participant to clarify what she meant by "pros and cons," desiring examples. Following her response that an example of a "pro" would be something she wants to do, and that she would love to go to grad school, but that a "con" would be both the expense of grad school and the minimum wage of entering the workforce, I asked the participant" "So, from what I'm hearing you saying, there's kind of an element of personal happiness but also a survival aspect." Reviewing the transcript, I wrote the following memo:

> Here, I am interpreting. I use her descriptions of money-related topics thus far to assume she values money in decision-making in terms of surviving and being able to afford daily living expenses. Perhaps I am overlooking here that she may just desire more money in general, but so far her words indicate a survival motive. I reflected this back to her so that she could correct me if I was wrong. I say personal happiness as I related her saying "love" and "want" to mean that these would relate to personal happiness and fulfillment. However, this could be incorrect potentially, not factoring in that maybe, to her, wanting to do something also relates to other influences like family. However, she had the chance to correct me, and she then adds family pressure to the conversation [following my question]. Does this imply a difference between liking something personally and her family's opinions?

> *Member checking.* Following researcher interpretation and narrative write-up, the participant was given the option to read the entire results section of this study or review a summarized version of the findings. Choosing the former, the participant read,

in its entirety, the results section of this study which I sent to her via email. I instructed

her to correct or affirm the way in which I interpreted her interview data and the way I

arrived at themes descriptive of her experience of uncertainty. I also highlighted each

subsection's need for member checking. After reading and reviewing this information,

the participant responded: "Everything looks really good!" and expressed that what she

had read was "all good." The participant did not provide specific corrections or

affirmations beyond these comments.

Family. The participant acknowledged being a "family-oriented" individual who

went beyond considering personal desires, interests, or personality when thinking about

her life after university. In addition to personal factors, she felt "a lot of family pressure"

as her parents were "very very pushing [sic]" her to go to grad school. This created

dissonance between her personal inclinations and social opinion: "And so, it's like,

wanting to obey *their* wishes versus wanting to do something for myself." As researcher,

I interpreted this incongruence to impact her experience of uncertainty. Had the two been

aligned, perhaps the participant would feel less uncertain in selecting a post-graduation

path. As she talked about her options (i.e., higher education or career) she expressed: "I

don't even know what I'd do if I *didn't* have their voices." As researcher, I questioned if

this was a positive statement that reflected appreciation for their help, or if this was an

observation of the pervasiveness of their influence as a norm in her life. Based on the

context of the statement within the interview, considering the ways in which the student

described her family's influence before and after this quote, as well as her tone voice and

subsequent laughter, I understood her statement as indicating the latter.

Considering the descriptions provided by the student, her family had been a constant voice in her educational journey, as she told me her mother had been the one to "push" her into her current undergraduate major with "subliminal messaging growing up." According to the student, ". . . I said I was interested in [field of study], "You're not very good at [field of study]." This contradiction between the opinion of her family and her personal interests led the participant to consider what she was good at as being separate from what she was interested in, potentially complicating her current decision-making process. Further, opinions from her family, particularly her mother, were at times contradictory, impacting the way she felt about her uncertainty:

> Participant: " . . . she says she [inaudible] "I really miss you!" On the other hand, she's like, "You should stay in school!"

> Researcher: [laugh]

> Participant: . . . Thanks… that doesn't help!

> Researcher: . . . Does [sic] the mixed messages from other people . . . influence you?

> Participant: Yeah, I tend to weigh everything everyone says, and so that doesn't help because sometimes people can be contradicting of themselves.

Considering this, the participant valuing the opinions of her family has not always been helpful in moving her from a state of uncertainty towards certainty.

Reflexive processing. Prior to member checking, reflexive journaling memos included the following. When the participant said of her family, "I don't even know what I'd do if I *didn't* have their voices [laughing]," I commented in my memo:

> Not sure if this is a negative or positive view of her family - Does she mean she just cannot imagine how the situation would be different because she cannot imagine not hearing their voices, or does she mean that their voices are of a certain help, after all? My bias is to say the former based on the context of this sentence in the larger conversation.

To inform this interpretation, I based this conclusion on other comments made by the participant during the interview, such as: "So, it's almost, like, going against my family [laughs] I feel like such a rebel for doing it, and like it's not even that big of a deal!" Within the context of the interview, I noted that this came as the participant:

> . . . found a way to do what interested her within the path she was pressured into. (This is the way it seems she feels- a pressuring or persuading rather than something less explicit).

However, I also noted her language during my interpretation of the *family* theme. After I asked her, ". . . Do you feel a dis- like not a disconnect, but a dissonance between what you would want and what they [her family] would want?" She told me:

> . . . the distance between my family and my [sibling] is a lot more than it is between my family and me, because growing up [her sibling] was always the one who rebelled, and I was always the one who followed the rules. So, it's almost like being trained not to go against what they want."

Here, I noted that, "Since distance is similar to dissonance, I wonder if I misheard her and she said dissonance, or if she misheard me and said distance, or if we both purposely used different terms."

In a demonstration of connection between the theme of anxiety and the theme of family, after reporting that this "rebellion" felt both cool and terrifying, she said, "It's really cool to be, like, not held in what they want me to do as their last chance of having a successful child. I've heard that too. . . the other hand, it's terrifying because I'm going against specifically what they want? and that's just w- panic-inducing." I made the memo:

> Going against her family is an experience with varying emotions for her - she feels that not being under their control feels "cool" yet it is also "terrifying" that she is going against their specific wishes (I am interpreting this relates to following their "rules" most of her life, and now doing something out of character for her. Does that contribute to the fear?)

Of note, the importance of family opinion was often interpreted by myself as researcher, such as when I asked the student why she thought it was so hard to find the answer for herself (to the question of where to go next after university). When the participant said, "I think it's cause I wanna make everyone happy," I took some interpretation as I processed:

> I am taking this to apply mostly to her family, since she has not mentioned any other persons [during the interview], yet when she generally says "everyone" I am taking this to mean her family, as these are the only other people she mentions.

This interpretation was obtained from the data present in the interview transcript based in the participant's own words. It is very possible, however, that there are non-familial persons the participant wishes to "make happy" that I was unaware of.

As a final consideration, I asked the participant, "Sounds like it would be impactful on how you experience the . . . uncertainty! . . . Do you think you would be experiencing your uncertainty differently or the same if they [her family] weren't having a say in it?" I made the memo:

> I attempted to try not to lead her by giving her a question with options, so she did not feel she had to agree with a single interpretation given by me. However, I assumed it would be impactful, so this may have influenced her response, "agreeing" with me that it is impactful. However, it appears evident in her dialogue that there is a difference between family and self-desires, so it may be likely that this is an honest reply on her part.

Member checking. Approving of the entire results section, the participant did not provide specific corrections or affirmations for this subsection.

 Anxiety. Throughout the student's description of her experience of uncertainty, she conveyed her experience in terms that included "worry," "scary," and "panic." Particularly for this student, feelings of "panic" were frequently articulated. Of note, the first description given by the participant at the start of the interview was a sense of panic:

> Researcher: . . . this interview will be open ended. I'll ask you one question, and you can take it any direction you want. Um, and that question is, "Can you

describe to me your personal experience of living with uncertainty about your

next life decision following university?"

Participant: Ah, the closer it gets to graduation the more panic-y I'm feeling about

it.

From the start, the emotional connection the participant made to the experience of

uncertainty was anxiety. At various places in the interview, as the topic of conversation

branched away from her initial description, panic would reenter her language. After

expressing that she desired to find an outcome "as perfect as possible," the conversation

again turned to panic:

R: Mm. So… What would be, like, some of the implications for you of [sic] if

you were to find the answer? Like, what would that look like?

P: Mm… I think I'd feel more relief than anything else. Um... if I found the

perfect answer then I don't know, I just, I don't think I would be as panicked

about graduating.

Here, we see panic related to upcoming gradation, another commonly cited aspect of this

student's experience of uncertainty discussed in further detail in the following section.

Later in the interview, the participant used the word "heavy" to describe how she

experienced uncertainty compared to if she had more "free time," a greater sense of

"completion," and was more certain of her post-graduation direction. Again, she related

this term to the feeling of panic:

P: . . . It would just, personally, it would feel just a lot better, a lot less heavy.

R: Hm, heavy is a [sic] interesting way to- to put it. Um, you think you could

expand on heavy?

P: Um…. you know how like when you have pan- like, when you're panicking

you feel like- like you have a weighed jacket on almost? Kind of like that feeling.

Interpreting such terminology during transcript analysis, I used the participant's

statements about anxiety, family, and other factors before and after the aforementioned

dialogue to contextually conclude that these feeling of anxiety, in part, related to familial

pressure and her approaching graduation date. These both appeared connected to social

expectation. During the interview, for example, I asked a clarifying question regarding

how she connected uncertainty to panic, and she explained it was related to ". . . the

uncertainty with . . . how it's going to be reciprocated . . . my family, with outside

influences like my extended family. . ." Though the participant also discussed how

uncertainty related to herself, she first mentioned her family and how their expectations

play a role in her experience of panic and being uncertain about how they might respond

to a given choice.

When asked if uncertainty had any positives to it, or if it was mostly a negative

experience (the student had only used negative terminology), she answered, "Um, I don't

[think] there's really any positives [laughs] That's scary!" This suggested that if the

student perceived more positive attributes to uncertainty, perhaps her levels of anxiety

would not be as high. Further explored in the discussion section, this presents possible

support for theoretical conceptualizations in which a person's emotional experience of

uncertainty is shaped by whether an individual perceives uncertainty as a positive or

negative phenomenon.

Reflexive processing. Prior to member checking, reflexive journaling memos included the following. After the student conveyed, ". . . It would just, personally, it would feel just a lot better, a lot less heavy," I knew that "heavy" could potentially relate to a number of emotions or experiences, but ultimately included this under the panic theme due to her direct explanation of the term as related to panic. I noted: "Heavy relates to the feeling of panic, for her," referencing the excerpt in which she described the term as analogous to the "weighted jacket" of panic.

In seeking to understand the nature of her panic following an analogy the participant gave of waking up and realizing one had a paper due, I asked the student, "So, there's - is there a level of the unprepared? Is that what I'm hearing from the analogy . . . " The student was then able to correct my misinterpretation:

> Here, I try to understand the analogy the participant gives of the paper, and she corrects me. Rather than feeling unprepared she ties it back to words that relate to avoidance, such as procrastinating or putting off.

It should also be noted that when reviewing the interview transcript, I made a note about my question, "Could you elaborate more on um… I guess how you emotionally experience it [uncertainty]?" I wrote:

> I think questions like these expose my bias of siding with the literature on viewing uncertainty not as an emotional state in itself but as a state that is interpreted and perceived in either negative or positive ways. I reveal in this type of question an assumption on my part that emotional experience can vary, rather than "uncertainty = a negative emotion."

Member checking. Approving of the entire results section, the participant did not provide specific corrections or affirmations for this subsection.

Relationship Between Themes

Primary themes of familial pressure and reported anxiety were largely found related to social norms and expectations outside of herself, and money was found to be related to survival, an external consideration beyond the intrapersonal. Therefore, a potential higher-order theme linking the three themes was "external influences," pressures from outside the self that create social expectations the participant considered in relation to intrapersonal factors discussed in the following section. As touched on in the above sections and suggested in my reflexive memos, embedded in transcript data arose a connection between money, family, and anxiety to the common theme of external or interpersonal pressure and expectation, supported by subthemes of the participant referencing her past and her approaching graduation.

Reflexive processing. When the participant reflected:

Cause like the way they describe . . . it growing up is like, by the time you're in high school you know what you want to do, you know where you're gonna be in 10 years, and all that fun stuff, but going through classes and stuff when you're in college it's like, okay here's a piece of what I like . . .

I noted: "She seems aware of others' expectations for her." Though ambiguous regarding who she was referring to when she said, "they describe," there was an articulation of an outside presence that holds expectations. Expectations outside of herself could also be

seen in her commentary of her family's opinion and her desire to make "everyone happy."

Referencing of her upcoming graduation was expressed in the following ways. After reviewing the comment "but the closer it gets to you have to know, there's a lot more negative." I reflected:

> There is more social pressure to know what you want to do when you are about to graduate college vs. when you are graduating high school with options ahead of you, I am hearing her say here. It is different to experience uncertainty when younger than at a certain age, when, it seems she is saying, there is social pressure to know.

This supported that external influences involve social norms and pressures that influenced the ways in which the participant was thinking about her uncertainty as she experienced it close to her college graduation date. For the *anxiety* theme, I had taken sentences such as "And that would kinda help like majority rules almost," and interpreted this to mean, "Appears that the participant implies a desire to have others choose for her rather than have to come to a conclusion herself. Anxiety in making a choice implies judgment of others?"

Overall, then, familial pressure and reported anxiety were largely found related to social norms and expectations outside of herself. Money was found to be related to survival, an external consideration beyond the intrapersonal. Intrapersonal desires and interests, in contrast to external influences of money, family, and anxiety are discussed below.

Member checking: Approving of the entire results section, the participant did not provide specific corrections or affirmations for this subsection.

Interactive Subtheme

Intrapersonal factors. In conjunction with interpersonal influences, intrapersonal considerations were often reported to interact with the external. This frequently-discussed subtheme emerged from the interview data in the form of personal interests, desires, and considerations of personality and identity. Such themes arose in close interaction with major themes such as money and family. Described briefly in the *family* theme section, when the participant expressed that her mother was the person who led her into her current field of study, she reflected that her mother would say, "You're not very good at doing this and that," which prompted her to conclude, "So why go into something I'm not good at?" During this point in the transcript, the participant was explaining her original interest in a field of study different than her current major. This conveyed that her personal interests were interacting with her mother's opinions of her, which influenced her decisions in the past and her choices in the present. I reflectively noted:

> What she wanted to do personally vs. what others told her she was and was not good at. Adds another point of consideration for her. Not just what she might be interested in, like [field of study], but what others tell her she is (not) good at. I interpret that she is saying they do not align. What she wanted to do (field of study) did not align with what she was told she was good at (current major), so when she was told she was not good at [field of study], she went into [current area of study] because she was told she was good at it. Two different criteria for

making a choice. That time, her family's voice won out over her personal

interests.

Furthermore, following the student's comment that ". . . you're kind of finding

yourself a lot more [in college]? Which is a bunch of pieces, and there's also what you're

good at, which is a whole other section of the puzzle. And like, finding all of these little

pieces of either yourself, or what you're good at, or what you wanna do, that completes

your picture of your life." I noted:

> "Finding yourself" - implies identity? She says, "either yourself, or what you're
>
> good at, or what you wanna do" as if they are separate factors. This implies a
>
> difference between understanding herself, what she is good at, and what she wants
>
> to do. When these do not always align, does this cause her negative emotions?
>
> Implies that if she loses one piece of her puzzle, that throws off the whole picture
>
> of what she wants to do? Complexity in her experience - many factors that
>
> interact and are not exclusive to each other.

For the theme of *money,* when the participant expressed, "Whereas now, it's just like, I

would love to be a [job position], but they don't get benefits, and I definitely get sick a

lot." I noted, "Dissonance with what she would like to do ideally and what is more

realistic."

Further, trying to see if the participant was experiencing uncertainty related to

external and internal influences separately, I asked, "Do you think that when your, um,

trying to think about your future after Concordia that you . . . do like, different factors

come into play like personality versus, like, social influences? Do they both impact you

when you're thinking about it?" The student replied: "Mm… yeah. I know I love

working with other people, I'm not a very social person, but like I'm very focused . . . "

Here, I noted: "Based on her replies, outside social influence is only one part of the

process - She also considers applying what her personality is like to what she will do after

college." This presented interacting forces that appeared to be separate considerations for

the participant: her own observations of her personality and her family's assessments.

When I asked if there was conflict for her within her own personality, such as when she

cited that her patience lent itself to grad school yet her frugality did not align with the

cost, I noted:

> Seemed to me that she had different aspects of what makes up her personality,
>
> frugalness, patience, etc. that were telling her different information about which
>
> choice might be best - one saying school and the other saying job. This appeared
>
> to come from herself rather than her family telling her she is frugal or patient.
>
> Family is another voice outside of these. Does she think cognitively about these
>
> factors or feel them more emotionally when making a choice? Is there literally a
>
> thought process of "What will mom think?" or is it a general unease knowing that
>
> they've always stated a certain opinion that may not align with hers?

In addition, following the participant response, ". . . even if I want to take time off

and just work minimum wage and maybe live at home, help out, . . . both my parents are

very very pushing me [sic] into going to grad school," I wrote: "This appears to back my

interpretation of "wanting" as applying more to her personal desires whereas wanting to

obey her family's wishes is something separate." After the participant added: "And so,

it's like, wanting to obey their wishes versus wanting to do something for myself." I wrote: "Here, she states there is a difference."

Member checking. Approving of the entire results section, the participant did not provide specific corrections or affirmations for this subsection.

Combined, then, both interpersonal and intrapersonal factors were reported to impact the participant's experience of uncertainty regarding life after university. As various factors often contradicted, this created difficulties for the student in what the literature has referred to as "determining meaning, categorizing or assigning value to an event, or predicting outcomes" (McCormick, 2002). Uncertainty for this student, then, must be viewed as a complex and interactive process comprised of multiple influencing factors that contributed to the whole of her experience.

External considerations of money, family expectations, and upcoming graduation created and interacted with feelings of anxiety as intrapersonal desires, interests, and self-assessments of personality clashed and contradicted. Lack of consensus among these influential factors prevented the student from assigning preferential value to one option over another, and her prediction of which choice would be optimal was inhibited. For this participant, then, the experience of uncertainty was characterized as a "pretty negative thing" she wanted to be "done with." She felt "stuck" and "panic-y." Her struggle to arrive at a decision was "frustrating" and her mental "flip-flopping" between options was "exhausting." In her own words, "I don't [think] there's really any positives [to uncertainty]."

Discussion

Contributions

As the participant in this phenomenological case study provided interpretations of uncertainty in concert with myself as researcher, study results may inform conceptual definitions of uncertainty and advance understanding of how the phenomenon is subjectively perceived, interpreted, and given meaning. Theoretical findings from previous studies are first related to the phenomenological results of the present study. The relation between study results and literature regarding college students and career counselors is then discussed.

Phenomenological results and theoretical findings. Reported in the literature, the nature of uncertainty has been heavily debated as to whether the phenomenon inherently relates to negative emotional factors or is a "neutral cognitive state" with positive or negative reactions influenced by individual perception (McCormick, 2002; McGregor, Zanna, Holmes, & Spencer, 2001; Mishel et al., 2005; Penrod, 2007; Van den Bos, 2009). Utilizing phenomenological experiences of participants such as the undergraduate in this case study, theoretical suggestions may be tested against real-world experience. According to the participant in this case study, the data supported a definition closer to that of uncertainty as a neutral state. This was concluded based on contrasting descriptions of uncertainty experienced in high school and uncertainty experienced close to college graduation and on descriptions of decisional "flip-flopping" as tiring, frustrating, and a process she desired to end. This second consideration raised the question: Is the cognitive act of deliberating between options inherently tiring or

frustrating, or has the act been interpreted this way by the participant? Based on

participant descriptions, I argue the latter.

As the participant proposed, after being asked if there were any positives to her

experience of uncertainty:

P: [laughs] Uncertainty is a pretty negative thing.

R: Um.

P: Um… I think if you had asked me that in high school it would have been a

different answer.

R: Um!

P: It would have been more of an, "It's exciting to find out what I want!" and,

"It's exciting to have all these choices,"

R: Yeah.

P: but the closer it gets to you have to know, there's a lot more negative.

First, the participant stated that uncertainty is "negative," seemingly supporting

the negative emotions definition. However, her proceeding comments suggested that

uncertainty may not always require a negative description, but rather the participant

imagined a scenario, or had experienced a scenario in the past, in which uncertainty was

perceived as exciting. This contrast in negative and positive interpretations of

uncertainty support the neutral cognitive state definition of uncertainty more than the

inherently emotionally negative definition.

Furthermore, the participant expressed during her interview: "It's – it's just an exhausting process going back and forth, and then you'll . . . decide like, "I definitely want to do this!" Then you're like, "Well, maybe not…" Reflexively noted during transcript analysis, I raised the question:

> For her, uncertainty involves mentally moving "back and forth" in decision-making, where she may feel she has arrived at a choice, but then she changes her mind again, "tiring" her. Does this imply an emotional component rather than simply a cognitive appraisal of her options and choices?

In other words, is cognitively shifting in consideration of options inherently "tiring," or has this cognitive appraisal been individually interpreted as such? To answer this question, placing participant comments within context was helpful.

After labeling the moving from certainty to uncertainty as tiring, the participant also expressed it was "frustrating". When I asked her to explain further, she stated: ". . . you feel like you know what you want, and then suddenly you don't know what you want again. And then you're back to square one when you feel like you were at square six." She also added: "I just wanna be done with this!" Such explications appear to suggest personalized interpretations that gave meaning to the cognitive act: she felt she was moving backwards, from a state somehow further along (i.e., "square six") to a state that was behind (i.e., "square one"). Do all persons experiencing uncertainty perceive changing one's mind as a step backwards? Do all uncertain students desire to have the process come to a quick end? I would argue, considering her earlier statement that in high school choices were more exciting, that this does not always have to be the case.

It should be noted, however, that during this study, when I brought to the participant's attention that her terminology was mostly negative when referring to her uncertainty, and I asked her if that was the way she experienced it, in an overall negative way, I exposed my bias for desiring to tie my research into theoretical literature, perhaps leading the conversation to places it would not have gone if I had not brought up the subject. Although I rooted my observations in the words of the participant and attempted to frame my question as not to imply that the participant needed to provide any positive description, the question's influence on the participant's explanations of her experience must be taken into consideration.

Questions for future research. Considering the impact of proximity to graduation for this participant, unanswerable in the current study, future studies must seek to answer the question, "Do younger students further from a graduation date experience uncertainty similarly or differently than older students?" Comparative studies on a wide range of students are needed rather than considering undergraduates monolithically in their experience of uncertainty. Do undeclared freshman experience uncertainty differently than declared seniors? Future studies would benefit from enrolling both declared and undeclared students to obtain a clearer idea of how widespread, or not, this participant's experience of uncertainty is. Additionally, future phenomenological studies may be able to detect patterns in how undergraduate students perceive uncertainty beyond this single-subject case study, supporting or refuting my proposition that the phenomenon is a neutral state involving interpretation and perception.

Implications for career counselors. Thematic information discovered in this

study may also contribute to advancing theoretical conceptualizations of how declared

undergraduate students experience uncertainty about life after university. Career

counselors may be able to utilize such findings to understand the nature of complex,

interconnected factors that contribute to the experience of uncertainty for declared

students, ranging from practical considerations (e.g., money), emotional experiences

(e.g., anxiety), cognitive deliberations (e.g., considering options in relation to

intrapersonal factors), and social influences (e.g., family). As many vocational and

career counseling programs have ignored the process of how decisions are made by

focusing more on the choices themselves, phenomenological considerations may reveal

potential reasons current management interventions succeed or fail (Betz & Hackett,

1986; Starks & Trinidad, 2007; Van den Bos, 2009). Since human agency to make

decisions was found to be related to interpersonal, intrapersonal, and contextual factors,

university counselors must assist students to better understand the subjective world of

personal goals, values, interests, attitudes, and emotions (Chen, 2006).

In this study, the student self-reported that she was aware of her "options," and

described each option in great detail. She often weighed the "pros" and "cons" to

selecting either graduate school or entering a career. This data may suggest that, as the

literature reported, the student was already aware of the nature of the choices available to

her but still struggled to make a choice between them. For example, when the participant

directly stated "There's options. I just don't know what to choose," I reflectively noted:

> It seems that her uncertainty relates to options she is aware of/has conceived of in
>
> her head, rather than an uncertainty experience where she is uncertain of the

options. There seem to be certain options she is thinking of often and has thought about already.

In consideration of findings that both interpersonal and intrapersonal factors impacted the student's experience of uncertainty, career counselors must go beyond a discussion of available options to explore how students struggle to make decisions in the face of complex, highly personalized influences. Participant comments such as, "Cause you think you know what you want, and 'en something really minor could happen and just throw it under the bus. . . " support arguments in the literature for focusing more on the actual process of decision-making and what might contribute to what the participant in this study called "flip-flopping."

It should be noted, however, that when I asked, "Do you feel that . . . there's any sort of resource that you're *lacking* in your navigating of the uncertainty, or do you feel that you *have* resources you're just not sure of how to [use them]" I reflexively wrote:

> This reflects my bias of being interested in learning how uncertain students relate to resources and if there are any they feel they are lacking or if they just are not sure how to use resources they are already aware of. This reflects my wanting to tie in my research to career counselors. Are resources something this student would have thought about/considered had I not brought up the subject? Is this relevant to her day to day experience of uncertainty?

Further, as some authors have suggested that undeclared students are disproportionately targeted for career counseling services, counselors may benefit from acknowledging that declared students, not just undeclared, desire assistance (Orndorff &

Herr, 1996). As the participant in this case study stated: "If I had time to like sit out [sic] and talk it out with someone, . . . like a nonbiased party, . . . Then I think it would be a little bit easier . . ." This statement was not made in response to specific questioning about the use of counseling services. Freely articulated as the participant described not having much time to think about making a post-graduation decision, the seeking of a "nonbiased party" could apply to career counselors even in the absence of specific mention. Whether the participant is aware of such services is a valuable question as she does not specifically say "career counselor" but rather "nonbiased party." Therefore, the question is worth asking, "Would this student benefit from a nonbiased party in the form of a career counselor?" As direct comparison between the needs of declared and undeclared students is impossible in this single-subject case study, future studies should compare the two groups to confirm or refute the similarity of counseling needs.

Strengths and Limitations

   Credibility. In attempt to come as close as possible to the truth of the data, steps taken to enhance credibility included myself as researcher describing my analytic process through reflective journaling and utilizing member checking to verify my interpretations of research findings with the participant. This presented the opportunity for the research participant to verify or correct my interpretation of her phenomenological experience. Weaknesses included the inability to observe the participant living through the circumstances she described during the interview, as observations were limited to the singular circumstance of one face-to-face interview with the participant that was reliant on self-reporting by the student, researcher questioning during the interview, and after-the-fact interpretations by the researcher.

Demonstrated as useful in past studies of uncertainty with clear methodological guidelines, strengths of using Interpretative Phenomenological Analysis (IPA) included the ability to deeply examine the experience of uncertainty by allowing the student living through the phenomenon of uncertainty to describe her experience in her own words. As factors that contributed to undergraduate uncertainty in this study were numerous and complex, IPA may enable researchers to consider elements of uncertainty many theorists overlook. The dual relationship of the researcher in this study as both researcher and student, however, may have enhanced or hindered honest participant answers. Having had encounters with the participant on campus prior to research, the participant may have felt less likely to correct my interpretations or may have been more likely to affirm my interpretations. Conversely, the opposite may have been true. Had I been a school official, teacher, or someone with authority, the ways in which the student talked about her relationship with her university or experiences of her education, for example, may have been hindered or self-censored. My position as peer, therefore, may have enhanced the truthfulness of participant self-reports.

Transferability. Limitations of this study included small sample size. Therefore, the scope of transferability of study results is limited and should be considered with caution. The case-study approach provided a highly contextualized body of data, making the generalization of study findings difficult. Data was obtained through interview-style data collection and carried out at a small, private, liberal arts university located in Portland, Oregon. The participant was a Caucasian female with a declared major who expressed being close to graduation from the university. Findings from undeclared students, students of other races and ethnicities, students of older or younger age, students

attending larger or smaller universities, and students further away from graduation cannot

be assumed to experience uncertainty regarding life after university in the same ways as

this participant. Such comparisons were beyond the scope of this study. Interpretation of

study results, therefore, must be done with caution and be considered within the

contextual embeddedness of the participant.

Dependability. This single-subject case study was limited in scope of

dependability. Though the primary researcher consulted with the thesis advisor at

various points in the research process, the primary researcher was responsible for making

interpretative decisions and did not work with other researchers to arrive at interpretive

conclusions. As the study utilized one participant, study results were not replicated

beyond the single participant. Strengths included descriptions of methodological process

and analytic strategies that would enable the study to be replicated with a similar

participant under similar conditions given the thick descriptions of the participant and the

study protocol.

Confirmability. The decision to conduct a single-subject case study utilizing

IPA presented the inherent weakness of lack of generalizability and reliance on

participant self-report to arrive at an understanding of how the phenomenon of

uncertainty was experienced. The selection of IPA methodology was congruent with

study goals of learning about the experiential reality of uncertainty for undergraduate

students. A methodological that utilized the participant's own words, the method

inherently yielded subjective experience over objective occurrence, supporting the use of

IPA to achieve the purpose of learning how undergraduate university students experience

uncertainty.

To ensure that study findings did not reflect the biases and viewpoints of the researcher, member checking was employed to provide the participant the opportunity to correct researcher interpretations. Reflexive journaling was conducted throughout the coding of interview data and reported in the narrative write-up of study findings. This was to achieve data-oriented interpretations. The researcher attempted as much as possible to derive interpretations from the participant's own words in the transcript data. Rich reflexive notes explicated the analytic process and described how conclusions were made for each theme. Being an interpretative study, however, such reflexive journaling necessarily noted times in which researcher questioning revealed bias and may have influenced participant responses during the interview. Potential biases should be noted and influence evaluation of study results.

Conclusion

The current study sought to answer the question, "How do undergraduate college students experience living with existential uncertainty regarding where to go next after university (i.e., career, higher education, or exploration)?" Utilizing Interpretive Phenomenological Analysis (IPA), a case study was conducted with a white, female undergraduate student with a declared major attending Concordia University Portland in Portland, Oregon. Results yielded three major themes to the student's experience of uncertainty: money, family, and anxiety. These three themes were suggested to fall under the higher-order theme of external influence found to interact with the subtheme of intrapersonal considerations. Phenomenological data were compared to theoretical conceptualizations of uncertainty in the literature and examined alongside potential implications for career counselors. Limitations of this study included single-subject case

study design that limited transferability and dependability. Strengths included the use of

member checking and reflexive journaling to enhance credibility and confirmability.

Future studies should enroll students from various racial, ethnic, gender, age, and location

demographics and enroll both declared and undeclared students to compare and contrast

the needs and experiences of the two groups.

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Appendix A

TARGETED ENROLMENT TABLE

Study design investigator descriptions: The recruitment will target the same demographic as the whole population, with no expected bias related to the recruitment method. The enrollment will be to obtain an even distribution of individuals participating in each ethnicity/race. Quota sampling will require enrollment of at least 2 males and 2 females. All must be adults.

Ethnicity/Race Self-identifying as:	POPULATION (N)		RECRUIT			EXPECTED ENROLLMENT
Investigator notes on categories:			*Recruit = distribution seen in population*			*No systematic process will be employed to eliminate races or ethnicities from enrolling, but just based on ratios, this is perhaps what would occur.*
Black	72		1			**0**
White	730		4			**4**
Latino or Hispanic	36		1			**0**
OTHER	359		2			**2**
TOTAL Expected:	**1197**		**8**			**6**

Age Group	POPULATION (N)		RECRUIT			EXPECTED ENROLLMENT
Investigator notes on categories:						*Participants must be 18-25*
0 – 7 years old	0		0			0
7-17 years old	0		0			**0**
Adult	1197		8			**6**
TOTAL Expected:	**1197**		**8**			**6**

Gender	POPULATION (N)		RECRUIT			EXPECTED ENROLLMENT
Investigator notes on categories:						*Quota sampling will require at least 2 males and 2 females*
Male	287		4			**3**
Female	910		4			**3**
TOTAL Expected:	**1197**		**8**			**6**

CU-04a Targeted Enrollment Table Standard Form V2

Appendix B

Concordia University – Portland Institutional Review Board
Approved: October 24, 2017; will Expire: October 24, 2018

CONSENT FORM

Research Study Title: Where to Next? Undergraduate Uncertainty Regarding
Life After College
Principal Investigator: Emily Goodson
Research Institution: Concordia University Portland
Faculty Advisor: Reed Mueller

Purpose and what you will be doing:
The purpose of this study is to answer the question, "How do undergraduate
college students experience living with uncertainty regarding where to go next
after university (i.e., career, higher education, or exploration)?" We expect
approximately 4-6 volunteers to participate in this study. No one will be paid to be
in the study. We will begin enrollment on {will add date for start to two weeks
after IRB approval} and end enrollment once a maximum of 6 participants are
enrolled, or 2/15/17, whichever is first. To be in the study, you will participate in
1-2 in-depth, face-to-face interview(s) with the principal investigator. Each
interview should take 1-2 hours of your time. No other participants will be present
during your interview. I will begin by asking you the question: "Can you describe
to me your personal experience of living with uncertainty about your next life
decision following university?" Depending on your responses, I will ask clarifying
questions throughout the interview. All interviews will be audio-recorded and
transferred word-for-word into visual transcripts to be analyzed. You may also be
asked to review my analysis of your transcript, checking for accuracy of
interpretation. Should this occur, specific directions will be provided on how to do
so.

Risks:
There are no risks to participating in this study other than providing your
information. However, we will protect your information. We will record interviews.
The recording will be transcribed by the investigator, and the recording will be
deleted when the transcription is completed. Any data you provide will be coded
so people who are not the investigator cannot link your information to you. Any
name or identifying information you give will be kept securely via electronic
encryption on my password protected computer and stored inside a locked
cabinet. The recording will be deleted as soon as possible; all other study
documents will be kept secure for 3 years and then be destroyed.

Benefits:
You may benefit from this study by growing in self-knowledge and having a space to express yourself and think deeply about your experience of uncertainty. Your information may contribute to psychology's understanding of the phenomenon of uncertainty and help university career counselors provide better services to students who are uncertain about their future after college.

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Concordia University – Portland Institutional Review Board
Approved: October 24, 2017; will Expire: October 24, 2018

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us of abuse or neglect that makes us seriously concerned for your immediate health and safety.

Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating (e.g., this will not affect your grade in any course). If you choose to withdraw from the study and would like the information you provided to be removed, please contact the principle investigator.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Emily Goodson, at egred@ymail.com. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_____   _____
Participant Name   Date

_____   _____
Participant Signature   Date

_____   _____
Investigator Name   Date

_____   _____
Investigator Signature   Date

Investigator: Emily Goodson email:
egred@ymail.com c/o: Professor Reed
Mueller Concordia University – Portland
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Portland, Oregon 97221

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