INSIGHTS FROM PREDICTORS OF FACULTY SUCCESS: A MIXED METHODS STUDY

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Abstract

The purpose of this study was to explore the predictors of faculty success. The study was underpinned by the philosophy of pragmatism because the researcher sought to solve perceived real-world challenges in the post-secondary education sector related to faculty success and performance. Those real-world challenges in post-secondary sector include increased public scrutiny of their productivity, reduced public funding, and concerns regarding professorial interface, efficacy and discourse around faculty accountability. Using both qualitative and quantitative methods of inquiry, a mixed methods approach guided this research. Scales such as the teacher collegiality scale (TCS), developed by Mediha Shah (2011), and organizational commitment and work satisfaction scales (Meyer et al., 1993; Stride, Wall, & Catley, 2007) were adapted for the study and administered to academics. For the purposes of this study the terms academic and faculty were used interchangeably. An academic refers to those members of staff who deliver various combinations of the following services: teaching, research, and service in post-secondary institutions. Interpretation panel sessions were conducted with academics at the University of Saskatchewan, the site for this study.

Higher education institutions operate in a highly competitive and globalized environment, and this results in great emphasis on faculty performance. Hemsley-Brown and Goonawardana (2007) corroborated this claim, asserting that post-secondary institutions (PSIs) operating in today's competitive and internationalized landscape incessantly compete for international students (and faculty) to remain competitive in the face of declining government funding and government-supported recruitment campaigns (p. 3) in the case of public institutions. Therefore, faculty success and its drivers have become focal points and place faculty members in roles as key agents of performance within these institutions. Past studies have suggested that

collegiality may be a driver of performance; therefore, studying faculty collegiality and other possible drivers of success were thought to be prospective means to reveal insights into the determinants of faculty success and to offer practical solutions for post-secondary institutions. This study revealed associations between the dependent variable, faculty success and the independent variables, collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust. However, the study indicated that only the variables collegiality, work engagement, and resilience predicted faculty success.

Comparative analyses were also conducted on the data to explore faculty success across various demographic variables. Significant differences were identified in faculty success across tenure. There was 95% confidence reached that there were statistically significant differences in faculty success across tenure at the U of S ($F(5, 183) = 2.808$, $p =. 018$ as determined by the one-way ANOVA test. A Tukey post hoc test also revealed that faculty members in their posts between 6-10 years were more successful than those in their jobs between 11-15 years ($p = .009$), suggesting that early career faculty members were more successful than mid-career faculty members.

Keywords: faculty success, collegiality, resilience, work engagement, higher education

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During the last five years of this PhD journey, I have been reoriented and re-socialized to accept the complexities and multidimensional nature of, not just life itself, but pursuing a PhD in a *foreign land* without the physical presence of my family, my most valuable earthly possessions. Nonetheless, their unwavering and pervasive support remains unmatched and was a catalyst for my own resilience, persistence and continuous engagement with my dissertation work. There has also been a multiplicity of other sources that have directly and indirectly contributed to the successful completion of this emancipatory discourse, *Insights from Predictors of Faculty Success,* and who I must acknowledge for their contribution in shaping me through the PhD process – whether through spiritual, emotional, moral, financial, or intellectual support and guidance.

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Dedication

This dissertation is dedicated to my children, parents, and grandmother

Eliana-Jade and Hannah Elizabeth

You both are my reason for completing this dissertation despite the many challenges. I dedicate this journey and product to you as a symbol of the tenacity, resilience, commitment, and the pursuit of excellence that I hope characterize your lives. My baby girls, please remember you can achieve excellence despite the personal, professional, and even social justice challenges you may face in your lifetimes. Go forth and kick some proverbial 'scholastic butts'.

Nigel Blair and Pauline Blair

Hortense Blair (1934-2019).

From the very tender age of two years, you taught me the value of education, to believe in myself, pursue my dreams, and the need to aim for excellence in all that I do and to do so consistently. You created a rich environment that inspired my love for life-long learning. I will forever cherish the values implanted and the life's lessons you taught me while growing up in Kingston, Jamaica.

Nanny (Hortense), I wish you were here to read my work.

Table of Contents

List of Figures

List of Tables

List of Appendices

Chapter 1

Introduction to the Dissertation

It is not known if, and to what extent, relationships exist between faculty success and collegiality, work engagement, work satisfaction, resilience, organizational commitment, and trust in higher education (HE) institutions. We do know that past studies have shown a perceived relationship between collegiality, performance, and school improvement at the secondary level (Little, Gearhart, Curry, & Kafka, 2003; Shah, 2012a). For example, one study revealed, "teachers from high-performing schools perceived higher levels of collegiality as compared to teachers from low-performing schools" (Baffico, 2014, p. ii). Similarly, other studies have indicated an association between faculty performance and work engagement, work satisfaction, resilience, organizational commitment, and trust (Youngxing et al., 2017; Metin & Asli, 2018; Bakotic, 2016; Demerouti & Cropanzano, 2010; Gillespie & Dirks, 2016; Kumari & Sangwan, 2015; Lasseter, 2013; Jaramillo, Mulki, & Marshall, 2005; Lee & Mowday, 1987; Riketta, 2008). Bakotic's (2016) study revealed a statistically significant correlation between performance and job satisfaction, while Xanthopoulou's et al. (2008) study revealed a positive relationship between employee engagement and individual performance.

Additionally, even though past studies have indicated an association between collegiality and academic performance at the HE level in the United States and other non-Canadian contexts (Gonzales & Terosky, 2016; Su & Baird, 2017), not many studies were found in the Western Canadian context (Pennock, Jones, Leclerk, & Li, 2016). According to Gonzales and Terosky (2016), colleagueship (collegiality) contributed to improved results in areas such as teaching delivery, research opportunities, and career management. Given the current trend of emphasis on post-secondary institutions' (PSI) accountability and faculty performance (Hornstein, 2017;

Osakwe, Keavey, Uzoka, Fedoruk, & Osuji, 2015; Milem, Berger & Dey, 2000; Berg & Seeber, 2016; Braskamp & Ory, 1994; Braskamp & Ory, 1994), it is useful to explore the relationship between faculty success and the selected six-predictor variables of collegiality, work engagement, resilience, organizational commitment, works satisfaction, and trust. While these six variables are not the only possible components of faculty success, they were selected because of the variables' past association with performance in the literature, which is discussed in detail in chapter two. Henceforth, the acronyms PSI and HE institutions are used interchangeably throughout this dissertation.

Background to the Study

The age-old adage that the most valuable resources in any successful institution are its human resource is of significance especially given the current attention to performance in HE. According to Astin and Astin (2000), faculty members are the main stewards of post-secondary institutions (PSIs). The nature of these institutions (e.g., knowledge acquisition, transfer etc.) lends itself to being labour intensive (at least in the foreseeable future). Accordingly, exploring the human motivations and factors that may influence success contributes to the importance of this area of research.

Several authors have underscored the importance of human resources to an institution's performance. Ayo and Fraser (2008) claimed, "the most significant resource and expense in HE lies with the institution's staff and their collective ability to support one another in transformative learning" (p. 57). Further, Mangiardi and Pellegrino (1990) suggested that university performance maximizes when individual human resource performance is optimal. Bovbjerg (2006) also referenced the transformation in the management of human resources since the introduction of the New Public Management (NPM) in some public institutions. All these

authors have affirmed the importance of human resources (and their performance) to the institution's overall success.

Through my myriad experiences, at the policy and operational levels, in the fields of human resource management/development and education, the importance of the social and psychological dimensions of performance in an organization have been reinforced. Further, insights from organizational theory confirm this. For example, Bolman and Deal (2008) suggested that employee participation, empowerment, and fostering teams improve employee performance and success. Additionally, according to Owens and Valesky (2007) "social psychology is particularly useful in informing the educational leader about organizational behavior" (p. 19). The field of social psychology encapsulates areas such as motivation, group dynamics, and social interactions (elements often related to aspects of the predictor variables). Factors such as collegiality, work engagement, and commitment may be viewed as a function of professional relationships that are important to faculty performance and success. This emphasis on the psychological and social dimensions of performance is of great import in a sector that is experiencing significant transformation such as HE.

Contemporary changes to the operating environment of HE as referenced in the introduction may be the catalyst for some of the problems identified (Turk, 2017; Veles & Carter, 2016; Lo, 2014). McQuarrie, Kondra, and Lamertz (2013) in their work on the role of government in the Canadian post-secondary landscape, also highlighted similar problems resulting from the changing HE landscape. Cipriano (2011), in his work on collegial departments in higher education in the United States, suggested that, "the landscape of HE for the sixteen hundred public and two thousand private HE institutions is rapidly changing and constantly evolving" (p. 8). Presently, the landscape is still characterized by some of the changes

3

highlighted by Cipriano to include internal and external pressures to align research with economically beneficial objectives of the institution, underfunding, and policies of funding agencies (Turk, 2017). The current global competition in HE is an impetus for the increased quest for and mobility of faculty across borders. The increased competition for the best students and faculty globally emanates from problems such as the dwindling public funding of universities, and the need to seek alternative sources of funding through research funding from private or alternative sources. Hemsley-Brown et al. (2016) agreed that the changes in HE include significant reduction in state and other funding of higher education, trans-national student mobility, and increased competition for international students. Other changes in the post secondary education (PSE) environment include increased public scrutiny of productivity and concerns regarding professorial efficacy and discourse around faculty accountability (Ayo & Fraser, 2008). Therefore, faculty success and its drivers are important focal points. This emphasis on performance in HE draws attention to the need for investigation of faculty performance and how universities can leverage faculty success in responding to some of the performativity challenges with which it is faced.

Some areas of collegiality that were explored in the survey include mentoring, and peer observing. The areas of work engagement explored included faculty members' passion and inspiration for work; while the areas of organizational commitment explored included academics' desire to remain in their academic unit as well as their sense of belonging. Varied dimensions of work satisfaction, trust, and resilience of academics were also explored. The study ascertained perspectives on the relationship between faculty success and the predictor variables of collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust.

The researcher assumed an exploratory and confirmatory stance. As a result, a mixed methods approach was used for this study and faculty members were the sample population. Both quantitative and qualitative methods were used to obtain a mixture of numeric and narrative data. Survey and interpretation panels were the main data collection techniques used. For the survey, a number of scales were adapted including the teacher collegiality scale (TCS) developed by Shah (2011) with higher education and Canadian-specific modifications. Other scales adapted were the organizational commitment and work satisfaction scales (Meyer et al., 1993; Stride et al., 2007), while other scales were researcher-developed.

Purpose of the Study

Having identified some of the contemporary challenges to faculty performance in HE, this study sought to gain insights from predictors of faculty success. Specifically, the study was bounded by the case of a research-intensive PSE, the University of Saskatchewan. There were challenges identified with exploring this topic on a national scale because, among other things, Canada is a federation wherein education is the exclusive responsibility of provinces. According to Jones (2009) Canada's status as a federation makes it "one of the most decentralized PSE in the developed world" (p. 360). As a result, each province governs its own higher education system, resulting in differentiation among them. The researcher made the decision to focus on one province and one institution within that province.

No study of this nature was found in the Western Canadian context. Further, few empirical studies have been conducted on collegiality and faculty performance (Miles et al., 2015). According to Su and Baird (2017), there are limited empirical studies on the impact of collegiality on faculty performance (most of which emphasize research performance). Additionally, no mixed methods studies on the topic were found in the Saskatchewan context.

5

Further, the development, adaptation and testing of the various scales (which were all found to be psychometrically sound) for use in future studies also contributed to the study's originality.

Su and Baird's (2017) study was limited to focus on faculty in one academic department, which limited their capacity to generalize their findings. Their research used a quantitative methodology, which limited its explanatory power. However, this study had both explanatory and exploratory aims through the mixed methods approach, which should offset some of the limitations of Su and Baird's (2017) study. Their study also used the following 'work related attitudes' or mediating variables of performance: job-related stress, employee organizational commitment, and the propensity to remain. They acknowledged that there may be other factors that influence faculty performance and recommended that other studies investigate additional mediating variables of performance.

This study's purpose was to: 1. Explore the relationship between faculty success and the independent variables, collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust, 2. Ascertain whether the independent variables predict faculty success at the University of Saskatchewan, 3. Explore the influence of collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust on faculty success through faculty members' lived experiences, and 4. Determine the extent to which interpretation panels provided a deeper understanding of the quantitative findings. The study's variables were selected based on investigation of past empirical studies on the relationship between these variables and performance. Similarly, other studies have indicated an association between faculty performance and work engagement, work satisfaction, resilience, organizational commitment, and trust (Youngxing et al., 2017; Metin & Asli, 2018; Bakotic, 2016; Demerouti & Cropanzano, 2010; Gillespie & Dirks, 2016; Kumari & Sangwan, 2015; Lasseter, 2013;

Jaramillo, Mulki, & Marshall, 2005; Lee & Mowday, 1987; Riketta, 2008; Macey et al., 2009; Mayer & Schoorman, 1992; Meyer & Herscovitch, 2001; Su et al., 2013), which revealed construct association. Because these variables were highly associated with performance in past studies, they were used to determine whether these predicted faculty success at the U of S.

Problem Statement

In contemporary HE there has been a shift in focus operationally and strategically to demands of increased accountability and performance. It has been argued that this shift to a new operating paradigm, one of the corporatization of the academy (Berg & Seeber, 2016; Miles et al., 2015), has been made at the expense of collegiality (Meek & Wood, 1997; Ryan & Guthrie, 2009). PSI's pressure to increase their performance in this era of competitiveness and accountability may be characterized by (a) increased pressure on faculty to perform because of increased competition among PSIs to attract the best graduate students and research grants, and competition for the most publications (Bercuson et al., 1997; Braskamp & Ory, 1994; Layzell, 1999; Palmer, 1992), and reduction in public or government funding of HE. As a result, PSIs use alternative funding or new funding models from alternative sources such as research grants, which is usually based on faculty research performance (Bercuson, et al., 1997; Layzell, 1999). Faculty members focus a significant amount of their performance time on research activities (which the institutions rely on to remain competitive) and less time on teaching performance, especially at the undergraduate level (Braskamp & Ory, 1994); and external pressures from stakeholders such as from students and the public to perform (Gonzales & Tersoky, 2016) are also factors. Some authors suggested that faculty collegiality has declined under some of these external pressures to perform (Christopher, 2012; Crooks et al., 2008; Su & Baird, 2017). This

study sought to better understand some of these challenges in HE through its investigation of the determinants of faculty success.

The Research Questions

The study explored the relationship between faculty success (dependent variable) and collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust (independent variables) in Saskatchewan's PSE. The study also sought to determine the predictors of faculty success using these variables. As a result, the research questions that guided the study included:

Research Question 1: What, if any, relationship exists between collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust (independent variables) and faculty success (dependent variable)?

Research Question 2: Do collegiality, work engagement, resilience, organizational commitment, work satisfaction, and trust predict faculty success?

Research Question 3: In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?

Research Question 4: To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory, sequential design method?

Significance of Study

In an era wherein greater emphasis seems to have been placed on faculty performance in the post-secondary education sector, one might consider an exploration of both the market drivers of performance and the pyscho-social drivers of performance. Collegiality, work

engagement, work satisfaction, and organizational commitment represent some of these later drivers and may contribute to work and by extension institutional success.

Additionally, particular areas of faculty success were deemed necessary to explore. These areas include teaching, research and local, regional, and international service. Other areas of performance focus included faculty accountability, productivity, efficacy, and organizational citizenship contributions. Traditionally, there has been an emphasis on values of isolation and competition in faculty performance, based on the nature of scholarship (Astin & Astin, 2000). Teaching and research as components of faculty performance are believed to promote values of isolation and competition, especially with respect to prestige and promotional decisions. For example, Rakes and Rakes (n.d.) argued that in the post-secondary field, faculty members usually work in silos and within departments, often resulting in performance ineffectiveness. Therefore, a study of the psycho-social variables that might predict faculty success was considered appropriate.

The pervasive problem of the tension between individualistic versus collaborative work and the relationships of these with ineffectiveness warrants further examination. The notion that faculty scholarship is heavily dependent on individualistic, rather than collaborative work (Astin & Astin, 2000) contributed to this assertion. Notably though, there has been a steady growth in collaborative efforts in some areas of academia such as between academia and industry (Lam, 2009). However, Jones et al. (2012) suggested, university leaders need to be more collaborative and participatory even as they acknowledge the individualism and autonomy of faculty work. One way to give attention to this tension was to examine the role of collegiality in faculty work, faculty engagement, commitment, and satisfaction within post-secondary institutions, with the hope of discovering insights and finding possible solutions to contemporary challenges.

9

Contemporary challenges such as the transformation from a regional or federal to a global economy has created new operating environments for higher education institutions. PSIs that operate in today's competitive and internationalized landscape are required to compete for international students (and faculty) to remain competitive in the face of declining government funding and government-supported recruitment campaigns (Hemsley-Brown & Goonawardana, 2007). This shift has resulted in the need for PSIs to transform, using more adaptive and innovative solutions in their operations (Astin & Astin, 2000). Exploring the predictors of faculty success then revealed some insights into the changing performativity landscape or operating environment of academics and how these challenges influences academics' success.

Why is this research of importance to Canada's post-secondary education? First, examining the predictor variables in the post-secondary context may cause educational leaders or senior administrators to carefully examine their operations and the impact of these on faculty success and by extension the success of their universities. Results from this study may contribute to the body of knowledge on faculty success, work engagement, work satisfaction, organizational commitment, collegiality, resilience, and trust in the Western Canadian context. Further, the findings may offer pragmatic solutions to some of the current challenges faced by educational leaders in the post-secondary field.

Second, the findings presented in this dissertation provide valuable insights that inform policy, programming, and practice in post-secondary institutions. The outcomes of this research may also contribute to the improvement in performance management, faculty performance, collegial and professional development practices in post-secondary institutions. An impact of this research may also be the improvement of the quality of work-life for academics.

Further, few empirical studies have been conducted on collegiality and faculty performance (Miles et al., 2015). According to Su and Baird (2017), there are limited empirical studies on the impact of collegiality on faculty performance (most of which emphasize research performance). Additionally, no mixed methods studies on the topic were found in the Saskatchewan context. Also, the development, adaptation and testing of the various scales (which were all found to be psychometrically sound) for use in future studies also contributed to the study's originality and significance.

Definition of Terms

A number of terms are important to understand the nature of this study. This section highlights the definition of key operational terms relevant to this research.

Academics. For the purposes of this study the terms academic and faculty are used interchangeably. An academic refers to those members of staff who deliver various combinations of the following services: teaching, research, and service in post-secondary institutions. Academics (faculty) may have titles such as full professor, associate and assistant professor, lecturer, adjunct or part-time faculty, professor emerita, and teaching librarians.

Coaching. Coaching is conceptualized as a collaborative relationship between the experienced and the inexperienced, which focuses on inquiry and learning (McGregor et al., 2011).

Collegiality. Collegiality was defined by Shah (2012) as "the cooperative relationships among colleagues…collegiality encompasses both professional and social/emotional interactions in the workplace" (p. 131). Additionally, Ayo and Fraser (2008) defined, collegial relationships as "professional interactions which arise from on-going communication between two or more individuals who share the same workplace or work interests" (p. 58).

11

This researcher's working definition was as follows: ***Collegiality*** refers to the supportive, collaborative professional and social relationships among colleagues in the same workplace, field or industry. These include mentoring, coaching and peer evaluating relationships (formal or informal) (Jarzabkowski, 2002; Shah, 2011).

Faculty Performance. According to Kurz et al. (1989) "faculty performance as typically employed in higher education literature is viewed as an effectiveness construct…or the degree to which the faculty member contributes to social, support, integration, or coordination efforts within the university" (pp. 44-45). As indicated, the traditional model of academic performance has been anchored in the three pillars of academe: teaching, research and service. Fairweather (2002) and Tierney (1999) supported this claim that the activities of teaching, research, and service are at the heart of academics' work effort. They further suggested that the basis of academic performance is the transmission, unearthing, and practical application of knowledge. In this proposed study, these pillars are considered the domains of performance or the responsibility areas where performance is manifest among academics.

Faculty Success. According to Stupnisky et al. (2015), the literature on faculty success has defined the concept of success as encompassing several elements such as research productivity and teaching achievements. This study focused on the three pillars of faculty success in defining the construct: research productivity, teaching success, and service achievement.

Mentoring. Preston and Walker (2011) suggested that mentoring is "a relationship of trust, which facilitates mutual growth and understanding through modeling, challenging, friendly critique in working towards building capacity, common goals and endeavours" (p. 22).

Mixed Methods Research. Creswell and Plano Clark (2010) defined the mixed methods approach as "a research design with philosophical assumptions as well as methods of inquiry. As a philosophical methodology, it involves philosophical assumptions that guide the direction of the collection and analyses of data and the mixture of qualitative and quantitative approaches in many phases of the research process" (p. 5)*.*

Organizational commitment. Toban et al. (2014) suggested that organizational commitment "is about how far an employee stands on the side of the organization and the objectives including a feeling to maintain his membership within the organization" (p. 20).

Organizational Culture. According to Schein (2010), organizational culture is "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 18).

Resilience. Bardoel et al. (2014) described resilience as the potential of an employee to recover from adverse conditions within (or outside) the workplace. According to Brammer (2000) little is known empirically about resilience among academics. His work also described resilience as having a purpose and having the capacity to operate in alignment with that purpose even in the face of challenges, and within a given period, which is essential in academic life.

Peer Observing. According to Harris et al. (2008), peer observation or review is a process whereby colleagues offer supportive and developmental feedback for each other.

Trust. "Trust can be defined as the firm belief in the reliability, truth, or ability of someone or something" (Brown et al., 2015, p. 362).

Work engagement. Schaufeli et al. (2002) defined work engagement as "a positive

fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). Similarly, Kahn (1992) suggested, engagement is a state of mind whereby employees display behaviours that are consistent with the conversion of high energy into aspects of job performance (physical, cognitive, and emotional).

Work satisfaction. Work satisfaction, according to Biswis and Varma (2012), described an employee's positive feelings or attitude emanating from their performance or work experience.

Career Stage. Career stage in academia might be defined by a lifecycle of milestone events such as receiving tenure, transitioning through the various ranks in the professorate such as from assistant to associate professor. In this study, the three main stages that were emphasized are early, mid, and late career stages. Though these stages are described differently across the literature for example, Lester & Horton's (2018) characterization: early stage faculty initial 1-7 years as a faculty, mid career faculty -1 to 10 years after receiving tenure, and late career faculty – 10 years after promotion to associate professor. Similarly, this study described the stages as: early career – between 1 to10 years; mid career – between 11 and 20 years, and late career – over 20 years.

Limitations of the Study

Limitations in a study refer to those inherent or logical biases in the study resulting from factors over which the researcher has no control, but which may impact the outcomes of the study (Price & Murnon, 2004). Merterns (2010) aptly suggested that executing a flawless research study is impossible and impractical, hence, the need to account for possible limitations in one's study. Some limitations were borne in mind when conducting this study. One of the limitations of the study was the potential lack of trust on the part of some participants. A

commitment to the following principles: transparency, confidentiality (in the quantitative phase), will hopefully have mitigated this limitation to some degree. For example, being open and transparent, providing the participants with the necessary information at various stages of the research, including the post interview transcripts and seeking their agreement, engendered and motivated researcher-participant trust.

Another limitation was the ability of participants to engage in the research process truthfully and knowledgeably. A strategy to mitigate this limitation was the selected sampling technique (purposive sampling) in the qualitative phase and its attendant criteria, which is one way the researcher sought to address this limitation. Other limitations included:

- The study was limited to the sample of the population available to participate. The remainder of the population (other potential participants) may have been unavailable because of personal reasons such as leave of absence, illnesses, or staff development activities.

- The study was limited by participants' willingness to participate in the interpretation panels and survey (and return the questionnaire within the given time).

- The study was also limited by the selected methodology. For example, the study relied on the self-reported data; therefore, the outcomes of the study were dependent on the respondents' honesty and perceptions.

- There was an imbalance in the literature outside the post-secondary education domain, especially with respect to the collegiality and resilience variables (limited past empirical studies on these variables in the PSE). Most past empirical studies on collegiality for example were conducted on the k-12 systems. The implication

is that while this study fills this gap in the research space, it also limits

comparison work.

- The outcomes of the study were also limited to data gathered by instruments

    developed. Other instruments could have yielded different results (Gay et al.,

    2006).

- The study was limited to the adapted versions of selected scale factors and items

    in the survey instrument (Meyer et al., 1993; Shah, 2011; Stride et al., 2007).

- The differences in faculty members' (participants') mindsets might influence the

    outcomes of the study.

- Internal issues unique to the University of Saskatchewan might influence the

    study's generalizability

Delimitations of the Study

As is customary in social science research, there were some delimitations associated with this

study. According to Gay et al. (2006), delimitations are variables over which the researcher has

control. These may incorporate the selected sampling technique – purposive sampling. The

purposive sampling technique allowed the researcher to deliberately select participants with the

'expert knowledge' and experience as needed for the qualitative phase of the study. A case study

approach was used and the study was bounded by the University of Saskatchewan. The

following represents other delimitations of the study:

- The study was delimited to surveying and conducting interpretation panel sessions with

    only academics from the University Saskatchewan.

- The study was delimited to questions on the survey and interpretation panel instruments.

- The study was delimited to the time within which respondents were given to participate in the study.

- The study was also delimited to six-predictor variables (collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust), noting that these are not the only possible components or contributors of faculty success; however, they were selected because of the variables' past empirical association with general performance in the literature, which is discussed in detail in chapter two. Further, one of the variables (collegiality) was revealed to be a predictor of faculty success in the United States' HE context (Stupnisky et al., 2015).

Assumptions

Some assumptions were made in this study. First, the data collected were analyzed on the assumption that participants responded openly and honestly to the survey and interpretation panel questions. Secondly, it was assumed that respondents provided sufficient information to meaningfully explore the predictors of faculty success. The researcher also assumed that the participants all had a fair understanding of the key variables in this study and that the respondents were representative of the University of Saskatchewan's academic population. Because there was an imbalance in the literature on collegiality and performance (that is, most empirical studies were conducted on the k-12 levels of education), assumptions were made on its resonance with PSE. Consequently, adaptation of instruments from these past studies, were done with PSE modifications. Finally, the researcher assumed that differences in mindset might influence perceptions of success.

The Researcher's Background

As a human resource practitioner for over a decade, I have been intimately involved in leading and managing teams and work functions respectively as well as performance management systems. I have in-depth knowledge and experience with various forms of relationships within organizations and motivators and drivers of performance. These include mentoring, coaching, and supervising relationships. Further, the latter five years of my human resource experience have been in the field of education at the policy level some of which included the post-secondary level in Jamaica. As a result, my professional experience, knowledge, and skills may have influenced the navigation of this study.

This study emanated from current trends and problems identified in the field of post-secondary education such as the contemporary pressure for faculty members to perform and my experience in the field of performance management. As a result, in seeking to coalesce the various elements above, I explored the relationship between the predictor variables and faculty success.

Organization of Dissertation and Summary

The dissertation is organized into the following five chapters:

Chapter 1: '*Introduction to the Dissertation*' provides an introduction and background to the study. The chapter also details the research problem as well as the purpose, significance, limitations, and delimitations of the study. The aim of this mixed methods study is to determine the predictors of faculty success in Saskatchewan. Even though studies have been conducted on the predictor variables in the past (Demerouti & Cropanzano, 2010; Kumari & Sangwan, 2015; Lasseter, 2013; Lee & Mowday, 1987; Riketta, 2008; Shah, 2012), only a few empirical studies have been conducted on the predictors of faculty success using these sets of predictor variables

as well as using the study's current design. The study fills this gap in the research by investigating the relationship between the predictor variables and faculty success in Saskatchewan.

Chapter 2: *'Literature Review'* presents a review of the existing literature on the main variables in the research question such as collegiality, organizational commitment, work engagement, work satisfaction, trust, resilience, and faculty success.

Chapter 3: '*Methodology'* outlines the methodology and philosophical foundation of the study. It details the research design, methods, and ethical considerations for this study and how a mixed methods design facilitates a pragmatic investigation of the research problem.

Chapter 4: '*Results and Findings'* presents the findings and results of the study. This chapter details the analysis of the data collected in the study.

Chapter 5: *'Discussion of Findings, Conclusions, and Implications'* provides a summary and discussion of the results of the study, draws conclusions from the findings and makes recommendations for practical applications and future study.

Most chapters relied on the foundations laid in chapter one of the study. However, Chapter 5, especially, depended on the presentation and analysis of the findings in Chapter 4. In summary, chapter one laid the foundation for this dissertation by explaining key aspects of the study such as the background to the study, the research problem being investigated, research questions, and the purpose of the study. Chapter 1 also helps the reader navigate the study's organization by providing a plan for the layout of the dissertation.

Chapter 2

Literature Review

This literature review analyzes the main themes, debates, and findings on faculty performance, success, collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust. The predictor variables (constructs) under review include work engagement, organizational commitment, trust, work satisfaction, collegiality and resilience. The review also presents correlational findings from past studies between the predictor variables and performance (success). First, I review the literature on performance and faculty success, including employee performance, faculty performance and success in higher education. Second, I review the literature on the predictor variables such as their conceptual arguments, influence of culture and past correlational findings. Finally, I present a theoretical framework, a conceptual framework and a summary of the literature on the variables under study.

Performance

This section explores the literature on employee performance and faculty performance as a backdrop to understanding faculty success. The literature revealed multiple ways in which performance is viewed including as a multidimensional concept and the various types of performance (Varshney & Varshney, 2017; Campbell, 1990). Studies have been conducted based on some of these perspectives of performance. Because this study focused on faculty success, the literature on faculty performance was also reviewed. From the review, the three main areas or domains of faculty performance were confirmed as teaching, research, and service (Fairweather, 2002; Palmer, 1992; Tierney, 1999). The development and transformation of

faculty performance in higher education was also explored generally and especially within the North American context.

Employee Performance

As a variable, performance has been perceived and conceptualized in multiple ways in past studies. While performance has been viewed as a multi-dimensional concept (Campbell, 1990), several studies have pointed to three domains of performance. Varshney and Varshney (2017) referenced the following three types of performance: task performance (job-specific actions that contributes to the company's goals), contextual performance (behaviours that contribute to the context and settings within which the job is performed), and adaptive performance (employee behaviour that demonstrates adaptability to changes in the workplace and in-role performance). Additionally, Kumari and Sangwan (2015) highlighted three types of performance. These are task performance, organizational citizenship behaviour, and counterproductive work behaviour.

Researchers have put forward multiple definitions of the term performance. For example, Hall and Goodale (1986) defined performance as the in-role behaviour of employees, utilizing time, skills, and interrelationships. On the other hand, Campbell et al. (1993), as cited by Kumari and Sangwan (2015), described performance as "what an organization hires one to do and how to do it well" (p. 27). Schermerhorn's (1989) definition of performance had greater depth, in that he stated that performance refers to both the quality and quantity of work executed by employees, with an emphasis on the successful achievement of tasks.

Faculty Performance

The traditional model of academic performance is anchored in the three pillars of academe: teaching, research and service. In this study, these were considered the domains of

performance or the responsibility areas where performance is manifested. According to Tierney (1999), "faculty work is comprised of instruction, research, and service activities" (p. 15). He further suggested that the basis of academic performance is the transmission, unearthing, and practical application of knowledge. Fairweather (2002) supported this claim and maintained that the activities of teaching, research, and service are at the heart of academics' work effort. Kurz et al. (1989) also posited, "faculty performance as typically employed in higher education literature is an effectiveness construct… or the degree to which the faculty member contributes to social, support, integration, or coordination efforts within the university" (p. 45). Therefore, the performance activities of faculty members provide an indication of the extent to which their work is in alignment with the university's goals. As a result, academics' research, teaching, and service productivity measured against the institutional or departmental (or some other measure) goals determine their level of performance or success.

Even though the most common pillars of faculty performance in academe today are teaching, scholarship, and service, historically this was not the case. According to Braskamp and Ory (1994), the role of faculty in the academy has transformed over time from a clergy to a professional framework. Similarly, Boyer (1990) elaborated on the development of higher education in America spanning over 300 years in which the first of the three distinct phases is that of the colonial college; wherein teaching or faculty work was considered a calling or perceived as a vocation, steeped in religious traditions. He argued that higher education then shifted from the molding of young minds to the "building of a nation" (p. 4) through to its current and third phase of emphasis on research and graduate education, which might characterizes the contemporary university. However, more recently, Mamiseishvili and Rosser (2011) suggested that there has been a renewed focus and interest in the teaching dimension of

22

academic work (it is viewed as a critical component of faculty work even though it might not be aligned with as much recognition and reward as the research component of faculty work). Included in this renewed emphasis is a focus on teaching and the scholarship of teaching and learning (an emerging area).

Part of this change was the broadening of the scope of faculty performance to include areas such as research and service, which were eventually added to teaching as the general criteria for faculty performance. According to Braskamp and Ory (1994), this transformation resulted in a shift from an emphasis on teaching to a greater focus on research-intense activities. Fairweather and Rhoads (1995) and Fairweather (1999) corroborated this claim, suggesting that even other types of institutions (such as liberal arts post-secondary institutions), which have historically emphasized teaching excellence, have shifted their focus to research performance (Fairweather, 1993). Palmer (1992) and Braskamp and Ory (1994) argued that this shift in which faculty spends a significant portion of their performance time on research activities in community colleges and research universities respectively was unprecedented.

Although there has been a considerable increase in the intensity of research as a component of performance in post-secondary institutions (generally), it should be noted that this intensity is far greater at research universities. The results of several studies have supported this claim. For example, a study conducted by the Carnegie Foundation for the Advancement of Teaching (1989) revealed that faculty members in four-year post-secondary institutions perceived research, as opposed to teaching, as their focus in the performance of their duties when compared to their community college counterparts. Similarly, according to Russell et al. (1990), in a study conducted by the Department of Education in the United States, indicated that

23

academics in four-year post-secondary institutions committed more time, than did their two-year college counterparts, conducting research activities. The findings from these studies suggest that whilst there is a general trend in increased research activity in faculty performance, there is some differentiation among the types of post-secondary institutions. It appears that there is greater intensity in this shift in emphasis on research performance in four-year research universities than there is in other types of post-secondary institutions.

This differentiation in faculty work is evident across types of post-secondary institutions; however, the lack of uniformity in faculty performance also exists across departments and colleges within the same post-secondary institution. According to Palmer (1992) faculty work differs across disciplines. This claim was also substantiated by Clark (1989) who suggested that the work of academics is significantly differentiated to the extent that their roles and functions and the systems that reward their performance is also differentiated. As a result, it is worth highlighting that the following represent some of the factors that influence or determine faculty work: type of post-secondary institution, faculty's discipline, laws and by-laws (such as negotiated or collective bargaining agreements).

In the context of faculty performance, some universities or faculty members are unionized; whilst others are not. According to Sun and Permuth (2007), the construct of unionization is related to some of the following terms: negotiated or bargaining agreement, terms and conditions of employment, and negotiated terms. They further suggested that faculty members' performance may be influenced by their operating environment, whether unionized or non-unionized. This scenario exists within Canadian HE.

According to Austin and Jones (2016) Canada's post-secondary institutions are significantly unionized in comparison to other industries. This increased trend of unionization of

faculty (and students) appears to be common in North America; yet there are varying views on its impact on the governance of higher education. Some positive views of faculty unionization include the protection of academic freedom and the protection of employee rights (Baer, 2013; Bess & Dee, 2008). Conversely, the negative views of faculty unionization (which relates to both personal and institutional impact) include the replacement of or limitations on the function of the university senate by unions, tension and mistrust between the leadership/administrators and the professoriate (academics); in turn, these may negatively impact collegiality (that collaboratively support relationships among colleagues) (Austin & Jones, 2016). Therefore, while there is a growing trend of unionization in Canadian universities, it is imperative that the impacts of this trend and its associated tensions be effectively navigated such that collegial performance operations at the faculty and institutional level is sustained or optimized, while concurrently protecting the rights of employees. Austin and Jones (2008) confirmed this approach when they concluded that "governance becomes a delicate balancing act between the traditional collegial faculty governance and faculty union" (p. 140). Irrespective of one's position, it is evident that Canadian post-secondary institutions are heavily unionized.

Because the unionized status of universities is referenced in this study, it is poignant to elaborate further on this operating context within Canadian post-secondary institutions. Most universities in Canada are unionized for example the universities of Saskatchewan, Manitoba, Winnipeg, Ontario, and York (Baer, 2013). However, there are a few post-secondary institutions that are non-unionized or have faculty associations that are not unionized. These universities include the universities of Alberta, Toronto, Waterloo, and McGill (Baer, 2013). Some non-unionized universities, like the University of Alberta, are forbidden from unionization, based on provincial laws (Baer, 2013). Even though these Canadian universities are not unionized, some

do have non-unionized agreements, which is discussed in the subsequent paragraph. Notwithstanding these cases, most Canadian university faculty members are unionized (Jones & Austin, 2016). According to Robinson and Dobbie (2008), in 2004, the proportion of unionized versus non-unionized academics in Canada was 79% and 21% respectively. The unionized or non-unionized status of a university may influence faculty associations and by extension faculty members' operation.

One of the major implications for faculty and faculty associations that are not unionized is the lack of bargaining rights. What this means for the terms and conditions of faculty work is the possible unilateral power of the employer during negotiation, as well as during the life of the agreements. Baer (2013) suggested that it was unclear whether non-unionized agreements, such as those at the University of Victoria, have legal authority. In fact, he went further to suggest that the 'minimalist agreements' at some of these institutions have lesser legal or bargaining power than their unionized counterparts. As a result, the perception is that in non-unionized institutions, greater power with respect to faculty work (including issues related to performance and performance related decisions) lies with the administration. Even though there is no evidence of a connection between faculty collective bargaining agreements and the determination of the fairness and objectivity of performance management systems that informs faculty's tenure decisions, past studies (Rees et al., 1995; Tullock, 1994) have revealed that faculty unions have been negotiating inter alia for fair wages. Faculty success then becomes a personal imperative for academics; even while aiming to meet the standards of their local institutions and departments. As a result, academics are responsible for their own success and pursue this in accordance with the standards and protocols of the institution.

Faculty Success

Definitions of faculty or academic success have developed over the years from more conventional conceptualizations to more contemporary ones. Traditionally, career success is defined more by individuals' hierarchical progressions, such as upward mobility and promotion (Al-Mansor et al., 2015; Tlaiss & Kauser, 2011; Verbruggen, 2012). However, more contemporary definitions have included psychological indicators such as job satisfaction, and career advancement. Some studies also focus on objective versus subjective academic success (Peluchette & Jeanquart, 2000; Al-Mansor et al., 2015). Subjective academic success includes the feelings of success (Peluchette & Jeanquart, 2000) in various areas of one's career; while objective success includes indicators such as salary levels and promotion (Scandura, 1992). Further, Pelluchette and Jeanquart (2000) suggested that subjective success indicators are as important as are objective success indicators. Therefore, faculty success may be described using both subjective and objective indicators. The above claim confirms a similar thread in the literature on faculty success where there are multiple perspectives on the conceptualization of faculty success.

Notwithstanding the multiple definitions, several studies have used the following as indicators of faculty or academic success: research productivity, financial reward, career satisfaction, research publication in indexed journals, research grants obtained, number of papers presented at international seminars, and service to university and community (Reis et al., 2012; Al-Mansor et al., 2015; Stupnisky et al., 2015). Based on the above-posited indicators of faculty success, there is evidently much emphasis on research productivity and scholarship activity in academia used to determine faculty success.

Even though contemporary higher education institutions place great emphasis on research

27

productivity of faculty members, the other two pillars of faculty success: teaching and service performance are also key to an academic's portfolio of success and usually these form part of the review process for tenure and promotion. According to Stupnisky et al. (2015), the literature on faculty success defines the concept as encompassing several elements such as research productivity and teaching achievements. Therefore, this study focused on these three pillars of the faculty success construct: research productivity, teaching success, and service achievements or contributions. Specifically, elements of these pillars were used as measures of faculty success and informed the development of the survey in the study.

The concept faculty success has grown in importance in recent years. Stupnisky et al. (2015) suggested that studying faculty success is important for several reasons including the expense of new faculty recruitment, anticipated increase in such recruitment due to continuously increasing student enrolment in higher education plus the growing natural attrition rate of academics. Higher education administrators, faculty members, education development specialists and other stakeholders are also interested in studying this area for several reasons, including facilitating the success of faculty members, generally, and especially, junior and mid-career faculty members as they transition through the stages of their career (Peluchette & Jeanquart, 2000; Al-Mansor et al., 2015; & Stupnisky et al., 2015). Mentoring relationships is one of the factors (whether outcome or antecedents of faculty success) explored in these studies.

Some outcomes of faculty success studies have included the establishment of effective mentoring relationships that support faculty members' successes. Past faculty studies have indicated that mentoring relationships played a significant role in faculty success as academics transition through their careers. Peluchette and Jeanquart (2000) confirmed in their study, on *Professionals' Use of Different Mentor Sources at Various Career Stages: Implications for*

Career Success, that mentored academics demonstrated high levels of objective faculty success in their careers. Further, the study also indicated that faculty with one or no mentoring relationships were far less successful than were their counterparts with multiple sources. Additionally, Stupnisky et al. (2015) indicated that mentorship was among the three most critical factors important to junior faculties for their success.

Therefore, mentoring relationships appear to be a key area of positive association with faculty success; or at minimum, junior faculty members perceive mentoring relationships to be critical to their success as they transition through their careers. What role then do stages of career development play in faculty members' success or their perception of success? The stages of career development, namely early, mid, and late career stages arguably play a role in academics' success or perceived success. An important part of an academic's success is being promoted through the ranks of the professorate. In order to do so, one has to fulfill the criteria for the institution's tenure and promotion policy or process. Inter alia, these criteria include areas around one's research, teaching, and service productivity.

The University of Saskatchewan's (2011) standards of tenure and promotion document lists seven categories in which faculty may be evaluated for promotion and tenure. These categories include credentials, teaching ability and performance, research, scholarly, and artistic work, practice of professional skills, and knowledge of discipline and field specialization. A review of these and the other areas suggests that early career faculty has a significant burden of proof of their readiness (and actual readiness) to be promoted, given their starting point when compared to mid and late career faculty. As a result, early career faculty members may rely heavily on other faculty (such as mentors) and the department or institution to support their professional development and research funding, and belonging needs. Early career faculty

29

members might require more collaboration (internal and external), more protected research time, increased alliances and networks, and other opportunities for development to support their career development.

Because of their significant work load (especially leading up to the application for tenure), and their relative newness in the role, junior or early career faculty expressed in a study by Stupnisky et al., (2015) that the following factors were critical to their success: clear expectations, balance (personal and professional), collegiality, and location. These developmental needs of junior faculty are justified given their situational context in the early stages of their career. Workplace diversity, professional development, and workplace climate were other factors discovered in their systematic review of the literature. Braskamp's (1981) seminal work on faculty development and achievement might still be relevant today, in that, he outlined three categories of faculty development (aligned with the ranks in the professorate), and discussed the needs of each category. The first category of assistant professor aligned with Stupnisky's et al., study, whereby the main focus of these early stage academics include: being a good teacher and researcher, and being promoted/receiving tenure. These factors outlined by Braskamp might explain some of the later concerns of early career faculty in Stupnisky's et al., (2015) study: clear expectations (very critical in order to build an impressive portfolio and obtain tenure), balance (because of the great work load and competing priorities outlined in the criteria for promotion and tenure). It is at this stage that Braskamp suggests that academics work to make and gain collegial respect and build their own reputation through their work and interactions.

On the other hand, Stupnisky's et al. (2015) study also revealed that perceptions of collegiality declined, the longer faculty members stayed in their role. Further, mid to late career

30

faculty members who have already received tenure might not have the same needs and expectations as early career faculty; as a result, factors motivating the development of associate and full professors may differ from more junior professors. For instance, later stage career faculty may be more interested in making a significant impact in the field and institution to which they belong. This might include areas in their specialization, as well as impact on those whom they mentor (graduate students and junior faculty). Braskamp's (1981) work suggests that academics in these categories, namely associate and full professors have the following focus respectively: associate professor - sense of mission, difference-making in people's lives, societal impact; full professor – impact on profession, help others. As a consequence of the previous categorizations of faculty developmental needs at the various stages of their career, it can be implied that faculty success might be perceived differently among the three groups.

Nonetheless, the growing importance of studying faculty success, the possible outcomes to academics and their institutions gained from insights drawn from such studies, together with the need to help faculty members become more successful in their careers provide credence to the need to explore and determine the predictors of faculty success. In this study, information gleaned on the predictors of faculty success by investigating its relationship to variables such as collegiality, work engagement, resilience, organizational commitment, work satisfaction, and trust provides both insights and instruction to academics and administrators in higher education institutions. The next section then explores the six-predictor variables that were investigated in this study.

Predictor Variables

In this section, the six-predictor variables are discussed: collegiality, work engagement,

work satisfaction, organizational commitment, trust, and resilience. The justification for the selection of the six-predictor variables is based on empirical evidence of their positive correlation with general performance in past studies. As a result, this study began by positing that a similar association might be found between faulty success and these variables; hence, their use as potential predictor variables. A review was conducted of the conceptual understanding for variables as well as their use in past studies and works together with their relevance to this study. Essentially all six variables were explored based on the prospects of their possible association with faculty success. As a result, the review of literature was conducted to highlight varying perspectives and use of variables in past literature and empirical studies, as well as their use in higher education.

Collegiality

This section explores the anatomy of the term collegiality to lay the foundation for understanding the concept and its uses in literature. The following structure of collegiality will be reviewed – multiple definitions in the literature, types and models of collegiality, working definition, and its importance. A part of the discussion on the multiple definitions is the claim that the term is ambiguous.

In the literature, the term collegiality has been fraught with claims of definitional ambiguity with several studies recommending agreement around a unified definition. Fielding (1999) argued for a singular definition of the term. Balsmeyer et al. (1996) in their study on collegiality among nursing academics asserted that the behaviours that define collegiality are unclear even though collegiality is a criterion in their performance management system. Similarly, Shah (2011) claimed that collegiality is ambiguous and has been misinterpreted. The potential impact of the apparently vague definition includes a lack of common understanding of

the behaviours needed for faculty to successfully relate to each other (Balsmeyer et al., 1996), resulting in challenges in implementing collegiality in higher education (Ayo & Fraser, 2008). Because of this ambiguity, there have been calls for an axiomatic definition.

Some of the definitions are centered on the idea that collegiality is a professional relationship or collaboration among colleagues with shared goals (Ayo & Fraser, 2008). Shah (2011) concurred with this approach to the understanding of collegiality. These professional relationships are sometimes characterized by identifiable traits that are deemed necessary for success. According to Mangiardi et al. (1990), these behavioural traits include collective commitment, communication of knowledge, and shared responsibilities.

The literature indicates varying models or frameworks for understanding collegiality, including the three dimensions model by Mangiardi et al. (1990) who proffered that there are cultural, structural, and behavioural dimensions of collegiality. The first dimension, cultural, refers to the norms or beliefs unique to the team; while the structural is denoted by the established regulations used to make decisions or that guides the operations of the group (Magiardi et al., 1990). On the other hand, the behavioural component is the actual responsibilities and collaborative activities of faculty members (Magiardi et al., 1990). Moreover, the term collegiality is sometimes used synonymously with collaboration. Whilst authors such as Mangiardi et al. (1990) and Shah (2011) focused on the professional collaboration among colleagues to expound their definition, others such as Jarzabkowski (2002) suggested that collaboration is merely a component of collegiality.

Jarzabkowski (2002) acknowledged the importance of collaboration in understanding the concept of collegiality, but she took a step further to include a social dimension. Jarzabkowski claimed that collaboration focuses on the importance of professional relationships and

33

interactions among colleagues; however, she suggested that collegiality also incorporates a social and emotional dimension. She argued that while the professional activities are largely geared towards instrumentalist goals of the organization, the social dimension advances and nurtures the personal relationships among colleagues, which may positively impact both organizational and personal goals such as developing a preferred culture. For instance, Jarzabkowski, (2002) suggested, "culture evolves in a particular way when teachers spend time both socializing and working together" (p. 3). Irrespective of the goal, the literature reveals that collegiality takes many forms including collaboration.

There are other perspectives on the types of collegiality in educational institutions. Little (1999) supported the notion that collaboration is a subset of (or one aspect of) collegiality and that there are other forms or types of collegiality. Seigel (2010) maintained that there are three types or levels, namely baseline, affirmative or aspirational collegiality, and affirmative uncollegiality. The first refers to collegial behaviour that respects and does not impede the work of one's colleague or hinders the organization achieving its mission; whilst the second type, affirmative collegiality, describes an exceptional colleague that does more than is required in his or her job (Seigel, 2010). On the other hand, Seigel (2010) suggested that affirmative uncollegiality is where an employee behaves in such a manner that obstructs the work of his or her colleagues or the mission of the organization. Similarly, Caesar (2005) claimed that an understanding of uncollegiality is the most common way in which the literature expounds the topic. He supported the assertion by the Academic Council of Wesleyan University (1980) that the following represent some behaviours synonymous with uncollegiality: rudeness, bullying, and disrespect. The foregoing are examples of the various perspectives of collegiality in educational institutions.

Caesar (2005) suggested that most of the literature on collegiality emphasized what it is not (or should not be), as opposed to defining collegiality. This claim is indisputable given the literature on the conceptual foundation of collegiality. The works of Shah (2012), Cipriano (2011), and Balsmeyer et al. (1996) are examples from the literature that have descriptively expounded the term collegiality. Caesar's (2005) argument may be pointing to a lack of consensus around a unified definition for collegiality.

Another approach to understanding and operationalizing the concept collegiality within various organizational settings is represented in a model offered by Ayo and Fraser (2008). This 'four constructs of collegiality' model examined the impetus of colleagues engaged in professional relationships in New Zealand (Ayo & Fraser, 2008). In the model, they suggested that there are four levels of professional relationships ranging from replication (most basic level), validation, aspiration, to alliances, which foster a deeper level of inquiry among colleagues who are now experts within their fields (Ayo & Fraser, 2008). Ayo and Fraser (2008) also suggested approaches to transitioning from apprentice to a specialist through strategies such as training, coaching, mentoring, and alliances respectively. Even though the model seems practical, it may be susceptible to some degree of idealism.

Alternatively, Little (1990) advanced a four-element model of collegiality that range on a continuum of independence to interdependence. The four elements in her model include story-telling and scanning, aid and assistance, sharing, and joint work respectively. In Ayo and Fraser's (2008) model, the coaching element (second level in model, which is a common to on-boarding and induction collaborative technique in organizations) is similar to Little's (1990) aid and assistance element in her model, which is also denoted by activities such as induction and person-person collaboration. Additionally, like Ayo and Fraser's (2008) model, Little's (1990)

35

collegial model ranges in intensity of collaborative activities from minimally to highly collaborative. For example, joint work which represents the highest intensity in Little's (1990) model refers to the type of interdependent collaboration that relies on the mutual obligations of the team and has a greater level of organizational impact, while alliances in Ayo and Fraser's (2008) model describes expert team members in collaborative relationships for the purposes of addressing high level or organizational challenges, innovations or policy problems. Further, Little (1990) suggested joint work offers the best opportunity for the infusion of a collaborative culture.

The figures below depict some of the models or components of collegiality found in the literature. They include Ayo's (2008) four constructs of collegiality model, Little's (1990) continuum of collegial relations, and Hargreaves and Dawe's (1990) conceptualization of informal collegiality. These models or components of collegiality laid the foundation for an understanding of the literature on collegiality. These diagrams are included because they each provided an illustrative view of the differing, yet complementary, perspectives on collegiality in the literature. Additionally, these perspectives or models of collegiality laid a foundation for understanding the construct, and subsequently aided in the development and refinement of the scale items for the study (which are detailed in chapter 3 of this dissertation).

In Figure 2.1, Ayo and Fraser's (2008) four constructs of collegiality model highlights four levels of collegial relationships: replication, validation, aspiration, and exploration. They suggested that some collegial strategies used to transition professionals within organizations from novice to expert could be placed in various groups depending on the nature of the collegial relationship and the degree of the institutional investment in and expectations of these relationships. As a result, the lowest level involves basic operational investments (replication)

36

such as training while the highest level involves the highest degree of institutional investment

and expectations such as research alliances. The researcher was then able to incorporate some of

these ranges of collegial relationships in the development of the study's survey. Specifically,

scale dimensions such as mutual support and network (name adapted and tweaked from Shah's

2011 scale) included mid-level relationships such as coaching and mentoring. On the other hand,

high-level relationships such as research alliances were not included because of the multiplicity

of external variables that may affect such. Notwithstanding, the survey did create space for a

research support relationship through the scale item: 'my colleagues and I share lab space or

other research resources'.

Figure 2.1 *Four Constructs of Collegiality (Ayo & Fraser, 2008)*
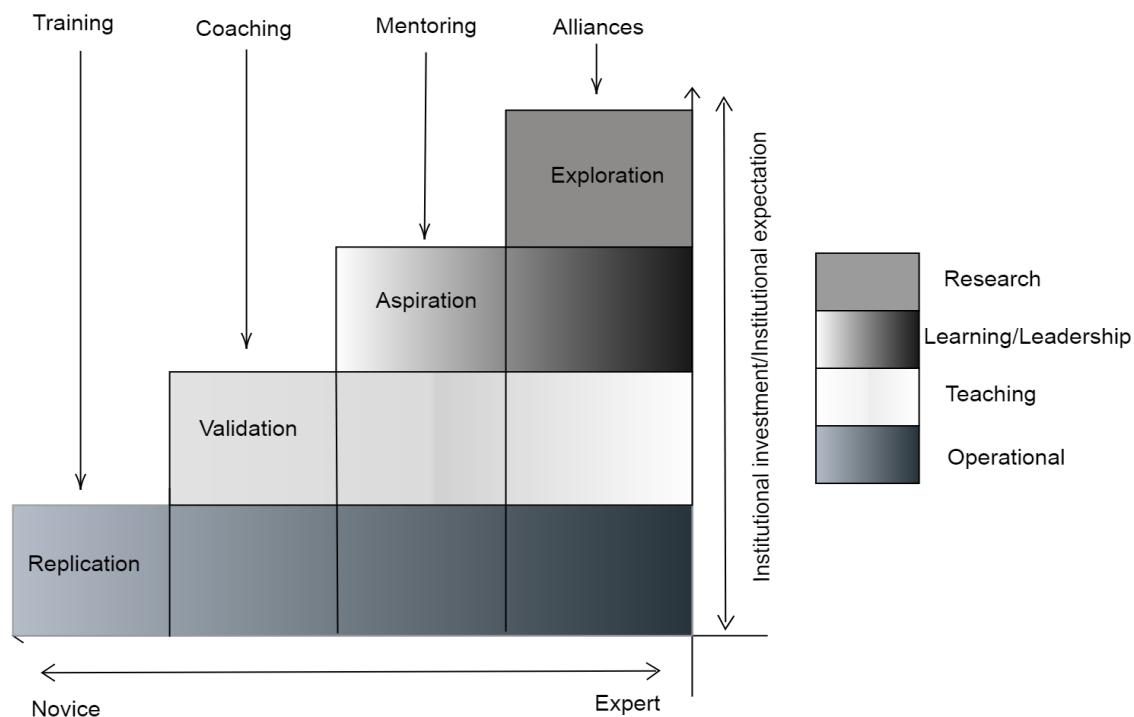
Adapted from Ayo and Fraser (2008). The four constructs of collegiality. *International Journal of Evidence Based Coaching and Mentoring*, *6*(1), 57-65.

Figure 2.2 is a visual representation of Hargreaves and Dawe's (1990) conceptualization of informal collegiality by underscoring the importance of establishing norms of collegiality within the organizational setting as a condition of informal collegial relationships as well as the claim that a collaborative culture is also an important element.

Figure 2.2 *Conceptualization of Informal Collegiality (Hargreaves and Dawe, 1990)*
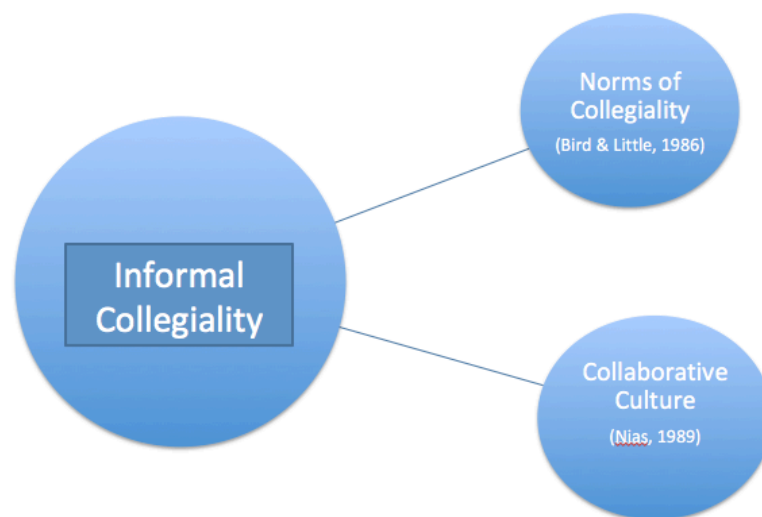
Hargreaves and Dawe (1990) further suggested that a collaborative culture and norms of collegiality are critical to the successful implementation of collegial relationships. From this conceptualization, norms of collegiality in the educational setting include mutual observation, cooperative work planning, and joint learning. Similarly, the use of strategies, such as treat days, praise and recognition, displaying empathy, and discussion of ideas and resources, promotes a

collaborative culture (Nias, Southworth, and Yeomans, 1989), which in turn influences informal collegial practices.

Figure 2.3 illustrates Little's (1990) model of collegial relations and explains that collegiality can be manifested in various ways on a continuum ranging from independence to interdependence, whereby some collegial activities, whilst collaborative (such as storytelling) requires less interdependence among colleagues.

Figure 2.3 *Provisional Continuum of Collegial Relations (Little, 1990)*
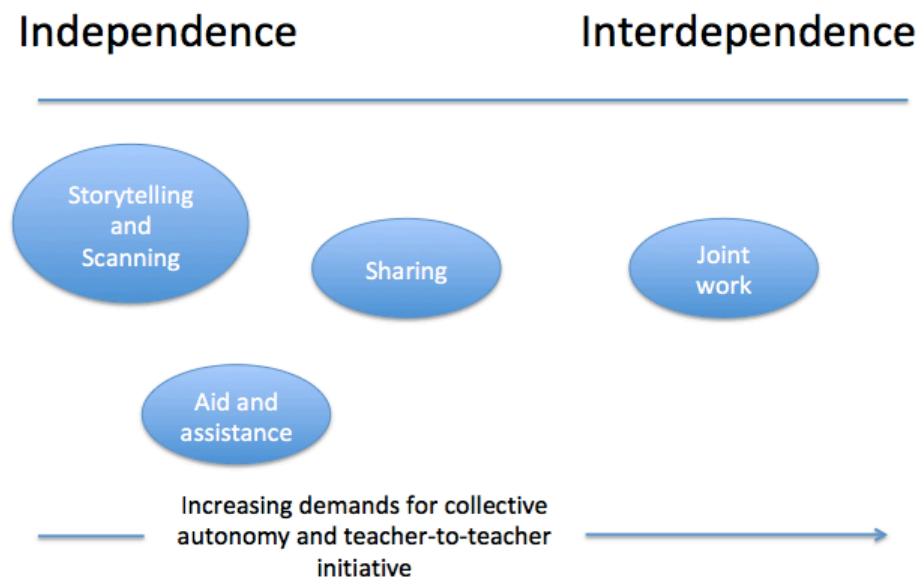
Conversely, collegial activities such as joint working demands a greater level of interdependence among colleagues, therefore, may require more investment in time and other resources and may have more significant organizational impact (Little, 1990). Similarly, a number of the collegial relationships represented in the study's survey can be found on Little's

(1990) continuum such as the sharing of resources and joint work such as that depicted by scale item: 'faculty in my department work jointly in pursuit of the accreditation and approval of new programs and courses in our department (or unit)' and requires a greater level of interdependence.'

In Figure 2.4 below, an illustration of how Jarzabkowski's (2002) conceptualization of collegiality is presented.

Figure 2.4 *Collaboration as a Subset of Collegiality (Jarzabkowski, 2002)*

The figure depicts how Jarzabkowski (2002) built upon the literature on collegiality by explaining that her perspective of collegiality transcends the traditional view of the formal collaborative elements, which permeates a lot of the literature. For her, collegiality must include informal elements of social and emotional work interactions as well as formal professional collaborations to the extent that a clear distinction is made between the two main elements of

collegiality. This conceptualization of collegiality contributed to and justified the development of some of the collegiality items in the survey instrument such as scale item: 'I frequently participate in my department's (or unit's) social events.'

In summary, the above models and conceptual elements in the literature on collegiality facilitated a deeper understanding of the concept as debated and negotiated. Further, they provided foundations on which to build this study. For example, elements of Jarzabkowski's (2002) subset of collegiality reinforced the need for this study to investigate both formal and informal aspects of collegiality, while differentiating the two forms of collegiality. The models also led to an understanding of the importance of the role that culture plays in assessing collegiality in organizations and ultimately faculty success. This claim was evidenced by Hargreaves and Dawe's (1990) conceptualization of informal collegiality, which highlighted key cultural concepts such as norms of collegiality and a collaborative culture.

Culture and Collegiality in Educational Institutions

At the center of the discourse on collegiality and especially its social dimension is the importance and role that culture plays in educational institutions. According to Jarzabkowski (2002), "collegial practices in schools are, therefore, activities in which culture is being developed. Culture evolves in a particular way when teachers spend time both socializing and working together" (p. 3). Chance (2009) describes organizational culture based on the group's mutual values, practices, beliefs, and alliances within the institution. Similarly, Hargreaves (1994) stated, "cultures of teaching comprise beliefs, values, habits and assumed ways of doing things among communities of teachers who have had to deal with similar demands and constraints over many years" (p. 165). He further claimed that fundamental to comprehending the behaviour of teachers is unearthing and appreciating their culture (Hargreaves, 1994).

41

Similarly, a part of studying academics' collegial behaviour relative to faculty success is understanding the organization's or department's performativity culture.

There are several reasons it is important to study educational cultures as a foundation for understanding collegiality. Because collegiality and collegial practices include behaviours, interactions, and supportive relationships, a key to unearthing its fundamentals is an appreciation of the environment, climate, and culture of the groups involved. Lieberman (1988) confirmed this by suggesting that it is commonplace for arguments about professional culture to be centered on collegial practices and effectiveness. Therefore, studying the effects of collegiality on faculty performance necessitates an understating of the department or school's culture.

Another reason culture is a critical part of the study is the importance of culture to human behavior including performance. When discussing faculty performance such as mentoring, coaching, peer observing, and professional learning communities, an understanding of the department's academic culture might be critical to their success. Further, culture can either hinder or promote the successful implementation of these collegial practices or vice versa. Wang (2015) and Lam et al. (2002) corroborated this claim by emphasizing the importance of organizational or school culture to the success of collegial practices such as professional learning communities and peer coaching. According to Lam et al. (2002), "without the right culture, the practice of peer coaching will not generate genuine collaboration" (p. 193). This perspective confirms the importance of culture to organizational innovations such as peer coaching and mentoring.

Organizational and school culture is also important to sustaining change. Johnson (1990) emphasized the importance of a collegial culture to the sustenance of organizational changes. In order to achieve this sustenance, educational leaders should cater to the deeply entrenched

42

aspects of a school's culture. Additionally, Little (1990) stressed the importance of the substance of educators' beliefs and values when implementing or studying various forms of collegiality. Similarly, Bovbjerg (2006) suggested that the notion of collegiality is helpful in understanding educational culture. Therefore, studies involving collegiality may consider the importance of culture in sustaining collegial innovations.

However, depending on the approach taken to operationalize collegial practices, the results may differ. For instance, collegial practices implemented as an institutional mandate may produce different results and reactions from those organically introduced. Several authors have studied the impact of the two approaches−organically and institutionally mandated collegial practices. Some authors made the distinction using the terms 'contrived collegiality versus collaborative culture' whilst others used the terms 'authentic versus mandated/organizationally induced collegiality' (Hargreaves & Dawe, 1990; Lam et al., 2002; Wang, 2015). They claimed that the effects of collaborative culture or authentic collegiality are more desirable than those of contrived or mandated collegiality.

Several studies have been conducted on the effects of contrived and authentic collegiality. The results of these studies suggest that authentic collegiality or collaborative culture promotes organizational trust, motivation, empowerment, satisfaction, inclusion, and creativity among employees (Hargreaves & Dawe, 1990; Johnson, 1990; Lam, et al., 2002; Wang, 2015). Some of the previously mentioned effects of a collaborative culture, such as empowerment and employee motivation, are also antecedent variables of performance. Some studies, therefore, favour authentic collegiality over contrived collegiality for implementation in educational institutions.

On the other hand, studies reveal some pitfalls of contrived collegiality or organizationally mandated collegiality. These studies described conditions including employees feeling forced and stifled, employee resistance, organizations employing collegial practices opportunistically as opposed to developmentally (Hargreaves & Dawe, 1990). These conditions do not promote the important values of trust and support (Hargreaves & Dawe, 1990; Lam, et al., 2002). Nonetheless, it is noted that there is some value in contrived or organizationally mandated collegiality. For example, Lam et al. (2002) and Wang (2015) suggested some form of hybrid relationship in which both contrived collegiality and collaborative collegiality (that is, organically developed supportive relationships) play a role in implementing organizational innovation.

Studies on collegiality also reveal the trend from an individualistic to a collaborative or collegial culture within schools. The individualist culture is characterized by norms of isolation, competition (in some cases), and independence, while the collaborative culture promotes values of interdependence, sharing, cooperation, and trust (Hargreaves & Dawe, 1990; Shah, 2012). At the post-secondary level, faculty members are traditionally accustomed to working in isolation, the result of which is ineffectiveness for group goals (Rakes & Rakes, n.d.). According to Lam et al. (2002), the culture of isolation has negative implications for school effectiveness and development whereas a collegial culture promotes effectiveness. Consequently, the studies suggest that schools replace cultures of individualism with more collegial ones.

Importance of Collegiality in Higher Education

The literature reveals that collegiality is highly critical to the operations of academic departments including in higher education institutions. Collegial practices, such as mentoring, are highly recommended because of potential benefits. Su and Baird (2017) suggested that post-

secondary institutions promote and implement collegial practices. The rationale for the recommendation is the positive outcomes found in literature of collegial practices in academic departments. These positive outcomes include school improvement results in teaching, efficacy, and trust (Shah, 2011). Little et al. (2003) agreed that collegial practices are fundamental to school improvement. Other purported benefits of collegial practices are reduced staff turnover, professional development, and employee attachment (Jarzabkowski, 2003; Knapp, 2003; Shah, 2011). Consequently, collegial practices are highly recommended in academic departments in post-secondary institutions.

Even though a large body of literature reveals several benefits to implementing collegial practices in academic departments, some institutions resist the inclusion of collegiality as a measure of faculty performance. The American Association of University Professors (AAUP) is one of those institutions that object to the inclusion of collegiality as an independent measure of faculty evaluation (Hatfield, 2006). Also, a study of a nursing academic department revealed that the absence of a set of indicators to measure collegiality resulted in faculty members experiencing challenges including collegiality in their evaluation (Balsmeyer et al., 1996). The perceived vagueness of the term collegiality is one of the main reasons for its resistance as a measure of faulty performance in academe. According to Hatfield (2006), this vagueness poses a challenge to administrators in tenure and promotion decision-making. Nonetheless, there is greater support for collegial practices in higher education when implemented for the purpose of professional growth and development (and in some cases in a voluntary capacity).

Despite the tension surrounding the inclusion of collegiality as a separate indicator of performance in higher education, the measure is increasingly being used in performance systems (Hatfield, 2006). Some North American post-secondary institutions include collegiality as a

45

criterion for faculty performance, but there have been court cases arguing against the use of collegiality for tenure and promotion decisions (Johnstson, Schimmel, & O'Hara, 2012; Blankenship-Knox, Platt & Read, 2017). However, courts have given leverage to said higher education institutions to use collegiality as a separate dimension of faculty evaluations (Hatfield, 2006). Notwithstanding, the AAUP argued against the inclusion of collegiality as a separate criterion; they, however, support its evaluative use as part of the other three measures of faculty performance–teaching, research, and service (Hatfield, 2006).

Work Engagement

Many studies have been conducted on work engagement, some of which sought to conceptualize the term for business research purposes. From these studies, four types of engagement and their definitions have been highlighted – personal engagement, burnout/engagement, work engagement, and employee engagement (Gruman & Saks, 2011; Simpson, 2009). The studies cited Kahn's (1990) work in which personal engagement was defined as "the process by which employees bring in their personal selves during work role performances" (Simpson, 2009, p. 1018). According to Gruman and Saks (2011) meaningfulness of work, psychological safety, and psychological availability are elements that affect an employee's personal engagement.

Maslach and Leiter (1997) expounded on the second type of engagement, which they described as the state of being disengaged from one's work ("burnout/engagement"). Further, they elaborated that engagement might be viewed as on a continuum with burnout and engagement at either ends of the scale. They identified three critical elements of burnout, which are in direct contrast to engagement – exhaustion, cynicism, and inefficiency (Maslach & Leiter

1997). The "Maslach Burnout Inventory" (MBI) can be used to measure both burnout and engagement (Simpson, 2009, p. 1019). On the other hand, even though Schaufeli et al. (2002) perceived engagement as the opposite of burnout, they viewed the two concepts as independent of each other with structural dissimilarities. Therefore, in their view, the two constructs should not be measured using the same scale.

The other types of engagement described in the literature are work engagement and employee engagement. Schaufeli et al. (2002) defined work engagement as "a positive fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). Similarly, Kahn (1992) suggested that engagement is a state of mind whereby employees display behaviours that are consistent with the conversion of high energy into aspects of job performance (physical, cognitive, and emotional); while Gruman and Saks, (2011) defined employee engagement as a situation where an employee displays emotional connectedness with fellow employees, cognitive valiance, and a high degree of passion for work. Based on the common thread found in the various definitions of engagement in the literature relative to this study, no distinction will be made between employee and work engagement. Further and more importantly, Kahn's (1992) definition of engagement (referenced earlier) implied a relationship between employee engagement and employee performance.

The employee engagement variable is increasingly used as a predictor of performance. Studies such as Macey's et al. (2009) also supported this claim by asserting that a number of studies found engagement to be a major determinant of performance. Mone and London (2010) and Gruman and Saks (2011) recommended the inclusion of employee engagement practices as part of the design, development, and implementation of performance management systems to improve performance. In order to achieve the benefit of improved performance, organizations

47

must implement initiatives for the engagement of employees (Gruman & Saks, 2011). Further, a

recent study of public and private universities in India revealed an association between work

engagement and job performance among university teachers (Sittar, 2020). Based on these

findings in the literature, the decision to select employee engagement as a possible predictor of

faculty success was made.

The empirical evidence of a positive correlation between employee engagement and

performance and its importance to performance improvement has led to the development of an

engagement management model by Gruman and Saks (2001). In this model, they assert that

engagement is an antecedent to excellent performance. The model is centered on the "belief that

behavioral engagement leads directly to job performance" (Gruman & Saks, 2011, p. 127).

Though there is evidence to support the claim that employee engagement is a predictor of

performance, most of these studies point to organizational versus individual performance. There

remains a need for more studies concerning the correlation between employee engagement and

individual performance (Gruman & Saks, 2011).

In recent times there has been a growing interest in the correlation between individual

performance and engagement. Most of these studies indicate a positive correlation between

engagement and individual performance (Xanthopoulou et al., 2008; Demerouti & Cropanzano,

2010). These studies have corroborated the claim of a positive relationship between engagement

and individual performance purported by Maslach's et al. (2001) study, which revealed that

burnout is associated with lower productivity (opposite of high performance). Recall that

Maslach's et al. (2001) developed an inventory called the Maslach Burnout Inventory (MBI),

which he claimed could be used to measure both engagement (marked by professional efficacy),

and burnout (marked by work exhaustion) on the premise that both constructs are on opposite ends of a continuum.

Empirical studies have been found that support the claim that a positive relationship exists between performance and engagement. For example, a study by Tarus (2014), on employee engagement and employee performance in Nairobi indicated that "there was a positive correlation (r) between all the drivers of engagement and performance for example, one driver revealed an r = 0.675. Another study by Rich et al. (2010) revealed that employee engagement predicted employee performance. This predictive study aligns somewhat with one of the objectives of this study: to determine the predictors of faculty success (engagement being one of the predictor variables). Further, the study found that, "individuals reporting higher levels of engagement tended to receive higher supervisor ratings of task performance" (p. 625). Specifically, the statistical findings indicated "support for hypotheses 1 and 2 in that the paths from job engagement to task performance and OCB were positive and statistically significant (β. = 35, .37, and .36, respectively)" (Rich et al., 2010, p. 626). Because employee engagement is a strong predictor of general performance in the literature, it was hypothesized that the variable might also predict faculty performance or success in this study. As a result, a strong case exists for the use of employee engagement as a predictor variable of faculty success.

Work Satisfaction

Work or job satisfaction has been defined in the literature in varied ways. Hoppock (1935) referred to job satisfaction as "a psychological state of being" while Locke (1976) defined job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job" (p. 1300). On the other hand, Lawler and Porter (n.d.) suggested that job satisfaction occurs

as a result of employee's motivation from work-related rewards, in that, their job satisfaction is based on the degree to which the job meets their expectations, which in turn affects their job performance. Arising from these conceptualizations of job satisfaction, a trend of both intrinsic and extrinsic job satisfaction was identified in the literature.

In conceptualizing work satisfaction, several researchers thought it necessary to highlight distinctions between work satisfaction and another work outcome/attitude, namely, organizational commitment because of the perception of blurred lines between the two. This distinction in the literature is mainly because of the perceived similarities between the two variables. Mowday et al. (1982) suggested that organizational commitment represents a more fixed and general worker attitude; while work satisfaction is viewed as more variable. Similarly, Shore and Martin (1989) agreed with this perspective when they discovered the difference in correlation between the two variables and performance. Further, Cohen (1993b) corroborated such distinctions when his study confirmed differences in association between work or job satisfaction and more direct employee attitudes/outcomes, whereas the relationship between organizational commitment and employee outcomes were relative to external effects.

There is a vast range of literature on the relationship between work satisfaction and organizational outcomes such as performance. For example, studies have been conducted on the association between job satisfaction and turnover (Griffiths et al., 2000; Hom & Kinicki, 2001;), organizational commitment (Carmeli & Freund, 2004; Westover et al., 2010), and performance (Bakotic, 2016; Crossman & Abou-Zaki, 2003; Yang & Hwang, 2014;). Bakotic's (2016) study revealed a statistically significant correlation between organizational performance and job satisfaction, while Biswas and Varma's (2011) study found that work satisfaction predicts employee performance. Their study on the antecedents of employee performance in India

50

revealed that there is an association between job satisfaction and employee performance ($r = 0.067$, $p < 0.01$)" (p. 182). The extant literature, therefore, revealed a positive association between work satisfaction and performance in past studies. Because of these past findings of an association between work satisfaction and general performance in the literature, it was hypothesized that there might also be an association between faculty performance or success and employee engagement in this study; hence, the selection of employee engagement as a possible predictor of faculty success.

Several empirical studies were found indicating a relationship between work satisfaction and employee performance. A study by Lee and Mowday (1987) revealed, "prior job performance was significantly correlated with job satisfaction ($r = .11$, $p < .05$) …" (p. 737). Further, a review of the literature indicated a positive relationship between job satisfaction and job performance, including the results of a meta-analysis, which suggested that there is a greater likelihood that job satisfaction influences individual performance more so than the reverse (Indarti et al., 2017; Riketta, 2008; Shore & Martin, 1989; Yang & Hwang, 2014;). The specific results of the meta-analysis on job satisfaction and organizational commitment by Shore and Martin (1989) were that "job satisfaction was related more strongly than organizational commitment with supervisory ratings of performance (.26 vs. .05; $t (65) = 1.68$; $p < .05$)" (p. 633). These researchers concluded that work or job satisfaction is deemed good predictors of employee performance. Further, a study of 558 faculty members in several Nigerian universities revealed an association between work satisfaction and faculty performance (Adeniji, Falola, & Salau, 2014). The study also indicated that the following contextual areas of work satisfaction positively impacted faculty performance: salary, package, organizational policies, work condition, social context of the job, academic autonomy, relationship with academic colleagues,

51

participation in decision making, and promotional opportunities. As a result, work satisfaction

was selected as one of the predictor variables of faculty success in this study.

Organizational Commitment

Similar to work engagement, the literature on organizational commitment is filled with

multiple definitions. Ketchand and Strawser (2001) claimed that organizational commitment

"represents the attachments that individuals form to their employing organization" (p. 221). The

term is sometimes used to explain employees' loyalty to their employer (Meyer, Allen, & Smith,

1993). A review of the literature suggests that commitment is sometimes perceived as a one-

dimensional concept (e.g., Brown, 1996; Mowday et al., 1982) and at other times as a

multidimensional concept (e.g., Allen & Meyer, 1990; Gordon et al., 1980; Meyer & Allen,

1984). Whether organizational commitment is multi-dimensional or otherwise, the extant

literature reveals its importance to organizational behavioural studies.

Using their multidimensional approach, Meyer and Allen (1991) conceptualized a three-

dimensional model to define organizational commitment; specifically, there are affective,

continuance, and normative dimensions. In their conceptualization, the affective dimension

refers to the employee's affinity towards, engagement, and identification with the organization;

this commitment results from a desire to remain with the organization (Meyer & Allen, 1991).

The continuance dimension is the cognizance of the negative implications of separating from the

organization, such commitment emanates from a need to remain; while the normative

commitment originates from obligatory feelings to remain with the organization; employees with

normative commitment think they ought not to leave the organization (Meyer & Allen, 1991;

Paul et al., 2016). All three dimensions of organizational commitment represent the

psychological state of an employee in reference to the organization (Meyer & Allen, 1991; Paul,

52

et al. 2016). Notwithstanding the multiple conceptualizations of organizational commitment,

which is an important concept in organizational behavioural studies, especially with respect to its

impact on organizational outcomes.

One organizational outcome of commitment is increased employee performance (Metin

& Asli, 2018; Jaramillo, Mulki, Marshall & 2005). Findings have revealed a correlation between

affective organizational commitment and job performance. According to Meyer and Herscovitch

(2001), affective commitment, more so than normative and continuance commitment, is

associated with behavioural outcomes such as job performance. Similarly, Meyer, Stanley,

Herscovitch, & Topolnytsky (2001) in their meta-analyses, asserted that affective commitment

correlates more significantly with organizational outcomes such as job performance than do

continuance and normative commitment. Finally, Mayer and Schoorman (1992) supported

Meyer's et al. (2001) claim that value commitment is more significantly associated with

performance than continuance commitment. As a result, the literature revealed that affective

commitment is more significantly associated with job performance.

Empirical studies on organizational commitment and employee performance indicate that

there is an association between the two variables. In a meta-analytic regression study conducted

by Riketta (2008), it was suggested that job attitudes (like organizational commitment) were

more likely to influence employee performance than vice versa. The study revealed,

"organizational commitment showed a moderately stronger association with employee

performance than did job satisfaction, however, both variables' relationship to employee

performance were statistically significant (β= .06)" (p. 476). Another empirical study by Lee

and Mowday (1989) found that "prior job performance was significantly correlated with job

satisfaction (r = .09, p < .05) (p. 628). These studies corroborate the claims that there is a relationship between organizational commitment and job performance.

A review of the literature revealed that because of these empirical and other findings authors have made correlational claims regarding organizational commitment and organizational performance. In a mixed methods study of 188 academics in China, Jing and Zhang (2014) suggested that it was "appropriate to measure Chinese academics' organizational commitment in terms of affective and normative commitment… because these types of commitment help to promote faculty's performance and effectiveness" (p. 201). Resulting from the evidence found in past studies of an association between organizational commitment and performance, organizational commitment might be deemed predictor of faculty success. As a result, organizational commitment was selected as one of the predictor variables in this study.

Trust

Like organizational commitment, trust is also a multidimensional concept. A review of the literature revealed several conceptualizations of trust. Mayer's et al. (1995) model of trust distinguished character traits of both the trustor and trustee, requiring vulnerability on the part of the trustor on the understanding that the trustee will perform a critical task according to the trustor's expectations. Alternatively, Barber (1983) suggested that trust incorporates moral, cognitive, and emotional elements. On the other hand, Butler (1991) articulated certain criteria necessary for trust to occur. These conditions by order of significance include competence, integrity, consistency, loyalty, and openness (p. 647). In his study, Butler (1991) manipulated the variable such that it accounted for both employee-employer trust and employer-employee trust conditions.

Trust may be defined as "the firm belief in the reliability, truth, or ability of someone or something" (Oxford English Dictionary, 2013). It is believed that employee trust in their supervisors, the organization or teammates may influence their behaviours and by extension their performance (Brown et al. 2015). According to Sharkie (2009) "employee trust is related to the perception an individual has about a number of factors: how they have been treated by the organization, management, and other employees; whether they perceive that these parties have been fair, kept their promises and met their obligations" (p. 492). Most of the conceptualizations of trust in the organization implicitly refer to an employee's in-role or work performance.

Several studies have indicated the importance of trust in the organization as a pre-condition of high performance or extra-role behaviours (Sharkie, 2007; Torlak & Koc, 2007). Specifically, empirical studies have provided evidence of a relationship between trust and employee performance. A study conducted on team trust and team performance revealed that there was a significant relationship between the two variables. According to Dirks (2000), "past performance has a significant effect on trust ($\beta = .61$, $p < .01$); trust in teammates was strongly associated with performance" (p. 1008). Additionally, a meta-analytic study (N = 7,763) by Jong et al. (2016) found that "intra-team trust is positively related to team performance (p = .30)" (p. 2). These studies underscored the importance of trust to employee performance and vice versa.

Consequently, it is recommended that leaders create and foster a climate that promotes trust among employees and between employees and leaders. Further, the rationale for expecting that employees will perform extra-role behaviours (performance beyond expectations) is mainly anchored on trust (Sharkie, 2009). Research findings indicate that trust is viewed as an important contributor to organizational performance (Jones & George, 1998) and that trust in team members is a predictor of performance (Robertson et al., 2012).

Other empirical evidence for the relationship between trust and performance includes a study by Setiawan et al. (2016), which revealed a direct impact of trust on performance. The investigation revealed, "direct effect of trust on job performance has coefficient value 0.42 and significant p value 1%" (p. 720). Organizational leaders need an understanding of the trust levels in their organizations given its impact on performance (Setiawan et al., 2016; Sharkie, 2009). This is evidenced in previous studies supporting the claim that there is a strong relationship between trust and performance, thereby justifying this study's use of trust as one of the six-predictor variables of faculty success.

Resilience

The final predictor variable of performance, resilience, is a highly debated topic in the field of business, with varying definitions in the literature. Though there is no standard definition of resilience (Luthar et al., 2000; Britt et al., 2016), there is agreement that resilience is an important construct in the fields of business, industrial and organizational psychology (Cooke et al., 2016; Varshney & Varshney, 2017). Resilience is perceived as an essential characteristic or criterion for excellent workers because of its potential to result in employees operating optimally in the face of otherwise challenging circumstances (Cooper et al., 2014). Further, Cooper et al. (2014) and Wagnild and Young (1993) suggested that positive attitude, emotional intelligence or stamina, resourcefulness, and flexibility were also key attributes (or outcomes) of resilience.

Several definitions of resilience were found as researchers attempt to gain conceptual understanding of the term. Wagnild and Young (1993) defined resilience as a personality trait that facilitates 'bounce back' energy or adaptability in the face of challenging or stressful

situations such as major organizational transformation. According to Britt et al. (2013) resilience is defined as "the demonstration of positive adaptation in the face of significant adversity" (p. 6). Similarly, Luther et al. (2000) referred to resilience as "a dynamic process encompassing positive adaptation within the context of significant adversity" (p. 543). A major thread throughout most of the definitions is the requirement for positive development subsequent to the experience of an adverse occurrence or stressful environments. According to Britt et al. (2000), whilst some definitions of resilience refer to growth, most demand individuals' successful adaptation to challenges. Cooke et al. (2016) posited that resilience sought after performance capacities such as problem-solving, relationship-building, and adaptability influences individual and organizational performance outcomes.

As a result, past studies indicated a correlation between resilience and performance (both individual and organizational performance). Varshney and Varshney's (2017) study revealed that an individual's capacity to be resilient might greatly improve their performance. According to Kumari and Sangwan (2015), there is a positive correlation between resilience capacity and employee performance. Likewise, Luthans et al. (2005) claimed that there is a positive relationship between resilience and job performance. In reference to organizational performance, research indicated a positive correlation between resilience and organizational profitability (Luthans et al., 2007). The empirical study conducted by Varshney and Varshney (2017) revealed, "resilience was found to have a significant positive correlation with adaptive performance (.402; $p < .001$), contextual performance (.610; $p < .001$), and task performance (.639; $p < .001$)" (p. 40). These empirical data provide evidence that support the claim that a strong relationship exists between resilience and employee performance. As a result, resilience was also selected as a predictor variable of faculty success in this study.

57

Summary of Section

This section detailed the predictor variables of faculty success, which were used to test the hypotheses in this study – collegiality, work engagement, work satisfaction, organizational commitment, trust, and resilience are predictors of faculty success/performance. Thus, there is warrant for these variables being selected as potential predictors of faculty success. Past studies have been conducted on some of these variables, revealing their correlative powers to performance generally.

Theoretical Framework

I used the works of Blackburn and Lawrence (1995) and Tierney (1999) to frame and inform this study mainly because their works help to contextualize the work of academics and the performativity culture within which faculty members operate. To understand faculty success, one must first comprehend the dynamic and differentiated work of academics. Therefore, I used the work of Blackburn and Lawrence (1995) to situate the work of academics. Secondly, Blackburn and Lawrence's (1995) work highlight the dynamic and sometimes challenging environment within which academics operate today and how these changes or challenges may or may not influence faculty members' success. Blackburn and Lawrence (1995) competently explain the shift in the emphasis of academics' work from teaching to being more research focused with the advent of World War 2. They informed readers that before World War 2, teaching was the focus of faculty work. However, the shift in focus to research intensity, which occurred after World War 2, never rebounded across most universities (notwithstanding this, some institutions such as colleges do have a predominant teaching focus emphasis to this day).

The work of Blackburn and Lawrence (1995) was also used to frame the tension that is commonplace in academic work between teaching and research (but also, to some extent, with service) expectations in their pursuit to become successful. This tension refers to the pervasive external view that academic success largely lies in the scholarship of research; in that, much more recognition, incentive, and promotion is given to research productivity rather than to teaching excellence. Tierney (1999) similarly suggested that most post-secondary institutions incentivize research more than teaching. It was Lawrence and Blackburn (1995) who articulated the distinction between successful research and success in teaching in post-secondary institutions. They argued that it is research (and not teaching) that influences one's academic career. This claim is evidenced in the practice whereby "disciplinary leaders around the world award prizes, confer on a faculty member a reputation that cannot be gained at home" (Blackburn & Lawrence, 1995, p. 116). Similarly, Willis and Dubin (1990) claimed that the scholarship of research has the power to produce significant results such that the institutions reputation is sometimes borne from these scientific or research advances. In other words, contemporary universities rely heavily on faculty members' research output for public recognition and reputation building. As a result, greater importance is placed on research success (both from external and internal sources).

The above claims highlight an important aspect of the transformation of academe over time. Jencks and Riesman (1968) referred to this shift in the role of academics as the 'professionalization of faculty'. This shift also resulted in increased salaries being aligned with publication or increase in publication and the eventual slogan 'publish or perish' among academics. Greater recognition is generally given to faculty members who publish more frequently (Tierney, 1999, p. 44). Further, Blackburn and Lawrence (1995) explained that in

59

today's academic climate, success is highly dependent on being recognized for work done and usually this is in relation to research (and not teaching) because even though teaching is still a vital part of academic life, a faculty's reputation and by extension the reputation of their department and institution (nationally and internationally) largely results from research not teaching. These lenses were used to understand the differentiation in faculty work in this study.

Another differentiation in faculty work, as articulated by Tierney (1999), is the variation among faculty from different disciplines and post-secondary types. For example, faculty members in community colleges may place greater emphasis on teaching success more so than on research (and to some extent service) success. While this might be true, the focus of this study is a research-intensive post-secondary institution; therefore, there might be more emphasis on research. Notwithstanding, the differences across disciplines at the U of S may result in some departments, schools, and colleges placing greater emphasis on teaching than on research and vice versa. A classic example of this is the librarian faculty, which was reflected in the results of the interpretation panels. Respond On the other hand, research universities like the University of Saskatchewan and other similar post-secondary institutions place greater emphasis on research success in organizing faculty work. Tierney (1999) suggested, "a productive faculty member's work will be dramatically different if he or she teaches at a private research university, a comprehensive state university, or a community college" (p. 43). Similarly, the work or success expectations of academics also differ depending on one's discipline and employment type (for example, success criteria of a part-time versus a full-time faculty or tenure versus non-tenure track faculty). Because of the significance of these distinctions in organizing faculty work and determining success criteria, these lenses were also used to understand and analyze the findings of this study.

Finally, an overarching thread interwoven throughout the emergent themes from the study include concepts of motivation such as intrinsic and extrinsic motivation. Further, the variant predictors of success in academia as explained by participants' lived experiences were aligned with theories of human motivation. Specifically, for this study, I employed the Self-Determination Theory (SDT) of motivation by Ryan and Deci (2000) and Deci and Ryan (2008) in framing the analysis and discussion of select findings. Self Determination Theory posits that to understand human behaviours (such as performance or faculty success), one must first account for some of the following psychological factors that influence behaviour: competence, autonomy, and relatedness (Ryan & Deci, 2000; Deci & Ryan, 2008). Therefore, in analyzing and discussing the findings from the study, some of these psychological needs were considered and provided the basis for deeper understanding and insights from the predictors of faculty success.

The SDT proponents further suggested that psychological factors are important pre-conditions for growth, wellbeing, and development. These pre-conditions were applied to the findings especially the qualitative findings in providing important lenses through which to view the motivation to perform and resultant outcomes for faculty members. They also provided a window through which to view the tension between motivation to succeed and the need for work-life balance in the lived experiences of faculty members.

Finally, an application of the SDT theory suggests that variation in (performativity) goals produce differences in quality of behaviour (performance) and mental health. Ryan and Deci (2000) also suggested that social contexts and personal differences that satisfies (faculty members') basic needs (for example, how each faculty member defines success and what faculty success means to them differed and determined their levels of success) enables developmental

61

processes such as intrinsic and extrinsic motivations. On the other hand, those factors that hinder academics' fulfillment of basic needs (thereby preventing autonomy, relatedness, and competence) are generally associated with lower performance and poor well-being.

In sum, the objective to explore and determine some of the predictors of faculty success in academia (not to determine causation) required that I triangulate all sources of data in answering the question as to whether the selected independent variables do, in fact, predict faculty success at the U of S. In so doing, I employed the lenses of Blackburn and Lawrence (1995), and Tierney (1999) to describe how the literature on the work of academics align with their lived experiences. I also, explored how culture, specifically the current performativity culture in academia influences academics' success. Finally, the lenses of SDT theory by Ryan and Deci (2000) were used to understand academics' motivation to succeed and explain how the thread of intrinsic and extrinsic motivation is intertwined in academics' quest to succeed while offering recommendations for future scholarship.

Conceptual Framework

It is important to understand the drivers of performance in studying organizations, and how they work, and the motivators of its agents. The emphasis of this study was on faculty success, which according to the literature encompasses the following measures – teaching, research, and service. The study explored the relationship between collegiality (supporting, cooperative relationships such as coaching, mentoring, and peer reviewing), work engagement, work satisfaction, organizational commitment, trust, and resilience, and faculty success in an era of significant transformations in HE. As a result, I explored the existing literature on the above-mentioned concepts (variables). There are possibly other variables that could have been used as

62

predictors of success, however, after careful review of the literature, the six selected predictor variables were found to have some correlation to general performance in past studies. As a result, it was implied that these variables would also act as sound predictors of faculty success.

This study also builds upon the literature on organizational culture and higher education to provide a context for the operation of the predictor variables among academics' work performance within post-secondary institutions. Specifically, organizational culture theories and concepts provided lenses through which to view the operationalization of collegiality, work engagement, resilience, organizational commitment, work satisfaction, trust, and academic performance in higher education. As a result, Schein's (2010) three levels of culture, namely artifacts, espoused beliefs and values, and basic underlying assumptions was used as a tool in the analysis of the findings on the relationship between the predictor variables and faculty success. For example, these three levels of understanding organizational culture were used to explain the findings from or provided some insights into the survey and IP results. In assessing faculty success in the collegium and its relationship to the predictor variables, faculty members' beliefs, values, and assumptions provided important insights into their responses. Additionally, because the literature underscored the pivotal role that culture plays in the understanding of and operations of the variables under study, the researcher decided that it was apposite to utilize a tool such as Schein's (2010) three levels of culture as a lens through which to analyze the findings on the relationship between the predictor variables and faculty success.

Hargreaves (1994) also suggested that in order to study teacher behaviour, there needs to be a fundamental comprehension of organizational culture. Therefore, an important part of the study on insights from the predictors of faculty success is an understanding of the role culture plays in predicting success. Moreover, the literature also reveals that cultural elements such as

63

norms and values determine the extent to which collegial practices are successful. Ayo and

Fraser's (2008) collegial framework supports this claim. Recall that the framework includes

elements such as mentoring and associated relationships, communities of practice, conversation

as a tool, and institutional culture. Additionally, Hargreaves and Dawe's (1990)

conceptualization of informal collegiality included a collaborative culture and norms of

collegiality, which he claims are central to the successful implementation of any collegial

relationship such as coaching. As a result, culture played a role in understanding faculty

performance and the predictors of success in this study.

The study's exploration of the relationship between faculty success and the six-predictor

variables of work engagement, work satisfaction, organizational commitment, trust, and

resilience were analyzed through the lenses of a performativity culture. Therefore, some

organizational factors, which provided even deeper insights, included the Department/school/

College's climate (which some authors claim is part of an organization's culture). Further,

factors such as collegiality and engagement provided insights into the department's climate and

by extension the department's culture and the role these play in faculty members' success.

Because the aim of this study was to glean insights from the relationship between faculty

success and the six-predictor variables, the beliefs, values, and assumptions of faculty members

were interwoven in their responses not just to the survey questions but also especially during the

interpretation panel sessions. These beliefs, values, assumptions, and artifacts played a vital role

in the participants' worldview as well as their performance behaviours. Consequently,

understanding their cultural context or the role culture plays in analyzing the predictors of faculty

success provided a basis for understanding some of the results in this study. A conceptual

framework diagram depicting the association between the dependent and independent variables as well as the theories and works used to synthesize the findings is presented in Figure 2.5.

Figure 2.5. *Study's Conceptual Framework*
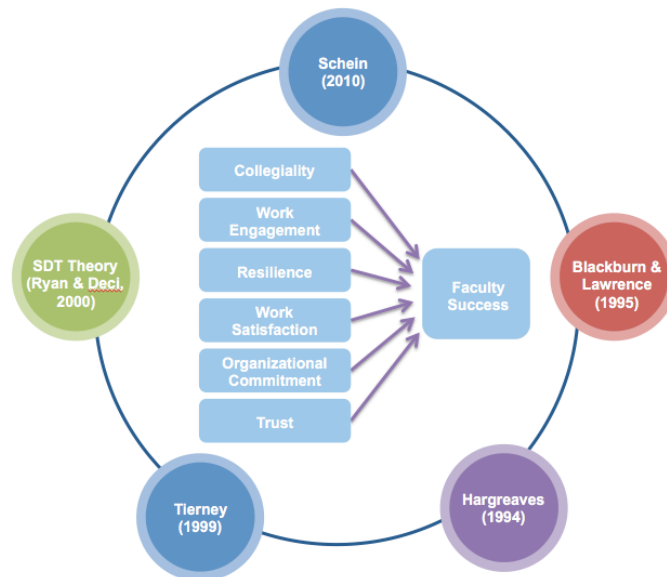
The study's six predictors (independent variables) of faculty success (dependent variable) viewed through the prism of selected culture and motivation theories and faculty productivity works.

Summary of Chapter Two

The literature review revealed insights into the key constructs of the study (faculty success, collegiality, work engagement, resilience, trust, and organizational culture). Multiple definitions of these constructs were gleaned, thereby providing a conceptual net from which the study's focus was narrowed. In the first section, an anatomy of the variables including their multiple definitions, perspectives, models, and uses in past studies, which laid a foundation for their understanding, were explored. Some of the models highlighted include Ayo's (2008) 'Four Constructs of Collegiality' and Little's (1990) 'Provisional Continuum of Collegial Relations'.

The literature review also revealed arguments about the conceptual ambiguity of some of these variables as well as their importance in higher education or to the performance variable.

A review of the literature on faculty success or performance generally was also conducted. In this review, an examination of faculty performance in the context of faculty unionization versus non-unionization in higher education was also explored because the study's sample may have included participants who fall in either category. Finally, a theoretical and conceptual framework for the study were also presented, which highlighted the study's use of theories and past works to triangulate the findings in Chapter 5; therefore, a review of the following theories and past works were also conducted: SDT theory, Schein's (2010) cultural theory and the works of Blackburn and Lawrence (1995) and Tierney (1999).

Chapter 3

Research Methodology

This chapter explains the philosophical paradigm or worldview that underpins this study and describes the overall research design. Research design elements addressed in the chapter include the research questions, methodology, research methods, sampling and procedures. The research methods section details the selected mixed methods design used as well as the procedures that guided the study. The developmental phase explains the survey design and development decisions and pilot testing while the procedures section highlights the data collection and analysis decisions and procedures. The final section of this chapter outlines the reliability, validity, trustworthiness and ethical considerations for this study.

Philosophical Paradigm

According to Creswell and Plano Clark (2011) a research paradigm or worldview refers to the philosophical assumptions made in a particular study. These assumptions usually reveal the beliefs, ontology, and epistemology inherent in the study. Some assumptions made in this study included the belief that there are both multiple and singular realities of the truth, which can be used for understanding real world phenomena. Pragmatism was the selected philosophical paradigm for the study. Hammersley (2012) argued that what is important in pragmatism "[is] the practical meaning that a concept had in the context of scientific investigation" (p. 11). Proponents of pragmatism, according to Cohen (2011), claimed, "there may be both singular and multiple versions of the truth and reality, sometimes subjective, sometimes objective, sometimes scientific, sometimes humanistic" (p. 23). A result of this ontological approach is the shift in focus from the paradigm debate (for example between post-positivism and constructivism) to an emphasis on the consequences of research or the real-world implications of research (Creswell &

Plano Clark, 2011). In alignment with this approach the worldview or theoretical assumptions in this study are outlined below:

- Epistemology and Ontology: Belief in both multiple and singular realities and a focus on the consequences of research. Specifically, the objectives of this study led to an inquiry that was both explanatory and exploratory. As a result, the researcher assumed that there are both singular and multiple realities of the truth, which guided how knowledge was processed and understood. Thus, the epistemological stance in this approach entailed a focus on the most appropriate methods to solve the research problem. Consequently, the study drew on both positivist and interpretivist orientations or paradigms (Johnson & Onwuegbuzie, 2004).

- Theoretical lens/Paradigm: Pragmatism is the philosophical paradigm or worldview that best describes the lens through which this study was approached. The paradigm is elaborated in this chapter.

- Methodology: Mixed methods design-based study (explanatory sequential mixed methods design) was the selected methodology for this study. This methodology is generally aligned with the pragmatist paradigm in the literature. According to Creswell and Plano Clark (2007), "pragmatism is typically associated with mixed methods research. The focus is on the consequences of research, the primary importance of the question asked rather than the methods, and multiple methods of data collection inform the problems under study" (p. 23).

- Methods: quantitative (survey) and qualitative (interpretation panels) methods were employed in this study. How these two methods were used in this study is explained in subsequent sections of this chapter.

As indicated in chapter one, this study sought to garner insights from the relationships between collegiality, resilience, work engagement, work satisfaction, organizational commitment, trust (independent variables), and faculty success (dependent variable) at the University of Saskatchewan. This was a correlative, predictive, and a comparative study; in part, this was a correlative study that tested the relationship between the predictor variables and faculty success. The researcher also compared faculty success across demographic variables such as gender, title, and tenure. The researcher assumed a confirmatory and exploratory stance. Through the study, the researcher tested the view that relationships might exist between collegiality, resilience, work engagement, work satisfaction, organizational commitment, and trust and faculty success (confirmatory stance). Additionally, the researcher gathered in depth information on participants' lived experiences with the predictor variables and faculty success (exploratory stance).

For the purposes of this study, the terms strands and phases were used interchangeably. Several considerations were made in the above-mentioned decision; they comprise implementation practicality, purpose of the research, and scope. Statistical analyses were conducted on the closed ended questions in the survey whilst thematic analyses were conducted via the interpretation panels following the administration and analysis of the survey. The qualitative responses were transcribed, member checked and thematically analyzed.

This study sought to explore the most practical approaches or solutions to the research problem. Greater emphasis was placed on finding the most practical solutions through both

multiple and singular realities; hence, the use of both quantitative and qualitative techniques. Additionally, the researcher believed that the use of mixed methods of inquiry compensated for the weaknesses of either approaches (Creswell & Plano Clark, 2007). Using this approach enabled the researcher to garner context specific, in-depth perspectives on the predictors of faculty success (which is best achieved using qualitative methods); while testing the existing theories that relationship exists between the predictor variables and faculty success (which is best achieved through quantitative methods). Consequently, a mixed method was deemed most appropriate for the purpose and objectives of the research.

The study, then, garnered in-depth data through interpretation panels with faculty members. The purpose of this data gathering approach was to further interpret selected findings captured by the online survey that tested the relationships between faculty success and the predictor variables. In mixed methods studies, "the problem may be one in which a need exists to both understand the relationship among variables in a situation and explore the topic further in depth" (Creswell, 2014, p. 111). The latter represents the multiple realities expressed by the interpretation panel participants.

Conversely, the singular reality was represented by data collected from surveys administered to U of S faculty members. This approach was represented by the quantitative element of the study. The findings from the survey (singular reality) tested the theories or hypotheses and provided further findings. Accordingly, the epistemological underpinning that guided this research was an emphasis on the most appropriate method that will solve the research problem. In this case, the most appropriate methods selected to resolve the research challenge in alignment with the study's objectives were to use both quantitative and qualitative methods of inquiry.

In this design, the findings of the study were triangulated by using the qualitative data (interpretation panel data) to both complement and explain or expand on the quantitative (survey) findings, which constitutes one of the main tenets of the explanatory mixed methods design (Creswell & Plano Clark, 2007). Specifically, the explanatory sequential mixed methods design which was used in this study, placed emphasis on the quantitative strand or phase.

The methods employed in the data collection phase of the study included: the development and administration of a survey instrument during the first phase. During phase two, interpretation panel discussions were conducted with faculty members. The research was conducted at the University of Saskatchewan among faculty members. Ten percent of the population (1,032 faculty members) was targeted for participation in the survey (phase one); while in phase two, four faculty members participated in each of four virtual interpretation panel discussions to analyze the significant findings from the survey as part of the explanatory objective of the study.

Mixing the datasets was an important aspect of the data analysis phase. Creswell and Plano Clark (2010) suggested "by mixing the datasets, the researcher provides a better understanding of the problem than if either dataset had been used alone" (p. 7). In this study, the quantitative findings from testing the predictors of faculty success were mixed with the qualitative data. The various in-depth perspectives and lived experiences of participants represent the qualitative data. The quantitative data answered question: does a relationship exist between the predictor variables and faculty success and do the independent variables predict faculty success at the U of S? Conversely, the qualitative data provided an explanation for how the predictor variables influenced faculty success, while expounding significant findings from the survey. The selected mixing method for this study is the connecting model, which is

depicted in Figure 3.1 later in this chapter.

Review of Research Questions

Recall that the study analyzed the relationship between the independent variables collegiality (C), resilience (R), work engagement (WE), work satisfaction (WS), organizational commitment (OC), and trust (T) and the dependent variable faculty success (FS) at the University of Saskatchewan. To review, the research questions that guided the study are:

Research Question 1: What, if any, relationship exists between collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust (independent variables) and faculty success (dependent variables)?

Research Question 2: Do collegiality, work engagement, resilience, organizational commitment, work satisfaction, and trust predict faculty success?

Research Question 3: In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?

Research Question 4: To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory, sequential design method?

Methodology

Methodology is defined as "the philosophical framework and fundamental assumptions of research" (Creswell, 2007, p. 4). Research procedures and decisions are informed by the selected methodology, as well as the purpose and objectives of the study. As indicated, the selected methodology for this study was a **mixed methods design-based approach**. This

methodology was deemed most appropriate to respond to the research questions expounded earlier.

Research Method

The data analysis phase of the study included the analysis of the numeric data from the survey followed by the textual data to garner its overall meaning. In reference to the qualitative data, Bernard (2006) suggested, "analysis is the search for patterns in data and for ideas that help explain why those patterns are there in the first place" (p. 452). The qualitative data analysis phase required processes like coding and the development of themes. Coding, according to Creswell (2014), refers to the process of arranging the data such that they are segmented into chunks, which are then categorized or labeled; these terms are usually called "in vivo terms" (Creswell, 2014). The qualitative phase of this study used the hybrid approach to coding. This approach utilizes predetermined codes before the data collection phase, thereafter, adjusting the codes (as needed) based on findings (Creswell, 2014). Ultimately, most of the final codes emerged after the data collection phase.

Figure 3.1 represents the general mixed methods design used in the study. The quantitative data were collected using surveys. Themes were then be generated from the survey results based on extreme cases, outliers, and comparison groups. These themes were then applied to the quantitative phase of the study at which point, a finalized interpretation panel guide was developed. The participants in the interpretation panel collaboratively analyzed the significant findings from the survey based on the themes generated. A second and final round of analysis took place in which the researcher triangulated both datasets for discussion.

Figure 3.1. *Study's Explanatory Sequential Mixed Methods Design*
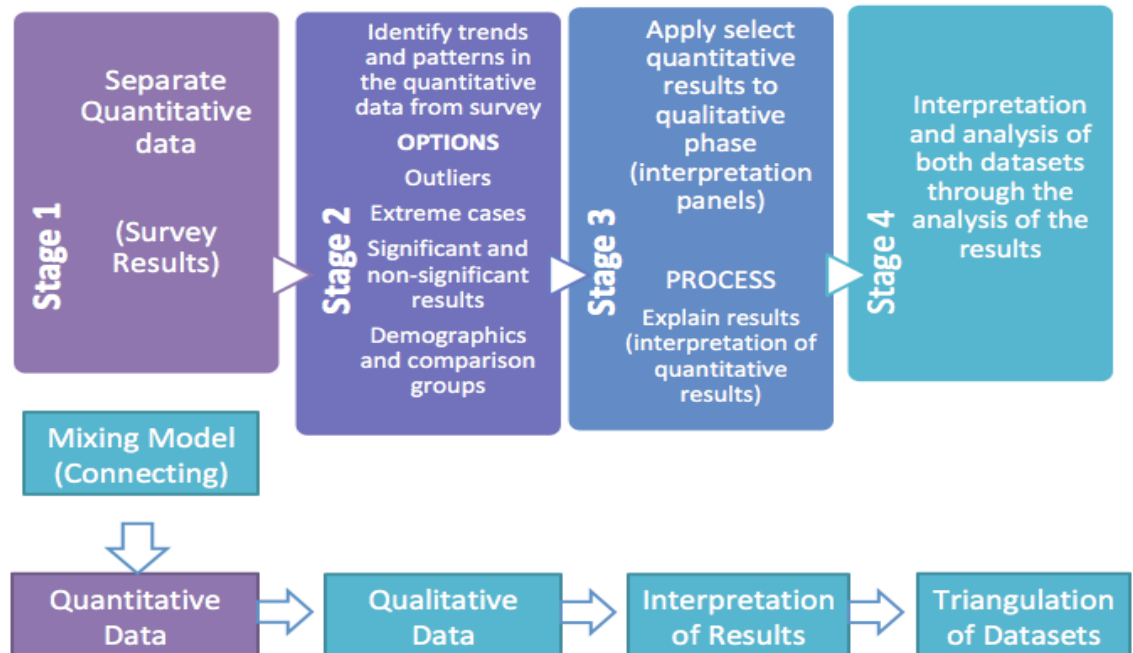
The researcher used the connecting model for the mixing of the data in this study. In this model the connection between the two datasets occurred based on the research questions.

Procedures

In this section, the survey design and development decisions, including the pilot of the survey instrument, are explicated. Sampling decisions and procedures are also explained for both strands of the study. Finally, the section also details the data collection and analysis procedures for the quantitative and qualitative strands of the study.

Survey Development

Because this mixed methods study employed an explanatory sequential design procedure (refer to the methods section), greater emphasis was placed on the quantitative instrument in this section. Recall that the explanatory sequential design method was a two-phase study, whereby

the researcher used the findings from the quantitative phase (first phase) to inform and conduct the qualitative phase (Creswell & Plano Clark, 2007). Therefore, themes and questions for the interpretation panel instrument were developed after the administration and analysis of survey data. Typically, the quantitative phase is carried out through the development and administration of a survey and analysis of the quantitative data, after which "statistically significant differences and anomalous results" are explained in the subsequent qualitative phase (Creswell & Plano Clark, 2007, p. 72). The focus of this section is on the development of the survey instrument.

Instrument Development Phase

The survey instrument was developed by the researcher under the auspices of the academic advisor via the adaptation of previously validated scales as well as from self-developed scales, based on a content validity process. The collegiality, organizational commitment, work engagement, and work satisfaction scales were based on adaptations. The faculty success, trust, and resilience scales were self-developed based on item and scale content validity.

The survey instrument was developed following a review of the literature on the following variables: collegiality, faculty performance or success, work engagement, organizational commitment, work satisfaction, trust, and resilience. The objective was to determine what the literature had posited in so far as defining and expounding the constructs. Content validity was achieved through the development of items based on findings from the literature. Critical to the development of scales in educational measurement is content validity which, according to Li and Sereci (2013, p. 365), suggested that "validity evidence based on test content refers to the degree of agreement between what a test measures and the domain it purports to measure." As a result, this method was employed in part to identify the most apposite

75

scale items based on the description or definition of the domains in the literature.

This study placed emphasis on both external and internal validity. External validity refers to the extent to which the findings of a study can be generalized to other populations (situational context or time) (Cohen et al., 2011). On the other hand, internal validity addresses the robustness and rigor with which the study was conducted with respect to measurement and design decisions that help to determine the authenticity of causal relationship (Vockell & Asher, 1995). The design of the instrument in this study was central to achieving both internal and external validity. Some of the decisions detailed in the next paragraphs reveal actions taken to maximize the validity of the instrument.

Additionally, reliability is defined as the "…dependability, consistency, and reliability over time, over instruments, and over group of respondents" (Cohen et al., 2011, p. 199). Reliability is achieved when a study or measurement is applied at separate times, to synonymous groups while producing similar results. Such tests of consistency lend themselves to greater credibility and trust for future studies. As a result, survey design decisions are important in establishing reliability. Both validity and reliability are essential considerations when designing a survey.

The process for developing the survey instrument in this study included the following steps espoused by Eastman et al. (1999): definition of the construct, item development, and psychometric testing of the scale's reliability and validity (this step was effected during implementation and results presented in chapter 4). The survey instrument consists of seven measures, namely:

1. collegiality,
2. faculty success,

3. work engagement,

4. organizational commitment,

5. trust,

6. resilience, and

7. work satisfaction.

The collegiality measure was developed from the adaptation of items from Shah's (2011) scale, which measured collegiality among teachers in a Pakistani pre-tertiary educational context. Shah's (2011) collegiality measure was adapted because of its robustness and accuracy in capturing the key components of the construct of collegiality as defined in this study. While other collegiality scales were not adapted, these other perspectives on collegiality were instrumental in refining and customizing the collegiality scale to fit the context of this study. This was especially so for Jarzabkowski's (2002) conceptualization of collegiality, which was quite useful. The following factors were tested by Shah's (2011) teacher collegiality scale (TCS):

1. mutual support and trust,

2. observing one another teaching,

3. joint planning and assessments,

4. sharing ideas and expertise,

5. teaching each other,

6. developing curriculum together, and

7. sharing resources.

Whilst the reliability and validity of the TCS scale was statistically rigorous (r = 0.71 to 0.85 (*n* = 364), the scale was modified to include and exclude items/factors based on higher

education context fitness, gleaned from the literature. The four factors adapted from Shah's (2011) collegiality scale included:

1. Demonstrating mutual support and trust renamed Mutual Trust and Support Network
2. Observing one another teaching renamed Openness about Teaching
3. Collaborative planning and assessment renamed Collaborative Decision-making
4. Sharing resources

The items in the modified collegiality scale used a five-point Likert-type scale to capture responses, ranging from strongly agree to strongly disagree together with an option of "not applicable."

Other measures that were adapted from previous studies include the organizational commitment and work satisfaction scales. The organizational commitment scale was adapted from Meyer, Allen, and Smith's (1993) instrument, which measures three types of organizational commitment:

1. Affective commitment,
2. Normative commitment, and
3. Continuance commitment.

The reliability and validity from this scale was also psychometrically sound inclusive of significant 'p-values' (p < .05), representing a rigorous scale. Moreover, these scales have also been reliably used in previous studies such as Shah's (2012) study further cementing the claim of the scale's robustness. The following five items were adapted from Meyer's et al. (1993) scale with their respective p-values:

1. I very happily would spend the rest of my career in my department - .645
2. I feel a strong sense of belonging to my department - .410

3. Right now, staying with my organization is a matter of necessity as much as a desire - .504

4. I have a strong sense of commitment to the people in my department - .735

5. I have a strong sense of obligation to remain in my department - .580

The work satisfaction scale was also adapted from Warr, Cook and Wall's robust instrument (Stride et al., 2007). They purport that this scale can be used as measure of employees' (of all categories) overall job satisfaction. The scale's internal reliability, using Cronbach's alpha was 0.93 *(n = 94)* in the higher education sector (Stride et al., 2007). This suggests that the scale was a reliable measure for use in this present study. The work satisfaction scale has four items seen below:

1. I am satisfied with recognition given for work done

2. I am satisfied with my remuneration

3. I am satisfied with the way my department is managed

4. I am satisfied with my department's organizational culture and climate

In reference to the work engagement measure, two items were adapted from Lee and Ok's (2015) scale, which was an adaptation of Schaufeli and Bakker's (2003) 9-item scale. These items were already validated in previous studies. The two items that were adapted were: 'In my job, I feel energetic' (renamed – in my day-to-day work, I feel energetic) and 'My job inspires me' (renamed, my day-to-day work inspires me). However, the other item was researcher-developed through a general content validity process as previously described. The work engagement scale has three items overall, including the self-developed one – 'I am very passionate about my day-to-day work'.

The remaining scales – faculty success, trust, and resilience were also self-developed, based on a content validity process. The faculty success dimension used three factors of self-reported performance or success indicators: teaching, research, and service derived from the literature on faculty performance (Su and Baird, 2017; Webber, 2011). The faculty success, trust, and resilience scales have ten, four, and five items respectively. The items for the faculty success scale are listed below:

Faculty Success in:

Research Performance

1. I have a high number of refereed journal articles or books published for my discipline

2. I publish good quality journal articles (based on number of citations) for my discipline

3. I have a high number of external research grants for my discipline

Teaching Performance

4. My student evaluation ratings are excellent

5. I am highly engaged in the improvement of courses and/or programs

6. I regularly engage in innovative teaching practices

Faculty Service Performance

7. I have administrative roles in my department, college or unit (e.g., Committee Chairship, Department Heads)

8. I am highly engaged in national or international association related activities

9. I am an active member of committees that work to support departmental goals

The trust scale was also researcher developed from a process of content validity. The items were derived from the literature on trust (Barber, 1983; Brown et al., 2015; Butler, 1991; Mayer et al., 1995) and selected based on their relevance, appropriateness, alignment with the purposes of the study, and use in previous studies. The items for the faculty trust scales are listed below:

Trust

1. I trust the decisions and actions of my department (or unit) head

2. I trust the administrative processes in my department or unit

3. There is a significant level of trust among faculty in my department (or unit)

4. Junior faculty members can trust senior faculty members

The resilience scale was also researcher developed from a process of content validity. The items were derived from the literature on resilience (Britt et al., 2013; Cooke et al., 2016; Cooper et al., 2014; Wagnild and Young, 2014) and selected based on their relevance, appropriateness, alignment with the purposes of the study, and use in previous studies. The items for the faculty resilience scale were:

Resilience

1. My colleagues adapt well to organizational changes

2. I am flexible and responsive to changes in the work environment

3. I operate optimally in my job in the face of challenging situations in my personal life

4. My colleagues usually respond positively to adverse circumstances

5. I bounce back quickly from difficult situations

The Study's alignment diagram (appendix H) depicts the alignment of the study inclusive of research question, study's framework concepts, scales, and survey items adapted or self-developed. It illustrates a logical connection between research questions, conceptual framework, scales, and scale items, including an identification of items developed versus those that were adapted. For the self-developed items, the table also indicated the studies or body of literature from which they were developed using a process of content validity.

Reliability of Scales

Tables 3.1 to 3.12 display the reliability levels of the various scales used in the quantitative phase of the study. One hundred percent of the scales were found to be reliable based on their reported alpha scores.

Table 3.1 *Reliability Analysis Faculty Success Scale – Research Scholarship*

Item	Alpha	Cronbach's Alpha if Item Deleted
I have a high number of refereed journal articles and/or books published for my discipline, rank and stage of academic career	.804	0.629076
I publish high quality journal articles (based on number of citations) for my discipline, rank and stage of academic career.		0.717702
I have a high number of external research grants for my discipline, rank and stage of academic career.		0.847032

N=190

Table 3.2 *Reliability Analysis Faculty Success Scale – Teaching Scholarship*

Item	Alpha	Cronbach's Alpha if Item Deleted
Overall, my student evaluation ratings are excellent.	.826	.797
Overall, peer assessments of my teaching are excellent		0.797838
Overall, my contributions to graduate student advisement and committee work are seen as excellent.		0.823743
I am highly engaged in the improvement of courses and/or programs.		0.808127
I regularly engage in innovative teaching practices.		0.805584
In my teaching, I feel a sense of choice and freedom.		0.797743
I feel confident in my teaching performance.		0.792255

N=190

Table 3.3 *Reliability Analysis Faculty Success Scale – Interpersonal Success*

Item	Alpha	Cronbach's Alpha if Item Deleted
Interaction with and support from my colleagues has a strong influence on my level of success.	.804	0.828373
I feel supported by the people I care about when it comes to teaching.		0.648348
I feel supported by the people I care about when it comes to conducting research.		0.705287

N=190

Table 3.4 *Reliability Analysis Collegiality Scale (Mutual Trust & Support Network)*

Item	Alpha	Cronbach's Alpha if Item Deleted
Our faculty members provide strong collegial support.	.935	0.928299
Professional interactions among our faculty are cooperative and supportive.		0.928458
There is a feeling of trust among my colleagues.		0.928616
I can count on most of my colleagues to help me, even though this help may not be part of their official assignment.		0.929482
Reverse coded hide failures from my colleagues		0.936547
I frequently participate in my academic unit's social events.		0.935234
Faculty members in my academic unit support new colleagues' career development efforts.		0.929749
Faculty members in my academic unit actively mentor colleagues.		0.930197

N=190

Table 3.5 *Reliability Analysis Collegiality Scale (Openness: Teaching & Research)*

Item	Alpha	Cronbach's Alpha if Item Deleted
In our academic unit, we regularly observe one another's teaching as part of sharing and improving teaching strategies.	.935	0.934276
Faculty members in my academic unit are open to being observed in their teaching by their colleagues.		0.931966
My teaching has benefitted from being open with colleagues about my successes and challenges.		0.931376
My research has benefitted from being open with colleagues about my successes and challenges.		0.931379
I usually consider the feedback that I receive from my colleagues and respond appropriately.		0.934343

N=190

Table 3.6 *Reliability Analysis Collegiality Scale (Collaborative Decision-Making)*

Item	Alpha	Cronbach's Alpha if Item Deleted
Colleagues in my academic unit regularly cooperate and collaborate.	.935	0.928534
Most faculty members in my academic unit participate actively in meetings.		0.930625
Faculty members in my academic unit have worked together in pursuit of the accreditation and/or approval of new programs and courses.		0.932961
Most faculty members in my academic unit contribute actively to making decisions about our program(s) and curricula.		0.930443
My colleagues and I collectively analyze our academic unit's programs and initiatives with some regularity.		0.930081
In our academic unit, faculty members encourage each other to contribute ideas and suggestions.		0.928063

N=190

Table 3.7 *Reliability Analysis Collegiality Scale (Sharing Resources)*

Item	Alpha	Cronbach's Alpha if Item Deleted
My colleagues and I regularly share teaching materials or resources.	.935	0.932281
My colleagues and I have worked out good arrangements for sharing lab space or other research/teaching resources		0.936722

N=190

Table 3.8 *Reliability Analysis Organizational Commitment Scale*

Item	Alpha	Cronbach's Alpha if Item Deleted
I would happily spend the rest of my career in my current academic unit.	.859	0.786180
I feel a strong sense of belonging to my academic unit.		0.770848
Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (d - I have a strong sense of commitment to the people in my academic unit.		0.805552
Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (d - I have a strong sense of obligation to remain in my department		0.864282
Right now, staying with my department is a matter of necessity rather than a desire		0.866284

N=190

Table 3.9 *Reliability Analysis Work Engagement Scale*

Item	Alpha	Cronbach's Alpha if Item Deleted
In my day-to-day work, I feel energized.	.913	0.935399
I am passionate about my day-to-day work.		0.867606
My day-to-day work inspires me.		0.819913

N=190

Table 3.10 *Reliability Analysis Work Satisfaction Scale*

Item	Alpha	Cronbach's Alpha if Item Deleted
I am satisfied with the recognition given to me for the work I've done.	.836	0.817866
I am satisfied with my remuneration (salary and benefits).		0.863546
I am satisfied with the way my academic unit is managed.		0.764201
I am satisfied with my academic unit's organizational culture and climate.		0.786179
I am satisfied with the level of leadership that exists in my academic unit.		0.761766

N=190

Table 3.11 *Reliability Analysis Trust Scale*

Item	Alpha	Cronbach's Alpha if Item Deleted
I trust the decisions and actions of my academic head.	.898	0.870351
I trust the administrative processes in academic unit.		0.862003
There is a high level of trust among faculty in my academic unit.		0.871734
Junior faculty members can trust senior faculty in my academic unit.		0.872046

N=190

Table 3.12 *Reliability Analysis Resilience Scale*

Item	Alpha	Cronbach's Alpha if Item Deleted
I adapt well to organizational changes.	.830	0.791405
I am flexible and responsive to changes in my work environment.		0.794645
I am able to operate optimally in my job even when faced with challenging situations in my personal life.		0.826404
Typically, I respond well to life, even in adverse circumstances.		0.780673
I bounce back quickly from difficult situations.		0.785750

N=190

The researcher used the Cronbach's alpha test to determine the reliability of each variable within the scales. The Cronbach alpha is an instrument of internal consistency or reliability of items, which is also known as the alpha coefficient. The benchmark of reliability being used in this study is alpha = 0.70 or higher. Cohen et al. (2011) suggest the following guidelines for interpreting alpha coefficients (>0.90 – very highly reliable; .080-0.90 – highly reliable; 0.70-0.79 – reliable; 0.60-0.69 – marginally/minimally reliable; <0.60 unacceptably low reliability). Therefore, all the scales in this study reported a Cronbach's alpha score ranging from reliable to

very highly reliable. As a result, the scales used in the quantitative strand may be deemed reliable, robust and adaptable for future studies.

Summary of Survey Development Section

In summary, this section expounded the survey development and administration decisions as well as the sampling decisions with justifications. The survey development phase included several processes such as the review of the literature on past studies on the factors being investigated and the broader constructs or variables they represent. From the review of literature, selected scales were adapted based on the empirical validity and alignment with this study. In other cases, scales were researcher-developed from a process of content validity. Several factors informed the inclusion or exclusion of items from adapted scales. They include the decision to adapt based on the post-secondary context of this study, alignment with the purposes of the study and broader research questions, as well as feedback from the pilot test conducted with selected members of academe.

Sampling Approaches

For this study, both qualitative and quantitative sampling methods were employed based on the study's design. As Teddlie and Yu (2007) claimed, "mixed methods sampling strategies involve the selection of units or cases for a research study using both probability sampling (to increase external validity) and purposive sampling strategies (to increase transferability)" (p. 78). Therefore, the purposive sampling strategy was used in the qualitative phase while a multiplicity of quantitative sampling techniques were used or adapted for the quantitative phase.

The sampling strategy that was used in the quantitative component of the study is based on multiple methods. Specifically, Teddlie and Yu (2007), 'Sampling Using Multiple

Probability Techniques' was used. The rationale for the use of this technique was because this technique primarily incorporates multiple traditional sampling methods used in quantitative studies, such as random sampling, stratified random sampling, and cluster sampling. According to Teddlie and Yu (2007), "a simple random sample is one in which each unit (e.g., persons, cases) in the accessible population has an equal chance of being included in the sample, and the probability of a unit being selected is not affected by the selection of other units from the accessible population" (p. 79). For the quantitative strand of this study one post-secondary institution in Saskatchewan, namely the University of Saskatchewan, was purposively selected among the list of post-secondary institutions in the province. The rationale for this selection includes inter alia accessibility to the population and the characteristics of the population including the number of and mix of faculty members employed to this institution for representativeness. However, within the institution, the sample was placed into clusters or categories of faculty (for example faculty per department, college, and school). The participants (based in their naturally occurring population) in the quantitative phase were then selected using the random sampling technique in the quantitative strand, whereby the survey was be circulated widely across the naturally occurring population (colleges/departments/schools), thereby giving equal opportunity for participation in the survey. The information on the participants' naturally occurring population were retrieved from publicly accessible contact information namely emails database.

Even though the entire population had an equal opportunity to participate in the survey, the researcher developed a threshold of desirable sample size for the quantitative phase, highlighted below. The sample size for the quantitative phase was to be no less than 10-15% of the total population. The actual number of participants in the survey was 190 (approximately

18%), which exceeded the target of 170 (15%) of faculty members. Specifically, a breakdown of the institution's faculty population indicates that the total number of academic staff at the institution is 1,134 (University of Saskatchewan, 2012).

The sample in the qualitative strand of the study was purposively selected because of the aim of having participants who were sufficiently knowledgeable in the subject matter, and who were willing to participate in the panel discussions. This criterion was important and in keeping with the design of the study and feature of interpretation panels. According to Teddlie and Yu (2007) "[p]urposive sampling techniques are primarily used in qualitative (QUAL) studies and may be defined as selecting units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions" (p. 77). Therefore, purposive sampling was selected for the qualitative phase, ensuring that the participants selected for the interpretation panels were not only a homogenous group but also selected based on their knowledge of the areas for further elaboration.

Creswell and Plano Clark (2018) suggested that the use of the same participants (or a sub-set) from the quantitative strand in this design may be logical given that their participation in the first phase qualifies the initial participants to further expound the findings in the second phase. However, given the nature of this study and the similar experiences shared by members of the population (faculty members), whether they participated in the initial phase or not, the use of faculty members who did not participate in the quantitative strand of the study would still satisfy the purpose of the use of interpretation panels. Further, sampling faculty who did not participate in the quantitative strand was also thought to be beneficial; in that, this permitted adjustment for any possible participation bias based on responses in the first phase. As a result, the researcher selected participants for the qualitative strand based on the following criteria:

- A faculty member from the institution.

- Availability and willingness to participate in the study.

- May or may not have participated in the quantitative strand of the study.

- Had knowledge of or experience with the variables within their institution (an important criteria for selection).

The qualitative phase did not engage an equal number of participants compared to the quantitative phase. As recommended by Creswell and Plano Clark (2018), a much smaller sample is desired in the second phase given that the purpose of this design is to collect sufficient data to be able to gain deeper understanding of selected themes from the original phase. Therefore, in this study the data were connected as opposed to compared (in which case there would have been a need for equal sample sizes in both strands). Thus, the sample size for the qualitative phase was 4 participants for each of the interpretation panel session and a total of four interpretation panels overall. This resulted in a total sample size of 16 participants for the qualitative strand of the study. A breakdown of the interpretation panel process is depicted in Figure 3.4 later in the chapter (Qualitative Data Collection and Analysis Process).

Summary of Sampling Approaches Section

Important Sampling decisions for both strands of the study were highlighted in this section, which informed and guided the sampling procedures. Sampling approaches were applied based on the study's designs in that, mixed sampling approaches were used. For the quantitative strand of the study, probability-sampling techniques were used leading to the use of a purposeful sampling technique.

Data Collection

The data collection section outlines the various procedures and processes that guided the researcher in capturing the quantitative and qualitative data for analysis. The recruitment processes used for both strands of data are also discussed.

Data Collection: Quantitative Strand

The recruitment for the quantitative strand of this study lasted approximately two months, with invitations sent to faculty members from all colleges, departments, and schools. Follow-up strategies (i.e., emails and flier announcements) were also implemented. As indicated, potential respondents for the quantitative phase were identified via contact information on the institution's/department's websites. The following steps or protocols were observed during the recruitment process:

1. Received approval from the University of Saskatchewan's Behavioural Research Ethics Board (REB) on June 27, 2019

2. Collated contact data of potential participants and created a database of U of S faculty members by college, department, and schools

3. Forwarded email invitations to potential participants with link to the survey, using a U of S secure online tool, via the Social Sciences Research laboratory

4. A response period of four weeks to complete the survey was given, with follow-up reminders in the second, third, and fourth weeks. Additionally, an extension of approximately two weeks was given for completion of the survey with the aim of increasing the response rate

5. Thank you emails (for participation) were sent together with an announcement to the winner of draw (respective winner/s notified) and token disbursed

6. Incentives – the following incentives were used to encourage participation and a high response rate in the study:

    a. Survey/quantitative phase participation – opportunity to enter to win a draw for a small gift card (value of no more than $150)

    b. Interpretation panel/qualitative phase participation – small gift card

The study used an online method of administering the survey instrument. Even though Mertens (2010) suggested that traditionally there is a low-response rate of online surveys, the other benefits of online surveys are significant and appealing to this study. Some of the perceived benefits or characteristics of online surveys include large-scale reach, flexibility, time and cost effectiveness, speed, convenience, technological advances, ease with which to enter and analyze data, and sample control. The foregoing represents factors that would have been otherwise challenging if using other modes of survey administration such as mail surveys. Consequently, the researcher used some of the following strategies to mitigate the possible challenge of purported low response rates to the surveys: periodic follow-up/reminders, recruitment incentives, and relationship building.

According to Dillman et al. (2009) and Mertens (2010), the mixed mode approach generally produces higher response rates. Response rates are the number of full responses to the survey as a percentage of the eligible units within the sample (Mertens, 2010).

To achieve high response rates, the following additional steps were initiated – clear communication of the purpose of the study and pledges of confidentiality and other ethical responsibilities, minimization of the length of the survey as much as practicable (approximately 20 minutes), and communication of the relevance and importance of the topic to respondents. These strategies were believed to have been effective during the recruitment phase of this study.

According to Groves et al. (2006), topic relevance and incentives are key ingredients to achieving high response rates in surveys. The use of appropriate incentives within the established ethical standards was also explored to stimulate higher response rates as indicated earlier. A response rate of approximately 70% is usually acceptable (Johnson & Christensen, 2008). Overall, to achieve this, steps such as, prior contact with institution, follow-up contacts made with non-respondents, reminders, and a pilot testing of the instrument were undertaken (Mertens, 2010).

Pilot Testing

Pilot testing is a process in research whereby, the researcher measures the instrument with a sample similar to the one proposed in the study (Mertens, 2010). As part of the study's quality assurance measures, approximately 20 colleagues in academia participated in a pilot test of the survey instrument; among them were faculty members from different post-secondary institutions (Vancouver Island University, University of Technology, Ryerson University, and University of Saskatchewan's past faculty). The results of the pilot informed a further refinement of the original instrument. This process together with advisor reviews helped to ensure the instrument's soundness (psychometrically), its relevance and applicability to the study's purpose and objectives.

Data Collection: Qualitative Strand

This section detailed the data collection procedures and decision-making in the qualitative phase of the study. Data gathered in this phase (as previously stated) was via interpretation panel sessions. A total of four interpretation panel sessions were conducted among faculty members during this phase.

The Interpretation Panel

An interpretation panel is a specialized form of focus group in which the participants interpret the data collaboratively (Noonan, 2002, pp. 89). This collaborative interpretation of the findings in the focus group session usually takes place after an initial or preliminary analysis of the data. As a result, the researcher prior to the sessions conducted a preliminary analysis of the quantitative data. An executive summary of the significant findings was prepared based on the initial analysis and circulated to participants prior to their sessions, which proved helpful to the discussions that ensued in the sessions. The study's use of this type of focus group method achieved both the qualitative purpose of the study as well as being pragmatic based on the faculty workload demands, scheduling conflicts and time constraints of academics – all factors considered in the decision not to use the individual interview option across colleges and departments.

Additionally, the features of the interpretation panel deemed it best suited for the study. These features included the collaborative nature of the tool, the kinds of insights to be gleaned from the use of this approach, and the alignment of the ethos of this study with the selected tool (collaborative and supportive). According to Noonan (2002), traditionally, qualitative studies have relied on the member checking process as a key aspect of the interpretation process; This tool not only enhanced the member checking process but also provided opportunities for the researcher to glean certain kinds of information, which would have not been possible in a non-collaborative process, such as through the traditional individual interview or focus group tool.

Even the IP sessions are organized in a similar manner to traditional focus groups; there are other important distinctions beyond its collaborative feature. Focus groups are data collection tools; whilst the interpretation panel was a qualitative tool used to analyze and

interpret data (Noonan, 2002). Further, the selection process for the focus group was mostly

random. On the other hand, the selection process for participants in interpretation panels was

purposively executed. Finally, and an important reason for selecting this tool was the claim by

Noonan (2002) that focus groups tend to deliver conflicting findings (especially when sensitive

themes are being discussed); however, the consensus building feature of the interpretation panel

was another reason for selecting this tool. This decision was made especially against the

backdrop of the sensitive nature of the faculty success variable being studied.

      According to Cohen at al. (2011), a focus group is a form of group interview which is

useful both for its economy of time (gathering a vast amount of data in a short period of time) as

well as its advantage of strategically focusing on a given set of themes revealing insights in a

group setting that would have otherwise been difficult to glean. Even though Morgan (1988)

recommended four to twelve participants and Fowler (2009) recommended six to eight; this

study aimed for four to six participants for each interpretation panel as indicated.

      In order to manage the logistics of participation in the interpretation panel, the study

employed the strategy of over-recruitment, as recommended by Cohen et al. (2011), which

mitigated the usual attendance weakness of focus group sessions. The recommended benchmark

for over recruitment is 20% of the targeted number. According to Cohen et al. (2011), having

one focus group session for a single topic or study was considered insufficient since it would be

difficult to determine if the results of that interview were unique to that single group. Therefore,

this study aimed to conduct four interpretation panels. The panel discussions took place virtually

via the secure teleconferencing platform, Cisco WebEx, which is supported by the U of S

information technology infrastructure (a meeting platform with which most of the participants

were familiar) for a period of no more than 60 minutes per session. Doodle poll technology was also used to support the organization of these sessions with participants.

Figure 3.2 illustrates the main elements involved in the interpretation panel process. This qualitative data analysis process includes two rounds of analyses – firstly by the interpretation panel of experts and secondly, a final round of analysis by the researcher, thereby increasing the quality of member checking process and ultimately increasing the credibility of the findings.

Figure 3.2 *Qualitative Data Collection and Analysis Process*
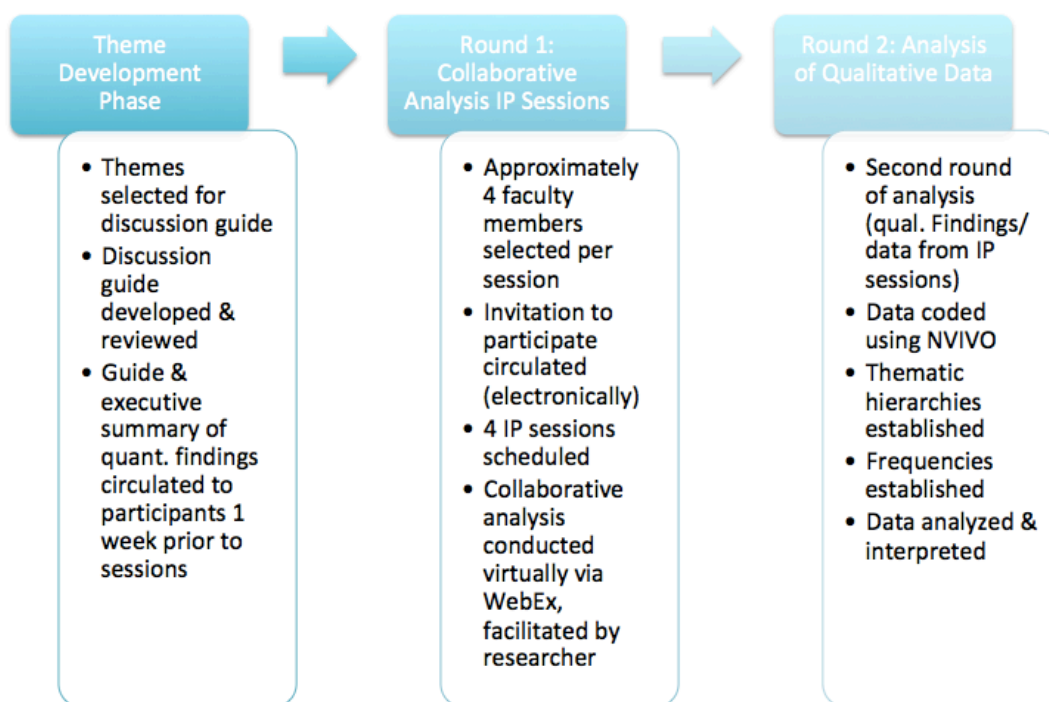
The objective of the interpretation panel was to collaboratively analyze the data after initial preliminary analysis of the findings of the quantitative strand of the study. By incorporating the input of experts in the field being studied, the analysis and interpretation of the data can be enhanced. Noonan's (2002) study, which used interpretation panels revealed,

"interpretation panels provided additional information that improved data interpretation" (pp. 89). According to Noonan (2002), the use of interpretation panels resulted in a level of explanation and analysis of the data from an emic standpoint, which would not have been achieved by the external positionality of the researcher alone (Noonan, 2002). For instance, the findings from his study, which used interpretation panels, revealed that participants (teachers) possessed unique insights that the researchers did not have which aided the interpretation of the data (Noonan, 2002).

Data Analyses

This section explains the data analyses decisions and steps that were taken in this study. The various statistical tests that were conducted on the quantitative data are also outlined in alignment with the objectives of the study as well at the steps taken in the analysis of data in the qualitative phase of this study.

According to Creswell and Plano Clark (2018), "researchers go through a similar set of steps for both quantitative and qualitative data analysis: preparing the data for analysis, exploring the data, analyzing the data, representing the analysis, interpreting the analysis, and validating the data and interpretations" (p. 201). For this explanatory sequential design-based study, the steps in the quantitative phase included inter alia:

- Entering and assigning numerical values to each response, using the SPSS tool.
- Cleaning dataset recoding items and establishing codebook, reviewing trends in the data by running some basic statistical operations.
- Conducting both descriptive statistical analyses and inferential statistics tests in order to answer the quantitative question.
- Summarize, present, and interpret statistical results.

Analyses of Quantitative Data

An electronic survey was forwarded to the potential participants in the study from the post-secondary institution. During the quantitative phase of this study several statistical tests, using the Statistical Package for the Social Sciences (SPSS) software were conducted. The following basic descriptive statistical operations, and measures of relationships were conducted in the quantitative strand of the study:

1. Basic descriptive statistical tests

    a. Measures of central tendencies (mean, median, and mode)

    b. Frequency distribution

    c. Measure of dispersion (standard deviation)

These descriptive tests provided primary information on the dataset for basic analysis, which were useful for sample comparisons. Further, the outputs from these tests provided useful information such as levels of collegiality, work engagement, and satisfaction across departments, schools, and colleges.

2. Measures of Relationship/Correlation or Regression Analysis (RA)

    a. Pearson product moment correlation coefficient revealed the measure of the relationship between the variables (and their effect sizes)

        i. Faculty success and the six predictor variables

        ii. Coefficient of determination determined the amount of variability in the faculty success variable that can be explained by the predictor variables

    b. The RA also determined whether collegiality, resilience, work engagement, work satisfaction, organizational commitment, and trust predicted faculty success.

c. Analysis of Variance (ANOVA) tests were also conducted to determine the

statistical differences in faculty success across selected demographic variables

Prior to the above statistical tests or operations conducted in SPSS, scatterplots of the dataset

were generated to give the researcher a pictorial view of the relationship between the variables

and to determine the possible types of relationship that exist (if any), for example positive,

negative or inverse relationships. Further, the analysis of the scatterplots helped to determine

whether the data needed to be 'cleaned' before further tests are conducted.

Analyses of Qualitative Data

Data analyses for the qualitative phase included transcribing of the interpretation panel

data, which included inter alia coding and creating NVIVO terms, which informed the thematic

analysis. According to Mertens (2010), the act of transcribing is an active process, providing an

avenue for the researcher to actively engage with the research material. With the permission of

participants, the researcher recorded the interpretation panel discussions and transcribed,

organized, coded and recoded the data in some instances. After the recording and transcribing

the data, I organized and formatted the data for analysis. The data were also coded, themed, and

analyzed using the NVIVO software as a tool for analysis. Recall that coding refers to the

process of "selecting parts of the data that conceptually hang together and assigning a label to

excerpts of the data" (Mertens, 2010, p. 425). After the exploration and analysis of the

qualitative data, both the quantitative and qualitative datasets were integrated and interpreted as

reflected in chapter 4 of this dissertation.

Mixing Data (Triangulation)

During the analysis phase, the researcher, used graphical representations of the integration process through joint displays. For instance, a table known as a *joint display* was done to depict how the qualitative results connects with the quantitative results. The purpose of such a display according to Creswell and Plano Clark (2018) is to provide a visual representation of how the qualitative findings enhanced the quantitative findings, which helps to address the mixing of questions in this study. The interpretation of the findings from the joint displays provided answers to the question: 'to what extent did the qualitative findings provide deeper insights into and explanations of the quantitative results' and is discussed in chapter 5 of this dissertation.

<p align="center">Summary of Data Analyses Section</p>

In summary, data analysis in mixed methods studies includes the analysis of both qualitative and quantitative data independently, then merging both datasets (integrating or mixing the data) (Creswell & Plano Clark, 2018). For this study, the quantitative data were analyzed first based on its explanatory sequential design. After which, the qualitative data were analyzed and both datasets combined for final analysis and interpretation. In mixed methods studies, data are not always analyzed simultaneously (Creswell & Plano Clark, 2018). Finally, the researcher used the findings from the qualitative phase to interpret and understand the results from the quantitative phase. The study then answered the questions: - to what extent do the data in the qualitative phase explain the findings in the quantitative phase, and how did the qualitative findings of faculty members' personal experiences provide meaningful explanations of the statistical findings in the quantitative phase?

Reliability and Validity

The trustworthiness of a study is largely dependent on its validity and reliability, both of which have different meanings depending on the research methodology. Validity and reliability bear different meanings across qualitative and quantitative studies. In mixed methods studies, there may be a mixture of both. Gibbs argued "qualitative validity means that the researcher checks for the accuracy of the findings by employing certain procedures, while quantitative reliability indicates that the researchers' approach is consistent across different researchers and different research projects" (Gibbs as cited by Creswell, 2014, p. 201).

Reliability and Validity of Qualitative Strand

Steps that were taken to assure the validity and reliability (accuracy and credibility) of the qualitative findings of this research include triangulating, member checking (partially, this process was inherent in the design of the interpretation panel process), peer debriefing, clarifying any researcher bias, establishing and communicating detailed case study protocols and crosschecking transcripts. These strategies helped to address the qualitative indicators of validity and reliability such as trustworthiness, authenticity and credibility. Establishing and communicating the detailed case study protocols to participants enabled the possible applicability, and transferability of the findings of the research (Creswell, 2014). According to Johnson and Christensen (2012) validity refers to the degree of credibility, plausibility, and trustworthiness of the study. Some strategies that were used in the qualitative phase to enhance the study's validity as referenced earlier were triangulation – crosschecking data using multiple sources and procedures (Johnson & Christensen, 2012), member checking, data triangulation, and methods triangulation.

Trustworthiness of Qualitative Strand

Some steps that were taken by the researcher to support the trustworthiness of this study include:

1. Using research methods (mixed methods) and tools such as surveys, which have been successful in past studies. Even though the use of the tool, interpretation panels is an emerging method, it falls under the broad umbrella of qualitative methods that has been successfully used by researchers in the past. Further, Noonan's (2002) study successfully used and recommended this method of data collection. According to Shenton (2004), Guba's model of trustworthiness supports the following strategies of research credibility: "use of established research methods, development of an early familiarity with the culture of participating organizations, random sampling of individuals to serve as informants, and triangulation" (p. 65). The research employed all the above methods to enhance the trustworthiness of the study.

2. The researcher was familiar with the institution's (University of the Saskatchewan) culture. This familiarity with the culture and ethos added credibility and trustworthiness to the data gathering and analysis process during the qualitative phase of the study.

3. Finally, the triangulation of the selected methods (use of multiple methods of data collection) that is inherent in the design of the study further supports the case for its trustworthiness. Another way the researcher triangulated the study was with a variety of sources that were able to corroborate responses. This range includes the use of faculty from multiple departments, schools, and colleges as well as

faculty at varying stages of their career (early, mid, and late career stages), and

finally, the sample included faculty members in administrative roles such as

graduate chairs and heads of departments.

4. Other strategies included regular consultations with dissertation supervisor and

committee throughout the research process for deliberations on the best courses of

action, encouraging participants in the interpretation panels to be open, assuring

them of their rights and responsibilities as participants, including their right to

withdraw from the study at any point and also the researcher's obligations to them

as student investigator, including the confidentiality of their responses (to the

extent that she had control). The researcher disclosed all her ethical

responsibilities to participants at all phases of the data collection and analyses

process. She reminded them that the results of the study will be reported as

statistical summaries and that no identifying information will be published.

Reliability and Validity of Quantitative Strand

The measures of validity and reliability employed in the quantitative strand of the study

included the use of the reliability as internal consistency model, specifically the Cronbach alpha

coefficient. This strategy measured or tested the internal consistency of the survey instrument or

scales that were used in the study. Another strategy used was ensuring that researchers with both

qualitative and quantitative expert knowledge forms part of the graduate committee (Creswell &

Plano Clark, 2007). The researcher also consulted with committee members during the research

process.

Additional strategies included the "use of external standards, establishing the validity and

reliability of current data, and validating and checking the reliability of scores" (Creswell &

Plano Clark, 2007, p. 129) from similar instrument used. This strategy was partially subsumed in the adaptation of some scales that already had strong reliability scores from past studies.

Summary of Reliability and Validity Section

In summary, the researcher took various steps in both the quantitative and qualitative phases to ensure the validity and reliability of the findings. Further, the researcher triangulated the various data sources and methods, which also increased the study's credibility. The main data sources included survey and interpretation panels. The use of a variety of data sources also increased the validity and credibility of the findings of this study.

Ethical Considerations

There were some ethical considerations that the researcher made during this research process. They included the adherence to the established standards of academic integrity of the University of Saskatchewan, seeking and receiving approval from the Behavioural Research Ethics Board prior to commencement of the study, and adhering to their guidelines and protocols throughout the study. After attaining the necessary approvals, letters of invitations or recruitment notices were sent out to the proposed participants of the study, which will inter alia outline the name, and nature of the study (giving full disclosure in alignment with board protocols), contact information of researcher and principal investigator (academic advisor) and other such pertinent information.

Information was also provided in the letter of invitation regarding the Behavioural Research Ethics Board's approval and their contact information. Consent forms were prepared by the researcher for both strands of the study, outlining participants' rights and responsibilities throughout the research process especially indicating their right to withdraw from the study

among other rights and responsibilities. These consent forms or protocols were communicated to

participants verbally (in the case of the interpretation panel sessions) and in writing prior to their

participation in the study. Member checks (an inherent feature of the interpretation panels) were

also done.

Additional information was made available to participants including the proper and

secure storage of data over a five-year period, the utilization of coding for the survey responses

and pseudonyms on the record of all interpretation panel discussions to ensure anonymity. It was

also communicated that full confidentiality cannot be guaranteed in the case of the panel

discussions given the nature of these group sessions, however, participants were encouraged to

maintain the confidentially of discussions in these sessions. Finally, the researcher informed

participants of how the findings or final output of the research will be used for example the

production of a dissertation and possible publications therefrom as well as practical institutional

application of the recommendations.

Summary of Chapter Three

Chapter 3 of this dissertation detailed the methodology and methods that were employed

in the study on the predictors of faculty success. The study assumed a mixed methods approach

based on its purpose and the research questions to be answered. This approach was deemed most

apposite for the study. The study used the case of a research-intensive post-secondary institution

in Saskatchewan, namely the University of Saskatchewan. The explanatory sequential design-

based approach was the specific type of mixed methods approach used, which gave priority

weight to the quantitative findings. Statistical analyses were conducted on the quantitative data

using SPSS whilst thematic analyses were conducted on the qualitative dataset, using the

NVIVO tool. The mixing and analysis of these two datasets answered the mixing question, 'to

what extent and in what ways did the interpretation panels with faulty members contribute to a

more comprehensive understanding of the predictors of faculty success, using the explanatory

sequential design method?'

Chapter 4

Results and Findings

Overview of Chapter

Again, the purpose of this study was to explore the relationship between faculty success and collegiality, employee engagement, work satisfaction, trust, organizational commitment, and resilience, using an explanatory sequential mixed methods design. This chapter presents a descriptive analysis of the demographic information, and variables in the study, correlation and comparative findings as well as the qualitative findings. The findings in this chapter are based on survey data collected from academics at the University of Saskatchewan and interpretation panel discussions conducted with purposively selected academics in the sample population. A description of the participants is presented first then the quantitative findings followed by the qualitative findings and mixed findings from the study. The results of the quantitative phase were analyzed through descriptive, inferential, and statistical analyses in relation to research questions number one and two while the results of the qualitative phase were analyzed and synthesized thematically to address research question number three, while joint display was used to present findings relative to the fourth research question using the Pillar Integration Process (PIP) technique.

Quantitative Findings

This section presents the findings of the survey conducted in the quantitative phase of this study. To administer the survey, the researcher announced the study to the academic population at the U of S. This was done via a research study announcement on the university's PAWS channel (section targeted to faculty members) three times between August and October 2019.

Additionally, the survey was circulated directly to academics' emails (which were mined from publicly accessible databases) every week over six weeks. A total of 190 online surveys were responded to: 91 males, 96 females, and 3 identified as other. The Statistical Package for the Social Sciences (SPSS) analysis research tool was used to analyze the data presented below.

Demographic Description Analysis

The researcher used the following demographic characteristics to better understand the sample population gender, age, college/school, education level, job title, and tenure. The following figures present the demographic breakdown of the sample population used in this study by gender, age, and tenure (based on a conception of early, mid, and late career stage faculty). Some of these demographic breakdowns were used later in the comparative findings section of this study wherein differences were found in faculty success and other variables.

According to Figure 4.1, the gender of faculty members was almost evenly split between males (47.9%) and females (50.5%) with 1.6% identifying as other.

Figure 4.1 *Gender Demographic Breakdown*
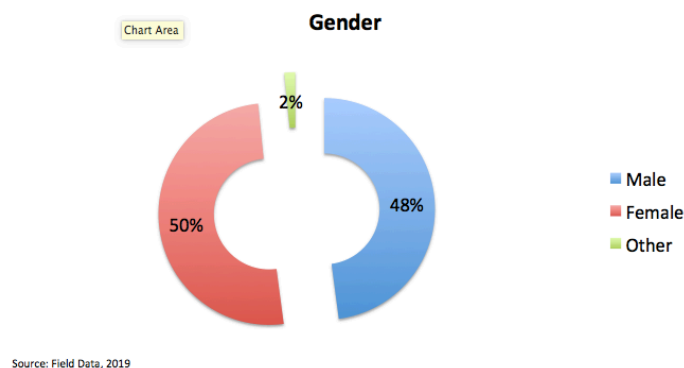
The majority of academics in the sample population (82%) were over the age of 40 years, while approximately 18% were under 40 years of age as depicted in Figure 4.2.

Figure 4.2 *Age Demographic Breakdown*
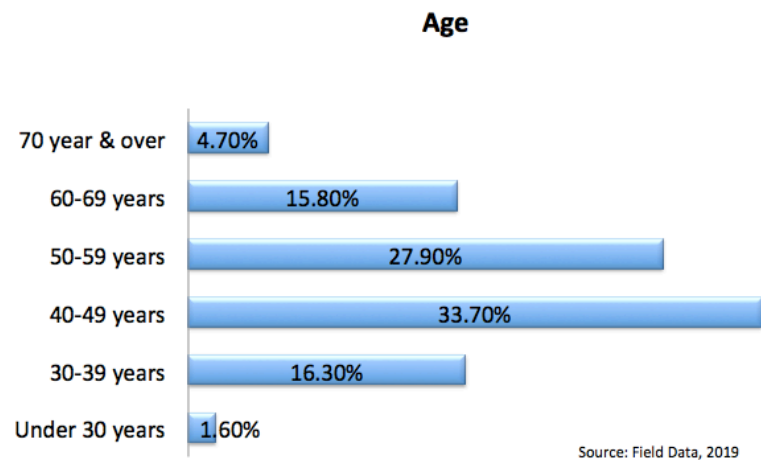
In analyzing the tenure variable, the categories were collapsed into 3 divisions in line with the literature: early career faculty, mid-career faculty, and late-career faculty as reflected in Figure 4.3. A slim majority of respondents (51%) identified as early career (1-10 years), closely followed by mid-career faculty with 40% (11-20 years). A small proportion of respondents, 9% identified as late career faculty (over 20 years).

Figure 4.3 *Tenure Demographic Breakdown*
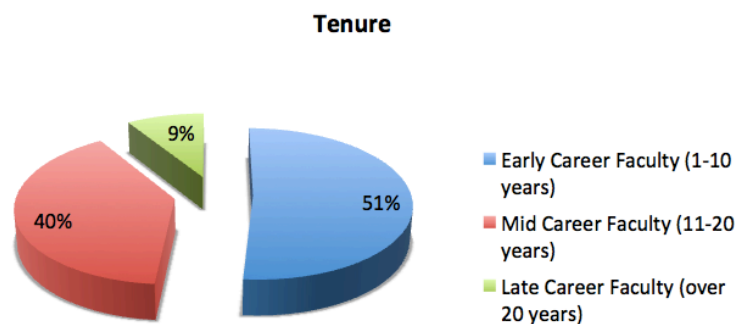
Consistent with the practice in U-15 research universities in Canada, most respondents (about 80%) held a doctorate degree as their highest level of education. On the other hand, 7%

116

identified their professional certifications as their highest level of education as reflected in Figure 4.4. These qualifications included board certification, Diplomate - Board Certified Specialist, Diplomate of American college of veterinary emergency and critical care, DVSc, Fellowship, MD, and FRCPC Psychiatry.

Figure 4.4 *Highest Level of Education*
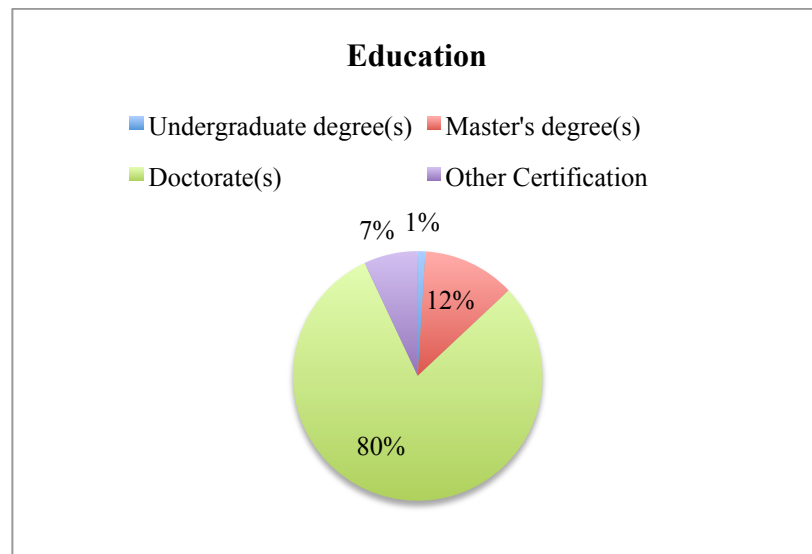
The College of Arts and Science faculty composed the largest number of respondents (31.2%), from among all schools and colleges. This is consistent with the fact that Arts and Science is the largest school/college at the U of S. Figure 4.5 also revealed that a marked percentage of respondents were from the fields of health and medicine (36.4%), which included colleges/schools such as Medicine, Veterinary Medicine, Dentistry, and Nursing.

Figure 4.5 *Population's School/College/Department Distribution*
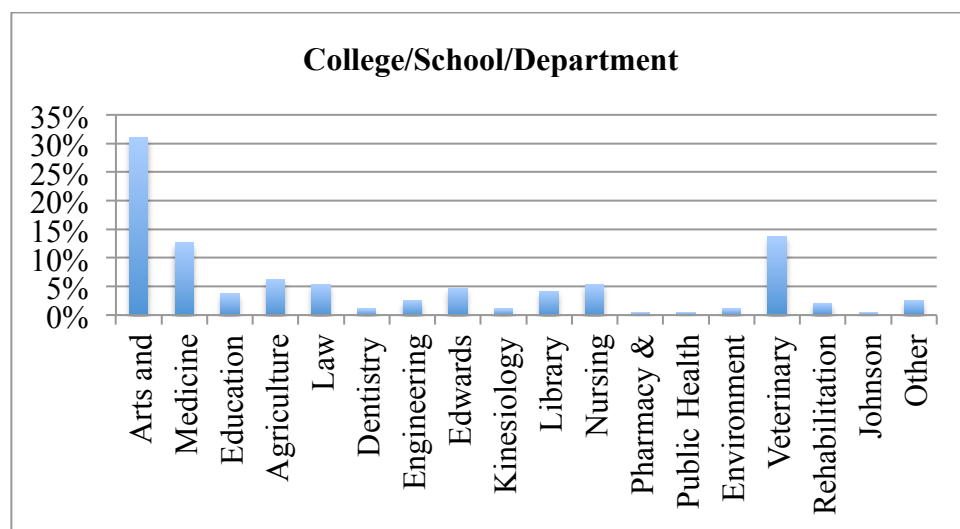
In keeping with the required educational qualification for most of these positions, a majority (over 85%) of academics reported position titles in the categories of Assistant Professor, Associate Professor, Full Professor, or Faculty with administrative roles. Notwithstanding the above finding, some academics in the following categories also participated in survey Professor Emerita, Adjunct Faculty/Professor, Assistant Librarian, Associate Librarian, and Clinical Associate Professor as depicted in Figure 4.6.

Figure 4.6 *Population's Title Distribution*
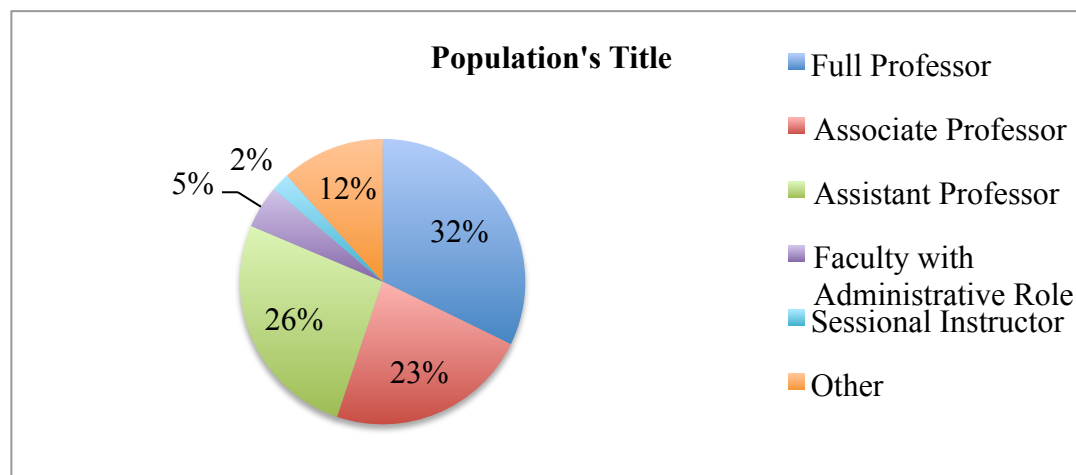
Descriptive Statistics

This section highlights the basic descriptive statistics for the dependent variable faculty success and the independent variables: work engagement, collegiality, resilience, work satisfaction, organizational commitment, and trust. The variables' standard deviation, and means are presented in Table 4.1. The survey responses were based on a five-point Likert scale ranging from 'strongly agree' to 'strongly disagree' with the sixth being 'not applicable' (1 representing strongly disagree and 5 representing strongly agree). On average, the level of faculty success ($M = 3.90$, $SD = 0.57$) for the sample population (N=189) was higher than the averages for the independent variables. The findings also revealed a good spread or dispersion around the mean, rendering it a fairly reliable measure of central tendency. This finding suggests that the average faculty member agreed that they were successful in the key areas of research, teaching, and service. Additionally, the resilience, work engagement, and collegiality variables reported the highest averages among the independent variables ($M = 3.89$, $SD = 0.67$), ($M = 3.74$, $SD = 1.00$), and ($M = 3.55$, $SD = 0.81$) respectively with trust reporting the lowest average, ($M = 3.33$, $SD = 1.08$).

Table 4.1 *Scales' Descriptive Statistics*

Scales	N	Mean	Std. Deviation
Faculty Success	189	3.90	0.57
Resilience	189	3.89	0.67
Collegiality	189	3.55	0.81
Work Engagement	189	3.74	1.00
Organizational Commitment	189	3.52	0.91
Work Satisfaction	189	3.36	0.95
Trust	189	3.33	1.08

The basic description of the scales in Table 4.1 revealed that the data are fairly normally distributed around the mean. The standard deviations were mostly small and within two standard deviations at the 95% confidence interval, suggesting that there were no significant outliers biasing the averages, thus, rendering the mean a fairly good measure for the data. With respect to the measurement of the scales, the average level of success for academics in the population ($M = 3.90$, $SD = 0.57$) suggest that faculty members at the University of Saskatchewan perceived their performance as moderately successful. However, a closer analysis of the dimensions of faculty success (discussed later when the measurement of the specific scale items is discussed) revealed that greater successes were achieved in some areas of academic work than in others.

The resilience, work engagement, and collegiality scales recorded the highest means among the independent variables respectively with faculty members' resilience averaging the highest ($M = 3.89$, $SD = 0.67$). This finding suggests that these variables are important to faculty members based on their experiences in the academy. Finally, of the six independent

variables, trust levels averaged the lowest for academics followed by organizational

commitment. A closer analysis of the items and dimensions in each scale using percentages is

presented in the next sub-section and reveals more information on the items or dimensions such

as those that were higher than others relative to faculty work.

Scale Items' Descriptive Findings

In this section the survey scale items and dimensions were described using measures such

as the mean, standard deviations, and percentages. In some cases, comparisons were made

between scale items or between scales to help the reader to better understand the scales used to

test the hypotheses in this study.

Faculty Success Items

The items in the faculty success scale are described in Tables 4.2 to 4.4 based on the dimensions used in the survey. These include research success, teaching success, and institutional support.

Table 4.2 *Research Success Scale Items*

Rating	Items by Percent (%)		
	I have a high number of refereed journal articles and/or books published for my discipline, rank, and stage of academic career (*M=3.55; SD=1.29*)	I publish high quality journal articles (based on number of citations) for my discipline, rank, and stage of academic career (*M=3.75; SD=1.15*)	I have a high number of external research grants for my discipline, rank, and stage of academic career (*M=3.18; SD=1.45*)
Strongly Disagree	6.35	4.76	15.34
Disagree	17.99	10.58	20.63
Neutral	20.11	16.40	20.63
Agree	29.63	45.50	21.16
Strongly Agree	22.22	17.46	17.46
Not Applicable	3.70	10.05	4.76

The research success scale indicated that of the three items, success with the number of external research grants averaged the lowest (*M=3.18; SD=1.45*); while publication of high quality journal articles averaged the highest within this dimension.

The teaching success scale revealed that excellent peer assessment of teaching scored the highest among items within this dimension as indicated in Table 4.3. Interestingly, it was also the item with the least variation around the mean. The data also revealed that approximately 81% of participants agreed or strongly agreed that they were confident in their teaching

performance when compared to 74% who indicated that they received excellent student evaluation ratings. The findings also indicated that the lowest scoring item within the teaching success dimension was 'I regularly engage in innovative teaching practices' (57%).

Table 4.3 Teaching Success Scale Items

Rating	Items by Percent (%)						
	Overall, my student evaluation ratings are excellent	Overall, peer assessments of my teaching are excellent	Overall, my contribution to graduate student advisement and committee work are seen as excellent	I am highly engaged in the improvement of courses and/or programs	I regularly engage in innovative teaching practices	In my teaching and research, I feel a sense of choice and freedom	I feel confident in my teaching performance
	(M=4.31; SD=1.01)	(M=4.56; SD=0.8)	(M=4.30; SD=1.07)	(M=4.24; SD=1.06)	(M=3.93; SD=1.15)	(M=4.16; SD=1.05)	(M=4.28; SD=0.92)
Strongly Disagree	1.59	0.53	2.65	1.06	2.65	2.65	0.53
Disagree	3.70	0	1.06	6.88	7.94	6.35	5.82
Neutral	12.17	8.99	14.81	11.64	23.28	8.99	6.88
Agree	33.86	32.80	39.15	34.92	32.80	40.74	43.39
Strongly Agree	41.27	48.15	27.51	37.04	25.93	35.98	38.10
Not Applicable	7.41	9.52	14.82	8.47	7.41	5.29	5.29

In the institutional and people support dimensions, only 45% (lowest scoring item) of the sample population indicated that institutional resources and supports were accessible to support their research performance when compared to 67% who indicated that resources were accessible to support their teaching performance. The data also revealed that 79% of participants were

active members of committees that work to support departmental, college, of school goals as depicted in Table 4.4. Sixty six percent of academics also indicated that they were highly engaged in regional, national, or international associations.

Table 4.4 *Other Faculty Success Scale Items (Institutional and People Support)*

Rating	Items by Percent (%)							
	Interaction with and support from my colleagues has a strong influence on my level of success (*M=3.65; SD=1.14*)	I feel supported by the people I care about when it comes to teaching (*M=3.76; SD=1.16*)	I feel supported by the people I care about when it comes to conducting research (*M=3.57; SD= 1.17*)	Institutional resources and supports are accessible to support my teaching performance (*M=3.79; SD=1.08*)	Institutional resources and supports are accessible to support my research performance (*M=3.22; SD=1.2*)	I am an active member of committees that work to support institutional goals (*M=3.96; SD=1.04*)	I am highly engaged in regional, national, or international association (s), such as editorial boards, research grant review committee, disciplinary associations etc. (*M=3.85; SD=1.23*)	I am an active member of committees that work to support our departmental, college, or school goals (*M=4.24; SD=0.99*)
Strongly Disagree	6.35	5.82	6.35	4.76	9.52	2.12	2.65	2.12
Disagree	10.58	6.88	12.17	7.94	18.52	7.41	17.46	4.23
Neutral	18.52	21.69	20.63	14.29	23.81	16.93	11.64	9.52
Agree	40.21	41.80	41.27	53.97	39.15	43.39	33.33	40.21
Strongly Agree	23.81	17.99	16.40	14.81	6.88	25.93	30.69	39.15
Not Applicable	0.53	5.82	3.18	4.23	2.12	4.23	4.23	4.76

Resilience Items

        Figures 4.7 to 4.9 and Table 4.5 describe the five items in the resilience scale in the study. Because resilience was the highest averaging scale among the independent variables, it was noteworthy that the item, 'typically, I respond well to life, even in adverse circumstances' was the highest scoring item.

Figure 4.7 *Adapt Well to Organizational Changes*

Indicate the extent of your disagreement or agreement with each of the following items, as
these relate to your academic unit (d – I adapt well to organizational changes.
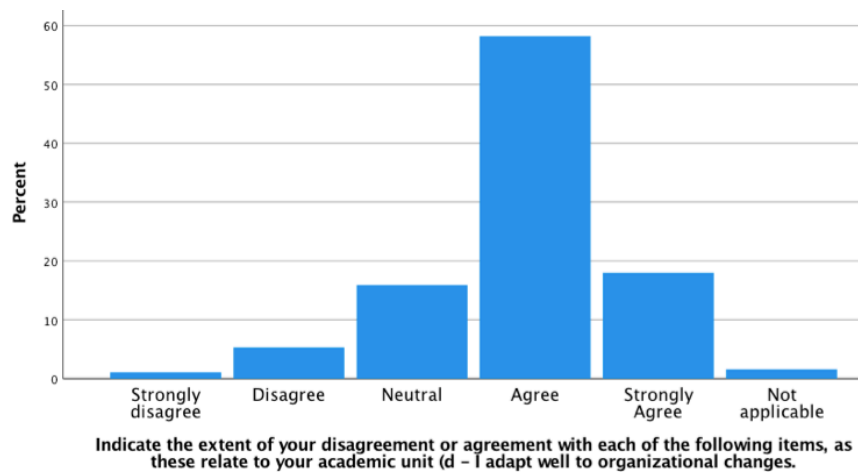
(*M=3.92*; *SD=0.84*)

        The data also indicated that 76% of the population agreed or strongly agreed that they adapt well to organizational changes when compared to 6% who did not agree.

The data revealed that 79% percent of the sample population agreed or strongly agreed (combined) that they were flexible and responsive to changes in their work environment as depicted in Figure 4.8. Only 5.8% of participants disagreed.

Figure 4.8 *Flexible and Responsive to Changes*

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (d – I am flexible and responsive to changes in my work environment.
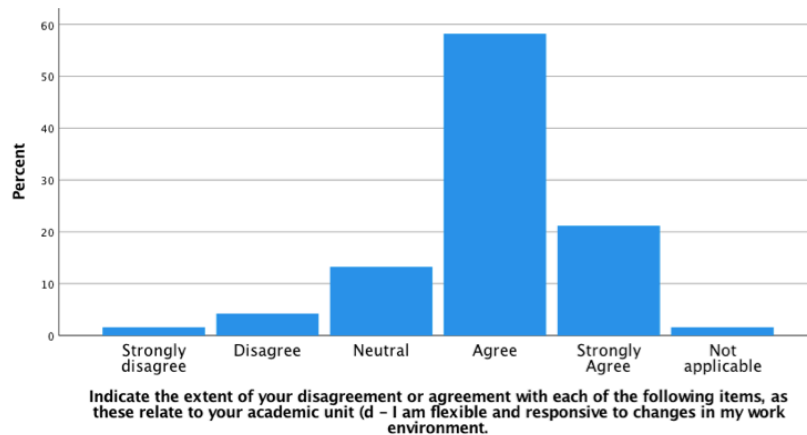
(*M=3.98*; *SD=0.85*)

The data also revealed that a fairly large percentage of the population bounced back quickly from adverse circumstances as reflected in Figure 4.9

Figure 4.9 *Bounce Back Quickly*

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (d – I bounce back quickly from difficult situations.
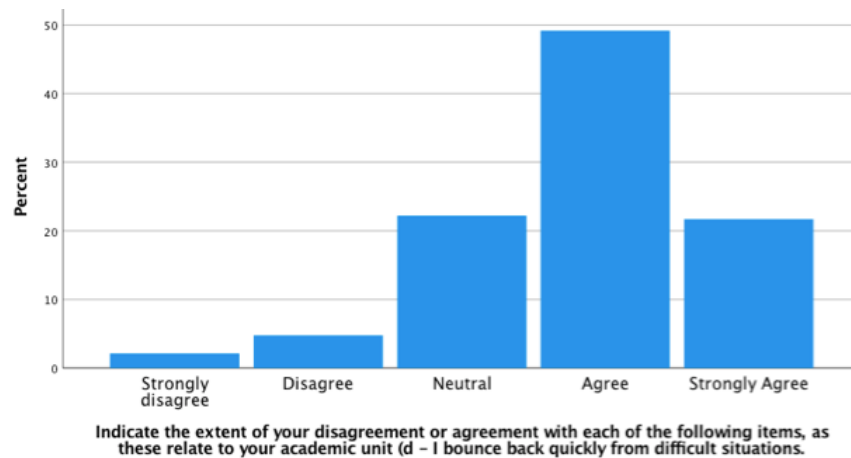
(*M=3.84*; *SD=0.90*)

In reference to the bounce back quickly item, 70.90% of academics revealed that they bounced back quickly from difficult situations when compared to 6.88% who disagreed.

Table 4.5 described two additional items to complete the resilience scale in the study. The data revealed that 82% of academics at the University of Saskatchewan agreed or strongly agreed that they respond well to life, even in adverse circumstances (highest scoring item in scale) when compared to 3% who disagreed or strongly disagreed.

Table 4.5 *Additional Resilience Scale Items*

Rating	Items by Percent (%)	
	I am able to operate optimally in my job even when faced with challenging situations in my personal life (*M=3.67*; *SD=0.10*)	Typically, I respond well to life, even in adverse circumstances (*M=4.03*; *SD=0.76*)
Strongly Disagree	2.12	1.06
Disagree	13.23	2.65
Neutral	19.05	13.23
Agree	19.05	58.20
Strongly Agree	46.03	24.34
Not Applicable	0.53	0.53

The data also indicated that 65% of academics operate optimally in their jobs even when faced with challenging situations in their personal lives.

Work Engagement Items

The work engagement scale had three items and was one of the higher averaging scales in

the survey ($M = 3.74$; $SD = 1.00$). The items are described in Table 4.6.

Table 4.6 *Work Engagement Scale Items*

Rating	Items by Percent (%)		
	In my day-to-day work, I feel energized (*M=3.54*; *SD=1.11*)	I am passionate about my day-to-day work (*M=3.95*; *SD=1.08*)	My day-to-day work inspires me (*M=3.73*; *SD= 1.06*)
Strongly Disagree	4.76	3.17	3.17
Disagree	14.81	10.05	11.11
Neutral	21.16	10.58	19.05
Agree	39.68	41.27	42.86
Strongly Agree	18.52	33.86	22.22
Not Applicable	1.0	1.06	1.59

The data revealed that the item, 'I am passionate about my day-to-day work' was the

highest scoring in this scale with 74% when compared to 13% who disagreed that they were

passionate about their day to day work. Fifty seven percent of academics (lowest scoring item in

this scale) revealed that they were energized in their day-to-day work.

Trust Items

The trust scale (lowest averaging scale in survey) had four items, which are described in

Table 4.7

Table 4.7 *Trust Scale Items*

Rating	Items by Percent (%)			
	I trust the decisions and actions of my academic head (*M=3.50; SD=1.26*)	I trust the administrative processes in academic unit (*M=3.29; SD=1.24*)	There is a high level of trust among faculty in my academic unit (*M=3.13; SD=1.19*)	Junior faculty members can trust senior faculty in my academic unit (*M=3.39; SD=1.24*)
Strongly Disagree	11.64	10.58	10.58	11.640212
Disagree	7.94	16.40	18.52	8.994709
Neutral	20.11	22.75	31.22	26.984127
Agree	40.21	35.45	27.51	34.920635
Strongly Agree	16.93	12.17	10.05	14.814815
Not Applicable	3.17	2.65	2.12	2.65

The data revealed that of the four items in the trust scale, the item 'there is a high level of

trust among faculty in my academic unit' scored the lowest with 37%. Conversely, 56% of

academics (highest scoring item) agreed that they trusted the decisions and actions of their

academic head.

Organizational Commitment Items

The organizational commitment scale items are described in Table 4.8. Four items, one of which was reverse coded, measured this scale.

Table 4.8 *Organizational Commitment Scale Items*

Rating	Items by Percent (%)				
	I have a strong sense of obligation to remain in my department	I have a strong sense of commitment to the people in my academic unit	I feel a strong sense of belonging to the people in my academic unit	I would happily spend the rest of my career in my current academic unit	Right now, staying with my department is a matter of necessity rather than a desire
	(*M=3.22*; *SD=1.29*)	(*M=3.67*; *SD=1.10*)	(*M=3.51*; *SD=1.23*)	(*M=3.66*; *SD=1.26*)	(*M=3.98*; *SD=1.42*)
Strongly Disagree	12.17	5.29	8.99	7.94	2.65
Disagree	17.99	5.29	12.17	10.05	14.29
Neutral	23.28	20.63	19.58	21.69	24.34
Agree	30.16	42.33	38.09	29.63	15.87
Strongly Agree	13.76	20.63	19.05	28.04	24.87
Not Applicable	2.65	1.59	2.12	2.65	17.99

The lowest scoring item in this scale was, 'Right now staying with my department is a matter of necessity rather than a desire' with 39% of academics agreeing when compared to just 16% who disagreed. The data also revealed that 62% of faculty members agreed or strongly agreed that they had a strong sense of commitment to the people in their academic unit.

Work Satisfaction Items

The work satisfaction scale items are described in Table 4.9. According to the data, satisfaction with the organizational unit's culture and climate was the lowest scoring item in the work satisfaction scale with 42% of participants indicating their satisfaction when compared to 30% who were dissatisfied.

Table 4.9 *Work Satisfaction Scale Items*

Rating	Items by Percent (%)				
	I am satisfied with the level of leadership that exists in my academic unit (*M=3.26; SD=1.27*)	I am satisfied with my academic unit's organizational culture a climate (*M=3.16; SD=1.33*)	I am satisfied with the way my academic unit is managed (*M=3.27; SD=1.22*)	I am satisfied with my remuneration package (salary and benefits) (*M=3.86; SD=1.07*)	I am satisfied with the recognition given to me for work I've done (*M=3.25; SD=1.22*)
Strongly Disagree	13.23	15.34	10.58	4.23	10.05
Disagree	12.69	15.34	14.81	8.47	20.63
Neutral	25.39	24.34	28.04	13.23	16.93
Agree	32.28	28.04	31.22	46.03	40.21
Strongly Agree	14.81	14.81	13.23	26.98	11.11
Not Applicable	1.59	2.12	2.12	1.06	1.06

The data also revealed that 30% of faculty members were dissatisfied with recognition for work they had done when compared to 51% who were satisfied. However, unsurprisingly, 72% of respondents were satisfied with their remuneration package (salary and benefits), which was the highest scoring item in this scale when compared to just 12% who were dissatisfied.

Collegiality Scale Items

The collegiality scale items were split into four dimensions: mutual trust and support network, openness about teaching and research, collaborative decision-making, and sharing resources as reflected by tables 4.10 to 4.13.

Table 4.10 *Mutual Trust and Support Network*

Item	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Not Applicable (%)
Our faculty members provide strong collegial support (*M*=3.38; *SD*=1.20)	11.64	10.58	19.05	47.09	10.58	1.06
Professional interactions among our faculty are cooperative and supportive (*M*=3.402116; *SD* = 1.20)	9.52	14.81	15.87	46.56	12.17	1.06
There is a feeling of trust among my colleagues (*M*=3.27; *SD*=1.17)	10.05	16.40	20.63	42.33	8.99	1.59
I can count on most of my colleagues to help me, even though this help may not be part of their official assignment (*M*=3.46; *SD*=1.22)	9.52	13.23	17.99	42.33	15.34	1.59
I frequently participate in my academic unit's social events (*M*=3.48; *SD*=1.30)	7.94	18.52	14.81	39.68	14.29	4.76
Faculty members in my academic unit support new colleagues' career development efforts (*M*=3.68; *SD*=1.17)	7.94	6.88	19.05	43.39	20.63	2.12
Faculty members in my academic unit actively mentor colleagues (*M*=3.31; *SD*=1.20)	8.47	15.87	29.63	30.16	13.76	2.12
The faculty members in my department hide their failures/mistakes from each other** (*M*=3.56; *SD*=1.16)	5.82	12.16	24.87	37.57	16.93	2.65

    ** Reverse coded item

Of all the scale items in the mutual trust and support network, supporting new colleagues'

career development efforts averaged the highest (*M*=3.68; *SD*=1.17) with over 60% of

respondents in agreement while feeling of trust among colleagues averaged the lowest score

(*M*=3.27; *SD*=1.17) followed by the item faculty members in my academic unit actively mentor

colleagues (*M*=3.31; *SD*=1.20).

For the openness about teaching and research dimension, 'I usually consider the feedback

that I receive from my colleagues and respond appropriately' averaged the highest among all

items (*M*=4.06; *SD*=0.83) with approximately 82% of respondents agreeing as illustrated in

Table 4.11.

Table 4.11 *Openness about Teaching and Research*

Item	Strongly Disagree (%)	Dis-agree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Not Applicable (%)
In our academic unit, we regularly observe one another's teaching as part of sharing and improving teaching strategies (*M*=3.40; *SD*=1.27)	6.88	22.22	16.93	34.92	14.81	4.23
Faculty members in my academic unit are open to being observed in their teaching by their colleagues (*M*=3.76; *SD*=1.11)	3.70	6.35	28.04	39.68	15.34	6.88
My teaching has benefitted from being open with colleagues about my successes and challenges (*M*=3.69; *SD*=1.30)	6.88	11.11	21.16	36.51	14.81	8.99
My research has benefitted from being open with colleagues about my successes and challenges (*M*=3.40; *SD*=1.24)	8.99	13.23	26.98	32.80	14.29	3.70
I usually consider the feedback I receive from my colleagues and respond appropriately (*M*=4.06; *SD*=0.83)	2.65	0.53	11.64	60.85	21.16	3.17

As reflected in Table 4.12 the item 'faculty members in my academic unit have worked together in pursuit of the accreditation and/or approval of new programs and courses' averaged the highest among all items (*M*=4.02; *SD* =1.14) with approximately 62% of respondents agreeing.

Table 4.12. *Collaborative Decision Making*

Item	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Not Applicable (%)
Colleagues in my academic unit regularly cooperate and collaborate (*M*=3.43; *SD* =1.22)	8.99	15.34	16.93	42.33	14.29	2.12
Most faculty members in my academic unit participate actively in meetings (*M*=3.53; *SD* =1.13)	6.35	12.17	21.16	44.44	13.23	2.65
Faculty members in my academic unit have worked together in pursuit of the accreditation and/or approval of new programs and courses (*M*=4.02; *SD* =1.14)	3.17	5.29	18.52	41.80	20.63	10.58
Most faculty members in my academic unit contribute actively to making decisions about our program(s) and curricula (*M*=3.69; *SD* =1.23)	5.82	13.23	15.87	41.80	16.93	6.35
My colleagues and I collectively analyze our academic unit's programs and initiatives with some regularity (*M*=3.31; *SD* =1.30)	11.11	16.93	21.69	33.33	12.70	4.23
In our academic unit, faculty members encourage each other to contribute ideas and suggestions (*M*=3.41; *SD* =1.17)	9.52	8.99	27.51	39.68	11.64	2.65

With respect to the 'sharing resources' dimension in the collegiality scale, the average faculty agreed that they have worked out good arrangements for sharing lab space or other research/teaching resources (*M*=4.02; *SD* =1.50) as revealed in table 4.13.

Table 4.13 *Sharing Resources*

Item	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Not Applicable (%)
My colleagues and I regularly share teaching materials or resources (*M*=3.48; *SD* =1.22)	6.88	12.70	28.04	34.39	12.17	5.82
My colleagues and I have worked out good arrangements for sharing lab space or other research/teaching resources (*M*=4.02; *SD* =1.50)	7.41	7.41	20.63	28.57	11.64	24.34

Comparative Findings

Comparative analyses were conducted to explore faculty success, across gender, title, and age, tenure, and schools/colleges/departments. Similar analyses were also conducted on the independent variables. Of the comparative analyses conducted on the faculty success variable, significant differences were identified across gender, title, and schools/colleges/departments, which were then interpreted in the panel discussions. Tables 4.14 to 4.17 and Figure 4.10 illustrate the differences in faculty success across the various demographic variables.

Faculty Success Across Gender

The one-way ANOVA test was conducted to test the following hypotheses, results of which are reflected in Table 4.14:

H_o: There are no differences in faculty success across gender

H_1: There are differences in faculty success across gender

Table 4.14 *Faculty Success Across Gender*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2161.005	2	1080.503	11.216	0.000
Within Groups	17917.651	186	96.331		
Total	20078.657	188			

The data indicated statistically significant differences in faculty success across gender at the U of S. Therefore, we are 95% confident that there were statistically significant differences in faculty success across gender at the U of S ($F(2, 186) = 11.216$, $p < .001$ as determined by the one-way ANOVA test. Therefore, we accept the alternative hypothesis that there are statistically significant differences in faculty success across gender.

A further analysis of the differences in faculty success across gender revealed statistically significant differences between male faculty members and those who classified themselves as other as well as between female faculty members and those who considered themselves other as reflected in Table 4.15. A Tukey post hoc test found that female ($p < 0.001$) and male ($p < 0.001$) faculty members were more successful than faculty members who identified as other. There were no statistically significant differences in success between female and male faculty members according to the data.

Table 4.15 *Post Hoc Tests: Faculty Success Across Gender*

(I) My Gender	(J) My Gender	Difference in means (I-J)	Std. Error	Sig.
Female	Male	-0.23	1.44	.986
	Other	26.93	5.75	.000*
Male	Female	0.23	1.44	.986
	Other	27.16	5.76	.000*
Other	Female	-26.93	5.75	.000*
	Male	-27.16	5.76	.000*

*The mean difference is sig. @ the 0.05 levels

Faculty Success Across Title

The one-way ANOVA test was conducted to test the following hypotheses, results of which are reflected in Table 4.16:

H_o: There are no differences in faculty success across title

H_1: There are differences in faculty success across title

Additionally, the data revealed that there were statistically significant differences in faculty success across title, that is, success looked different among, assistant professors, associate professors, full professors etc. as revealed in Table 4.16. We are, therefore, 95% confident that there were statistically significant differences in faculty success across title at the U of S ($F(5, 182) = 3.931$, p=. 002 as determined by the one-way ANOVA test. As a result, we accept the alternative hypothesis that there are statistically significant differences in faculty success across title.

Table 4.16 *Faculty Success Across Title*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1955.700	5	391.140	3.931	0.002
Within Groups	18107.054	182	99.489		
Total	20062.754	187			

Significant differences (in faculty success) were found between faculty members who identified as other (title) and those who identified as Assistant, Full Professors, and Sessional Lecturers respectively as revealed in **Table 4.17**. A Tukey post hoc test showed that faculty members who identified as other (title) were more successful than the Assistant Professor group (p = .006), the Full Professor group (p = .032), and the Sessional Lecturer group (p = .009). There were no statistically significant differences in faculty success between other groups such as: Other (title) and Associate Professor (p = .174) and between other (title) and Faculty with administrative roles (p = .850) respectively.

Table 4.17 *Post Hoc Tests: Faculty Success Across Title*

(I) What is your position title?	(J) What is your position title?	Mean Difference	Std. Error	Sig
Other	Assistant Professor	9.17	2.55	.006*
	Associate Professor	6.18	2.61	.174
	Full Professor	7.56	2.49	.032*
	Sessional Lecturer	18.70	5.42	.009*
	Admin. Faculty	4.63	3.95	.850

* The mean difference is significant at the 0.05 level

Faculty Success Across Schools/Colleges/Departments

A one-way ANOVA test was conducted to test the following hypotheses:

H_o: There are no differences in faculty success across schools/colleges/department

H_1: There are differences in faculty success across schools/colleges/department

The data indicated that there were no statistically significant differences in faculty

success across schools/colleges/departments at the University of Saskatchewan. We, therefore,

accept the null hypothesis (H_o) that there are no differences in faculty success across

schools/colleges/departments at the 95% level of significance ($F(15, 172) = 1.835, p = .112$ as

determined by the one-way ANOVA test.

Faculty Success Across Tenure

A one-way ANOVA test was conducted to test the following hypotheses, results of which

are reflected in Figure 4.8.

H_o: There are no differences in faculty success across tenure

H_1: There are differences in faculty success across tenure

The ANOVA test revealed statistically significant differences in faculty success across

tenure. We are 95% confident that there were statistically significant differences in faculty

success across tenure at the U of S ($F(5, 183) = 2.808, p = .018$ as determined by the one-way

ANOVA test. We, therefore, accept the alternative hypothesis that there were differences in

faculty success across tenure.

The means plot illustrated at Figure 4.10 revealed statistically significant differences in

the success of faculty members in the group 6-10 years in their position (early career faculty) and

faculty members 11-15 years in the academy. A Tukey post hoc test also revealed that faculty

members in their posts between 6-10 years were more successful than those in their jobs between

139

11-15 years ($p = .009$). This finding suggests that early career faculty members are more successful than their colleagues in mid-career. There were no statistically significant differences in faculty success between the other groups.

Figure 4.10 *Faculty Success Across Tenure*
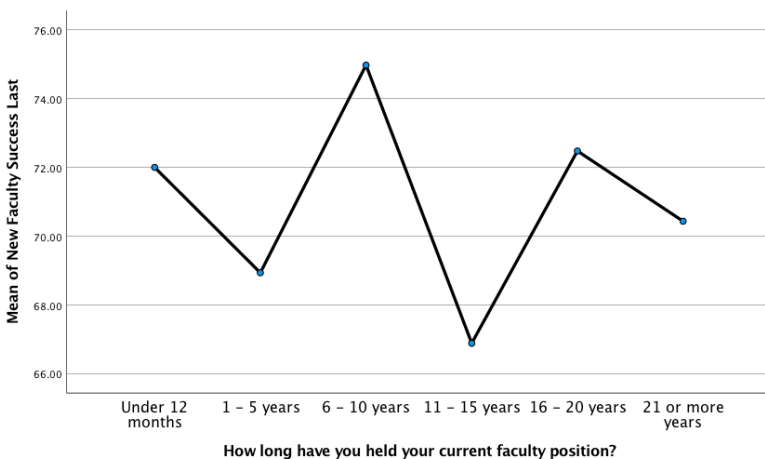
Collegiality Across Colleges/Schools/Departments

A one-way ANOVA test was conducted to test the following hypotheses, results of which are reflected in Table 4.18:

H_o: There are no differences in collegiality across colleges/schools/departments

H_1: There are differences in collegiality across colleges/schools/departments

We are 95% confident that there were statistically significant differences in the levels of collegiality of faculty members across colleges at the U of S ($F(15, 172) = 3.498$, $p < .001$ as determined by the one-way ANOVA and reflected in Table 4.18. We, therefore, accept the alternative hypothesis that there are differences in collegiality across colleges/schools/department.

Table 4.18 *Collegiality Across Schools/Colleges/Departments*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12268.846	15	817.923	3.498	0.000
Within Groups	40213.524	172	233.800		
Total	52482.370	187			

A Tukey HSD post hoc test revealed significant differences (in collegiality) between faculty members in the School of Nursing and those in other schools/departments/colleges as depicted in Table 4.19.

Table 4.19 *Post Hoc Tests: Collegiality Across Schools/Colleges/Departments*

(I) Which school or college are you primarily affiliated with?	(J) Which school or college are you primarily affiliated with?	Mean Difference	Std. Error	Sig
Nursing	Agriculture and Bioresources	-27.233	6.547	0.005*
	Library	-32.275	7.253	0.002*
	Arts and Sciences	-22.485	5.229	0.003*
	School of Rehabilitation Science	-33.900	9.046	0.021*
	Veterinary Medicine	-24.785	5.690	0.002*
* The mean difference is significant at the 0.05 level				

The Tukey post hoc test revealed that faculty members in the following

141

schools/departments/colleges were more collegial than those in the school of nursing as reflected in Table 4.19: Agriculture and Bioresources ($p = 0.005$), Library ($p = .0.002$), Arts and Science ($p = 0.003$), School of Rehabilitation Science ($p = 0.021$), and Veterinary Medicine ($p = 0.002$). There were no statistically significant differences in collegiality between the other groups in the sample.

Work Engagement Across Schools/Colleges/Departments

A one-way ANOVA test was conducted to test the following hypotheses, results of which are reflected in Table 4.20.

H_o: There are no differences in work engagement across colleges/schools/departments

H_1: There are differences in work engagement across colleges/schools/departments

Differences in work engagement across schools/colleges/departments were revealed. We are 95% confident that there were statistically significant differences in the levels of work engagement of faculty members across schools/colleges/departments at the U of S ($F(15, 172) = 1.968$, $p = .020$ as determined by the one-way ANOVA and reflected in Table 4.20. As a result, we accept the alternative hypothesis that there are differences in work engagement across schools/colleges/departments.

Table 4.20 *Work Engagement Across Schools/Colleges/Departments*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	247.192	15	16.479	1.968	0.020
Within Groups	1440.455	172	8.375		
Total	1687.647	187			

A Tukey HSD post hoc test revealed that faculty members in the college of Agriculture and Bioresources ($p = 0.016$) were more engaged than those in the school of Nursing as reflected in Table 4.21. There were no differences in the level of work engagement between the other groups in the sample.

Table 4.21 *Post Hoc Test: Work Engagement Across Schools/Colleges/Departments*

(I) Which school or college are you primarily affiliated with?	(J) Which school or college are you primarily affiliated with?	Mean Difference	Std. Error	Sig
Agriculture and Bioresources	Nursing	4.750	1.400	0.016*

* The mean difference is significant at the 0.05 level

There were no statistically significant differences in work engagement of faculty members across age, title, and tenure as revealed by the one-way ANOVA test.

Work Satisfaction Across Schools/Colleges/Departments

A one-way ANOVA test was conducted to test the following hypotheses, results of which are reflected in Table 4.22:

H_o: There are no differences in work satisfaction across colleges/schools/departments

H_1: There are differences in work satisfaction across colleges/schools/departments

There were statistically significant differences in work satisfaction across schools, departments and colleges at the University of Saskatchewan as indicated in Table 4.22. We are 95% confident that there were statistically significant differences in work satisfaction across schools/colleges/departments at the U of S ($F(15, 172) = 2.659$, $p = .001$ as determined by the one-way ANOVA test. We, then accept the alternative hypothesis that there are differences in

143

work satisfaction across schools/colleges/departments.

Table 4.22 *Work Satisfaction Across Schools/Colleges/Departments*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	787.332	15	52.489	2.659	0.001
Within Groups	3395.670	172	19.742		
Total	4183.002	187			

The Tukey post hoc test revealed that faculty members in the following

schools/departments/colleges had higher levels of work satisfaction than those in the school of

Nursing as reflected in Table 4.23: Agriculture and Bioresources ($p = 0.002$), Library ($p = $

$.0.024$), Arts and Science ($p = 0.001$), School of Rehabilitation Science (p = 0.035), and

Veterinary Medicine ($p = 0.004$). There were no statistically significant differences in work

satisfaction between the other groups in the sample.

Table 4.23 *Post Hoc Tests: Work Satisfaction Across Schools/Colleges/Departments*

(I) Which school or college are you primarily affiliated with?	(J) Which school or college are you primarily affiliated with?	Mean Difference	Std. Error	Sig
Nursing	Agriculture and Bioresources	-8.283	1.902	0.002*
	Library	-7.825	2.108	0.024*
	Arts and Sciences	-7.031	.001	0.001*
	School of Rehabilitation Science	-9.450	2.629	0.035*
	Veterinary Medicine	-6.969	1.653	0.004*

* The mean difference is significant at the 0.05 level

There were no statistically significant differences in work satisfaction across tenure, title, age, and gender. Additionally, the data revealed that there were no statistically significant differences in resilience across tenure, gender, age, schools/colleges/departments, and title according to the one-way ANOVA test.

Correlation Findings

Relationships between the dependent variable faculty success and the independent variables: collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust were explored using the Pearson's product moment bivariate correlations test, where appropriate. Results of the correlation analyses are summarized in Table 4.24.

Research question 1 explored the relationship or association between faculty success and the six-predictor variables: RQ 1: What, if any relationship exists between faculty success, collegiality, work engagement, organizational commitment, work satisfaction, resilience, and trust?

- Collegiality was significantly and positively related to faculty success at the University of Saskatchewan, $r = .604$, 95% BCa CI [.483, .696], $p < .001$. This finding also represents a strong correlation between faculty success and collegiality. Thirty six percent (r^2) of the variability in faculty success can be explained by collegiality.

- Work engagement was significantly and positively related to faculty success at the University of Saskatchewan, $r = .409$, 95% BCa CI [.252, .540], $p < .001$. This finding represents a moderate correlation between faculty success and work engagement. Sixteen (r^2) percent of the variability in faculty success can be explained by work engagement.

- Resilience was significantly and positively related to faculty success at the University of

145

Saskatchewan, r = .328, 95% BCa CI [.138, -.500], p < .001. This finding represents a moderate association between faculty success and resilience. Ten percent (r^2) of the variability in faculty success can be explained by resilience.

- Work satisfaction was significantly and positively related to faculty success at the University of Saskatchewan, r = .493, 95% BCa CI [.371, .608], p < .001. This finding also represents a moderate association between faculty success and work satisfaction. Twenty four percent (r^2) of the variability in faculty success can be explained by work satisfaction.

- Organizational commitment was significantly and positively related to faculty success at the University of Saskatchewan, r = .440, 95% BCa CI [.309, .549], p < .001. This finding represents a moderate correlation between faculty success and organizational commitment. Nineteen percent (r^2) of the variability in faculty success can be explained by organizational commitment.

- Trust was significantly and positively related to faculty success at the University of Saskatchewan, r =.455, 95% BCa CI [.317, .582], p < .001. This finding also represents a moderate association between faculty success and trust. Twenty percent (r^2) of the variability in faculty success can be explained by trust.

According to Cohen (1988), the following is a standard for effect size in statistical analyses: small effect r = .10 (r square = 0.01 or 1% variability); medium effect r = .30 (r square = .09 or 9% variability); large effect r = .50 (r square = .25 or 25% variability). Cohen's (1988) standard for effect size was applied to the relationships described earlier.

The findings indicated that there were moderate to strong relationships between faculty success and the six –predictor variables of work engagement, collegiality, resilience, work satisfaction, organizational commitment, and trust as depicted in Table 4.24. The results of the biased corrected accelerated (BCA) confidence intervals, which indicate that none of the confidence intervals crossed zero also suggest that a true relationship exists between faculty success and the six-predictor variables. We can, therefore, be confident that this finding has a genuine effect on the population (Field, 2013). As a result, we can conclude that as collegiality, work engagement, organizational commitment, trust, resilience, and work satisfaction of academics increase their level of success also increase and vice versa.

Table 4.24 *Correlations*

				Correlations				
		New Faculty Success Last	NEWCOLLEGIALITYVARIABLEFINAL	NEW ORGANIZATIONAL COMMITMENT	NEW WORK ENGAGEMENT LAST	NEW RESILIENCE LAST	NEW WORK SATISFACTION LAST	NEW TRUST VARIABLE LAST
New Faculty Success Last	Pearson Correlation	1	.604**	.440**	.409**	.328**	.493**	.455**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	189	189	189	189	189	189	189
	Bootstrap^c Bias	0	-.003	-.001	-.002	-.008	-.001	.000
	Std. Error	0	.055	.059	.075	.105	.060	.062
	BCa 95% Confidence Interval Lower	.	.483	.309	.252	.138	.371	.317
	Upper	.	.696	.549	.540	.500	.608	.582

** Correlation is significant at the 0.01 level (2 tailed).

Prediction Findings

Research question 2 explored whether faculty success is predicted by the independent variables: RQ 2: Do collegiality, work engagement, resilience, organizational commitment, trust, and work satisfaction predict faculty success?

A simple linear regression was conducted to determine the predictors of faculty success at the U of S. With respect to the degree of variability in faculty success shared by the six independent variables, the combined coefficient or spearman correlation (r) was squared to

obtain the coefficient of determination (r^2), which revealed the amount of variability in one

variable that can be explained by another. As a result, the findings indicated the level of

variability in faculty success as shared by the six-predictor variables. The results revealed that

combined collegiality, work engagement, resilience, work satisfaction, organizational

commitment, and trust account for **44.1%** of the variability in faculty success at the University

of Saskatchewan as reflected in Table 4.25. The predictor variables combined had a moderate

effect on faculty success at the University of Saskatchewan at the 95% confidence level. The

criteria used for interpreting the coefficient of determination (r^2) as proposed by Cohen (1988)

indicates that an r^2 of 0.25 explains a medium effect size. Additionally, the autocorrelations

between the variations in these variables were tested and proven to be good. Thus, the Dubin

Watson test for autocorrelation is "1.94" implying that the results of the regression of the

predictor variables on faculty success are good.

Table 4.25 *Regression Model Summary*

R	R Square	Std. Error of Estimate	Durbin Watson
.664	.441	7.851	1.66

The findings also indicated that the regression model was a good fit for the data, in that,

the regression model predicted the dependent variable of faculty success well. This finding is

shown the Table 4.26, which revealed that $p < .05$ and is a significant predictor of the outcome

variable, hence, a good fit for the data.

Table 4.26 *ANOVA: Regression Model*

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8860.985	6	1476.831	23.961	.000[b]
	Residual	11217.672	182	61.636		
	Total	20078.657	188			

a. Dependent Variable: New Faculty Success Last

b. Predictors: (Constant), NEW RESILIENCE LAST, NEW TRUST VARIABLE LAST, NEW WORK ENGAGEMENT LAST, NEW ORGANIZATIONAL COMMITMENT, NEW WORK SATISFACTION LAST, NEWCOLLEGIALITYVARIABLEFINAL

The regression equation for the model based on Table 4.27 would, therefore, be:

Faculty success = 1.633 + 0.398 (Col) +0.047 (OC)+0.093 (WS)+0.090 (WE)+0.077 (T)+0.161(R), where Col = collegiality, OC = organizational commitment, WS = work satisfaction, WE = work engagement, T = trust, and R = resilience. However, findings in Table 4.27 also revealed that only the variables collegiality ($p < .001$), work engagement ($p = .029$), and resilience ($p = .002$) contributed statistically significantly to the model. In alignment with established statistical testing standards, significant levels (p-values) lower than 0.05 are deemed to be statistically significant, therefore, the significant levels for the variables collegiality, work satisfaction, and resilience contributed statistically significantly to the model, while organizational commitment, trust, and work satisfaction did not as reflected by their p-values. Consequently, collegiality, work engagement, and resilience were found to be significant predictors of faculty success at the U of S, a finding that was further elaborated or explained by members of the interpretation panel sessions in the qualitative section of this study. The regression analysis, therefore, revealed that of the six independent variables under study, only three: collegiality, work engagement, and resilience predicted faculty success at the University of

Saskatchewan. Because all six predictor variables were associated with faculty success (as previously stated in the correlations section) yet only three of these variables significantly predicted faculty success at the U of S, further exploration of this finding was deemed necessary to answer questions of why or how.

Table 4.27 *Coefficients Table*

Model	Coefficients	Std. Error	t	Sig.	r
Constant	29.056	3.973	7.313	.000	
1. Collegiality	.343	.064	5.390	.000	.664
2. Organizational Commitment	-.105	.183	-.514	.567	.664
3. Work Satisfaction	.342	.219	1.562	.120	.664
4. Work Engagement	.527	.239	2.204	.029	.664
5. Trust	-.381	.269	-1.417	.158	.664
6. Resilience	.562	.181	3.105	.002	.664

Dependent variable: Faculty Success

Based on the findings of the coefficients in Table 4.27, resilience, collegiality, and work engagement contributed more significantly to faculty success than did organizational

commitment, trust, and work satisfaction. The study used the results from the field data (2019) on U of S faculty to draw conclusions on the predictors of faculty success.

Summary of Quantitative Findings

The quantitative findings section of the study focused on research questions 1 and 2. First, a description of the participants was presented as well as a descriptive analysis of the demographic information, which later proved useful in the comparative analysis portion of the quantitative findings section. Second, a detailed description of the variables under study was conducted, specifically reviewing the means, standard deviations, and percentages of the scale dimensions and scale items. Comparative findings were also conducted on the faculty success variable across various demographic variables such as gender, title, and school/department/college. Similar comparisons were conducted on the independent variables.

Then a presentation of the correlation findings, which addressed research question 1, was done. The findings of which revealed statistically significant and positive associations between faculty success and the six independent variables. Combined, collegiality, work satisfaction, work engagement, resilience, trust, and organizational commitment accounted of 44% of the variability in faculty success at the University of Saskatchewan. Additionally, the regression model used in the study was deemed a good fit for the data and revealed that of the six independent variables in the study, only three: collegiality, work engagement, and resilience predicated faculty success at the University of Saskatchewan.

Qualitative Findings

During the qualitative phase of this study, four interpretation panel sessions were conducted with 4 faculty members in each session. In total 16 faculty members participated in the sessions to collaboratively interpret significant findings from the survey (quantitative phase). The sessions were conducted in the month of April 2020 over three weeks at the onset of the Covid-19 pandemic, which caused the conversion of planned in-person sessions to virtual ones. The response rate to and participation in these virtual sessions exceeded expectations with a response rate of over 80%. Seven males and nine females participated in the sessions. Various colleges, schools, and departments across campus were represented and early stage, mid-career and late career academics participated. Academics with titles such as Assistant Professors, Associate Professors, and Full Professors were also included in the sample. Additionally, Teaching Librarians, Research Faculty, Heads of Departments and Graduate Chairs (former or present) participated in these sessions. Recall that the participants in the interpretation panel sessions were purposefully selected from publicly mined data of faculty members at the University of Saskatchewan. The researcher's intent was to include a wide cross-section of faculty members from various department/schools/colleges as well as faculty members at varying stages of career and those with and without administrative roles with the objective being to achieve a representative sample as well as to select participants seemingly knowledgeable about themes to be collaboratively explained.

Interpretation Panel Findings

In this section, I highlight selected significant themes from the survey (quantitative phase) that were interpreted in the interpretation panel sessions as well as emergent themes from the sessions. Quotes from the interpretation panel sessions are included in this section, which

provides an explanation of some of the survey's significant findings/themes. In presenting the

qualitative findings, pseudonyms were used to represent the participants in the IP sessions. An

initial categorization of the data was performed to facilitate further analysis. The following are

some of the major categories identified from the survey and expounded or interpreted during the

interpretation panel sessions:

- Collegiality, Work engagement, and Resilience: significant predictors of faculty success

- Collegiality: strongest predictor of faculty success

- Differences in faculty success across gender

- Differences in faculty success across title

During the collaborative analysis of the significant quantitative findings above, the

following sub-themes emerged and were also discussed as shown below:

- Faculty members' perceptions of faculty success based on their lived experiences

- Faculty workload and work life balance

- Causes of high versus low work engagement

- Role of culture in faculty success

- Additional predictors of faculty success

A model of the coding process during the qualitative phase is shown in Figure 4.11. The

figure highlights key actions taken during the coding of data in the qualitative phase of this

study. A set of initial categories was predetermined from the quantitative findings, which were

used to develop the IP protocol and to initiate the collaborative analysis of quantitative findings;

however, additional themes and sub-themes emerged during the IP sessions, which were

included in the second round (final) analysis of the qualitative data using the NVIVO software.

During the final phase of analysis, decisions were taken to include or exclude certain codes inter

153

alia based on the following: objectives of the study, codes that contributed to answering research question 3, codes that overlapped, or did not represent the data, in addition to those that provided a better understanding of the quantitative data's significant findings.

Figure 4.11. *Coding Process*
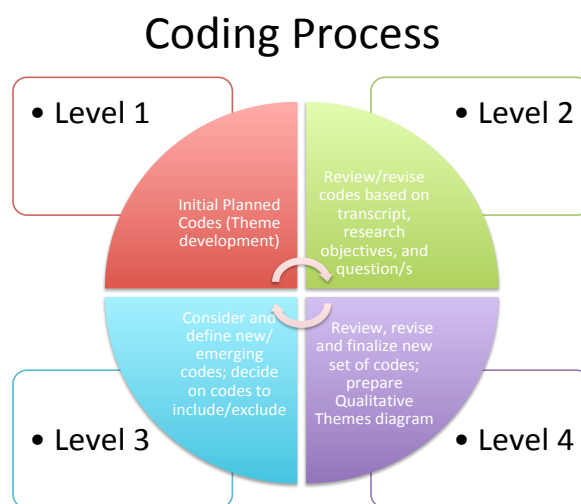
Coding Process

Table 4.28 illustrates the frequency of the themes covered in the qualitative data analysis process. The most prevalent domains of discussion were specifically focused on faculty success explained, strongest predictors of success: resilience, work engagement and collegiality, and additional predictors of success. With respect to the non-coded exchanges, our analysis revealed that those data were largely tangential to the study's focus, repetitive or overlapping, or needed follow-up/clarifying questions or responses, which explains its high frequency.

Table 4.28 *Qualitative Data Initial Categorization Frequency & Emergent Codes*

Category	Frequency of Exchanges	Emergent or Renamed Codes
Not Coded	43	N/A
Faculty success explained	43	Personal and professional fulfillment
Differences in faculty success across gender	3	N/A
Differences in faculty success across title	3	N/A
Strongest predictors of faculty success: collegiality, work engagement, and resilience:	17	Interconnected predictors of faculty success
Resilience: Work load	4	Support for Faculty Work Life Balance and
Work life balance	4	Prioritizing Success
Challenges prioritizing success indicators	5	Indicators
Personal resilience story	2	Interconnected predictors of faculty success
Work Engagement: High work engagement causes	9	Intrinsic and Extrinsic Motivators of High Work Engagement
Low work engagement causes	5	Disincentives to High Work Engagement
Collegiality: strongest predictor of faculty success	10	Collaborative Culture and Climate Critical to Faculty Success
Feeling supported factor	5	Personal and professional fulfillment
Recognition and acceptance by peers	5	Personal and professional fulfillment
Role of culture	6	Collaborative Culture and Climate Critical to Faculty Success
Additional predictors of faculty success	14	N/A

Prior to the development of the emergent or renamed codes in Table 4.28, an initial categorization of the data was attempted and reflected in Figure 4.12 This figure was developed as a result of the initial coding process and categorization process during the qualitative phase.

155

The themes and sub themes in the diagram below were further analyzed and synthesized with the final codes reflected in the last column of Table 4.28.

Figure 4.12. *Initial Categorization of Qualitative Themes*
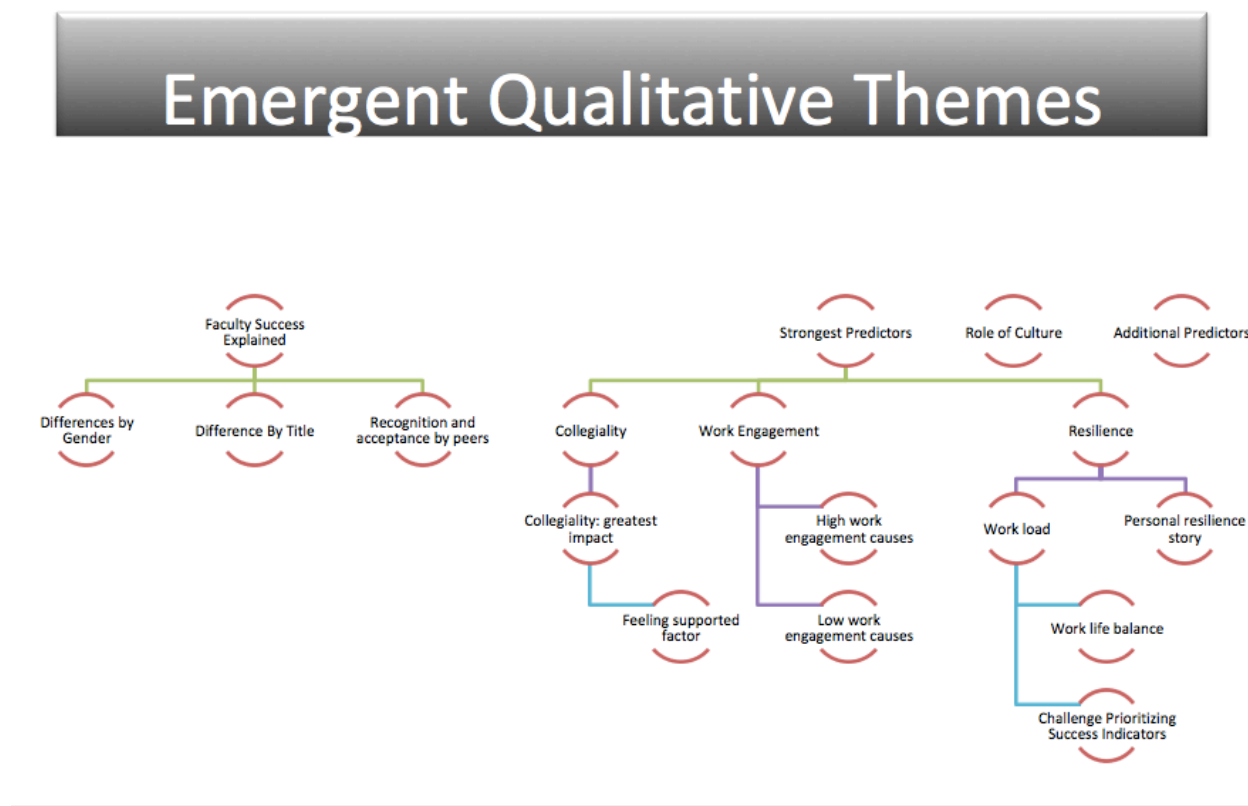
The emergent or renamed codes from Table 4.28 are discussed next relative to research question number 3 (qualitative question). Recall research question number 3: In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?

Personal and Professional Fulfillment

Members of the interpretation panel defined faculty success in part by institutional measures (more so that of research productivity and to some extent teaching productivity). However, some participants expressed that while they acknowledged the importance of such institutional success measures, there were other factors important (and sometimes more

important) in defining their success. They included, their students' success, their level of engagement, work life balance, satisfaction, happiness, productive working relationships, collaborations, feeling supported, and partnerships across campus as well as external to the U of S. As a result, from this category, the theme of personal and professional fulfillment was derived, which includes inter alia, happiness, satisfaction, and thriving.

Some of the responses gleaned from this theme included faculty member, Bob's [pseudonym] response, which suggested that faculty success might be defined by one's curriculum vitae. He said,

> Their CV is essentially strong enough that they could be competitive and leave but at the same time that they're happy enough that they don't want to. And I thought that was actually a good way to put it because they- they're obviously doing well in that case with research publications and with teaching. Basically, being a well-rounded teacher-scholar but you're not going to be happy enough to want to stay if you don't have a semblance of work-life balance and satisfaction on top of that. So, I don't know- to me I'd say that success is [where] the person is thriving and also sufficiently satisfied to not be looking to get out of here.

Faculty success as a category was viewed by Bob in part as a psychological state of happiness and satisfaction, whereby, despite internal or external challenges including competition (push or pull factors), academics desire to and remain with the institution because of their perceived happiness with their accomplishments as a scholar, personal satisfaction with perhaps their work environment and terms and conditions of engagement (or some other professional or personal factors) that compels them to remain with their academic institution.

Other responses on the theme, included:

157

You are happy and satisfied.

I would say it's very personal and that colleagues, the institution, leadership, whatever it may be, needs to understand the individual as a human being and as a person and their life circumstances. So, one person might need more teaching support because they've got young kids and they've got these- everyone's different so being understood as an individual I would say is being supported.

A combination of not just for example have you achieved tenure? I think you have to be able to reach for that but then also what you get with that, for me it's very personal in terms of is what I am doing really important for all this effort? Am I really making a difference?

Personal and sort of professional satisfaction that you get from what you're doing and that you have the flexibility in your position to be able to pursue those things that give you that. In my area, we're quite different in that librarians have quite a significant portion of professional practice instead of research. We do have research but it's like 15% of our assignment. So, we do a lot of professional practice and having the flexibility to pursue that and our research as well in ways that are meaningful to us and provide us satisfaction.

Another faculty member's response also confirmed the theme of personal and professional fulfillment, wherein he highlighted the basic yet important need to achieve success in the tenure and promotion process (professional fulfillment) as a critical part of surviving in the academy as a faculty as well as the role of student achievements in defining his success.

However, he also underscored the importance of other personal fulfillment pillars such as

job and financial security, working with collegial staff/peers, satisfaction, and acceptance by peers.

> Uh I would say that success is also following that normal trajectory of the processes we have here at the university is typically you get hired as an Assistant Professor under probation and then you get your renewal. And then you get tenure and promotion to Associate and then promotion to full Professor. So, success obviously or I think at least in my mind is successfully and completing those tasks all the way through. But also doing so with some confidence and those can be very stressful, those stages I think especially that particular one we call tenure is one of those stressful ones. You either get it or you're out the door and so, it comes with a tremendous amount of concern for a lot of folks but also being able to do our job effectively. That comes with having adequate research funding, having good students, having a- being a good environment where you feel where your work is valued and that you're supported in the kinds of ways you want.

Another faculty member expressed that job security is a fundamental part of his definition of success, which contributes to his personal and professional fulfillment as an academic.

> Certainly, success for me…[is that] in my field, I probably get paid in the top 10% of most of my colleagues [in the world]. And so in that sense it is- and it's not just the amount. For me, the big success…at this point for me is that [of] having a permanent job. And once I got tenure I just felt this huge relief in the sense that, financially because I'm the only person that earns money in my family, taking care of everyone and being able to know that 10 years from now I'm still gonna be able

to take care of my family and pay our bills and be a normal functioning part of

society is a huge part of what I feel my success has been…and also gives me that

ability to make some longer term decisions. Before, as a graduate student and post-

doc you make these very short-term decisions. Like I remember being nervous about

signing a one-year lease seemed like a big undertaking at one point in my life versus

buying a house on a 25-year mortgage or whatever it is these days. And so I think

the financial aspects, I think the support aspects, and certainly working with good

students and good staff. I think can get derailed fairly easily if you happen to work

with some people that are difficult. One difficult individual can change your whole

job and your whole life perspective. I certainly found that through my own

experience and having a fairly major, loud bully in my department for quite a

number of years and when that particular person retired my whole life changed and

the level of stress. And the success I felt with my own program changed

dramatically with that one relatively small change. So, there are a lot of pieces to it

for sure and like I say, getting your research published and getting some, some level

of success there. Publishing is a key part, we talk about publish or perish and it is

absolutely, 100% true. And seeing our graduate students, for me a lot of my- the

value that I get from my job is seeing our students succeed.

Another respondent corroborated the claim that making an impact through the various

peer-recognition processes in academia such as the journal acceptance and tenure and review

processes is to him another means by which some define faculty success.

That sometimes we're not successful until someone tells us we're successful and

that ties right through the tenure promotion, external referees that come through that

160

to our research grants. To then especially, I mean of course peer-reviewed journal papers but then, especially to get what the university wants us to get is national, international awards to increase the reputation of the university. So, we feel successful when we feel we have an impact and I think part of that becomes our psyche to feel successful when others recognize us. So that's what I would say. To me, acceptance by your peers and peers all around the world I would say is very, very important, whether or not you are accepted by the rest of those in your field.

Respondents also believed that a notable part of defining one's success in academia is to some degree acceptance by one's peers. It was suggested that faculty members usually feel successful through a systemic recognition of their work by their peers. Whether this recognition is based on their research or teaching productivity, it was believed that peer recognition was an important element that defines their success.

As part of the discussion on faculty success, there were inferences made about the importance of support as an academic and its impact on faculty members' success. Bradley articulated that both his colleague's as well as institutional support was important to his ultimate success particularly at a time when he needed leave for his family.

I was the first male faculty member in my department to take a parental leave for example. And I got unquestioned support from my colleagues like there was no [comments] like that's gonna make it hard for the rest of us. [Rather,] it was [like] okay well how are we gonna make this work? And that you're here for the long haul so we want you to be sort of: happy family means happy faculty member kind of thing. But like I say [that it is] unquestioned support at times like that where you're

161

making, at least from the perspective of a still on probation, untenured Assistant

Professor, what feels like a really big ask.

As a result, it stands to reason that both collegial and institutional support for faculty

members' wellbeing (holistic) is a critical element in supporting their success as an academic.

This finding might, therefore, be instructive for administrators in higher education since this

supportive response by one of the faculty's academic unit contributed to his happiness and

satisfaction on the job and ultimate success in his work.

Another faculty member went further in explaining his personal experience with

uncollegial behavior at the U of S:

> I've sort of had one major experience…where we had a- quite a significant bully in
>
> our department um when I started. And he was a major in breaking down that
>
> collegiality and boy did I ever notice, as I said, when that person left how much
>
> everything bounced back into a more collegial experience and the stress and the
>
> anxiety. Because I went through the lowest point of collegiality that I experienced
>
> was also in the time frame uh leading up to my application for tenure and
>
> promotion. So those are those periods where you are the- you are the most
>
> vulnerable and certainly feel the most vulnerable by far.

Overall, a review and analysis of the responses in this category revealed that the

emphases of participants were on the following codes: satisfaction, students' success, being

understood, success is personal, making an impact on society/lives, meaningful work, flexibility,

acceptance by peers, job and financial security, scholarly success, and working with collegial

staff. Consequently, and based on a synthesis of the data, the theme of *Personal and

Professional Fulfillment* was developed. This theme aptly describes participants' perspectives

162

on faculty success as a very personal feeling of fulfillment even while being professionally satisfied. Moreover, some of the nodes in this theme overlapped, in that, student success for example transcends both personal and professional fulfillment; hence, the merger and ultimate characterization of the personal and professional fulfillment theme. How then do faculty members and administrators leverage such states of personal and professional fulfillment such that levels of faculty success are harnessed, nurtured, and reproduced or even mentored to maintain, reproduce, and incent continued success?

Differences in Faculty Success Across Gender and Titles

Two other significant findings from the survey were that there were differences in faculty success both across gender and across titles. The participants in the panel discussions interpreted both findings. Having explored the faculty success category in the IP sessions, faculty members then explored how success might appear to vary across demographic variables. Two such variables of interest were differences across title as well as differences across gender. Recall that the survey data revealed differences in faculty success across title as well as across gender. The following nodes were gleaned from the response set from the code, differences across gender: differences affect ability to succeed, not much of a difference between males and female success, women still bear burden of home life. Faculty members, Briana and Dana [pseudonyms] expressed that differences in faculty success across gender is very pervasive in academia and are more prevalent in some disciplines than in others:

> I think there is a gender difference. I participated in another survey on women in economics, so I see lots—probably only economics as well as some other discipline there is a difference in the treatment…in the profession...

163

I think it's well known that female faculty members, especially young faculty members- this is Dana. Are still carrying a greater burden of home life, of responsibilities at home and I think in a lot of cases that has had an effect on their ability to succeed in a job still.

The above responses confirmed success differences among faculty of different genders generally (be it female, male, or other). However, there was also a presupposition that female faculty members bear the burdens of home life which by extension might affect their success levels. However, other faculty members agreed with the part of the findings suggesting that in their experience there is no significant difference in faculty success between female and male faculty members. This finding may be the result of the nature of certain disciplines in academia as suggested by the faculty member below.

Well, our discipline is pretty female focused—female dominant let's say, there's quite a lot of women in our discipline so I wouldn't say that there would be as much of a difference probably for us.

In summary, there were divergent views on this topic largely resulting from the variety of personal experiences on the panels. While some participants suggested that from their experiences there were no differences in success across male and female genders in their disciplines, which they largely attributed to the nature and perhaps culture of their disciplines, others claimed that they experienced differences (whether directly or vicariously) in success across gender. The main reasons suggested for these differences included long held cultural norms as well as the nature of some disciplines in academia which influences success across some genders.

Faculty Success Across Title

Participants then explored the differences in faculty success across titles. This finding suggested for example that there is a variation in success levels for full professors versus associate and assistant professors. An analysis of the responses in this category revealed the following codes: career stages, pre-tenure-survival; mid-career-make your mark; late stage-legacy.

A senior/late stage faculty member, Karen attempted the use of her knowledge of past literature and her own experiences to interpret this finding by largely anchoring her response on the premise that the stage of academics' career (early stage, mid-level, late stage) largely influences their success levels. This argument she said may explain this comparative finding from the survey:

> So, this isn't actually my own thought, it was a book I read but um I read a book that was talking about the stages of, of faculty lives and he said that there were essentially three stages and the first stage, I'm gonna get the terms wrong. But basically, the first stage sort of pre-tenure stage is just about survival, that's all that people want is they just want to get their butts across that tenure line. And then the mid-career stage is in his terms, it was something about, I don't wanna say success, but you know, trying to make your mark in the world and um, and basically proving- proving yourself in your discipline and in your institution and. And trying to be what you think you wanted to be as a scholar essentially and as a teacher and all those things. And then the third (late) stage according to this guy and where I think I am 'cause I think I'm the most senior on here is really about legacy and sort of wanting to pay it forward to that next generation of scholars or to the continuation

of one's discipline or department or those types of things. So, I wonder if those, assuming that guy's theory is correct, I would say that might explain some of the-the differences between different levels of a- of job title and definitions of faculty success.

Respondents explained that faculty success might look different across titles because of their varying stages of career. In other words, success may look different for academics in one of three career stages previously articulated (early stage, mid-stage, and late career stage) than it does for others. The suggestion is that the demands of faculty life in some stages for example resulting from the rigorous tenure and promotion process or the mid-stage (wanting to make your mark) may account for this finding. As a result, it appears that faculty success (at least as it is institutionally defined) is heavily dependent on the traditional performativity indicators, such as teaching and research success and which appears to be more intense at the mid-career stage when one not only aims to make a mark in their respective field but also, has gone through the teething and growing 'pains' of the onboarding, early mentoring, and pre-tenure processes. It might also be at this stage that many critical aspects of faculty life have been normalized and somewhat mastered, hence, accounting for the data that there appears to be greater success at this stage.

Interconnected Predictors of Faculty Success

After gleaning insights into the participants' perceptions and experiences with faculty success at varying stages of their career, and reasons for some of the findings of faculty success differences, it was then important to collaboratively explain the significant findings from the survey that suggested that collegiality, work engagement, and resilience were significant predictors of faculty success at the U of S. Recall that the survey findings produced a correlation between faculty success and all six predictors: collegiality, work engagement, resilience,

166

organizational commitment, and trust. However, predictive relationships were identified

between faculty success and the first three variables. Therefore, the participants of the

interpretation panel sessions sought to collaboratively explain the finding that three of the

independent variables, collegiality, work engagement, and resilience significantly predicted

faculty success at the U of S. Figure 4.9 gives a visual of the responses, which will be

expounded further. An analysis of their responses revealed the following nodes: interconnected,

collegiality, resilience, nature of faculty work, persistence, endurance, extra effort,

relentlessness, collaborate, research collaborations, engage, and support. From a synthesis of

these nodes emerged the code, Interconnected Predictors of Faculty Success.

Participants agreed with the finding that collegiality, resilience, and work engagement

worked together as predictors of faculty success at the U of S. Respondents claimed that the

nature of faculty work was such that a necessary ingredient for success was resilience. For

example, the rigor of the tenure and promotion process required one to be resilient to achieve

targets set institutionally and personally; while maintaining a competitive portfolio, which was

constantly being reviewed, by peers or colleagues. Further, the ongoing competition for inter

alia grant funding beyond the tenure process also catalyzes persistence and resilience among

academics. Consequently, tied to this success indicator was the factor of collegiality; whereby

most of the work in academia encourages collaboration and are linked to peer reviewed

processes within the collegium. Further, according to participants, collegial processes such as

mentoring (formal or informal) and coaching were important elements that support faculty

members' success. Finally, the participants agreed that their success required them to

continuously engage with their work and that collegiality (or the lack thereof) could determine or

undermine their success.

Faculty member, Carter [pseudonym] confirmed this finding by suggesting that the three variables, collegiality, resilience, and work engagement were interconnected predictors of faculty success.

> From my view certainly- I would say that- it certainly would make sense to me that these are, three are probably clearly. Or at least clearly in my little brain, highly interconnected and related to each other for sure. I will say that one of the things that I value tremendously in my job is the collegiality within my department and in my college and across the university…

Similarly, another faculty member Mark summed up the consensus explaining why or how he thinks the three significant predictor variables worked in consort to predict faculty success at the U of S.

> I'm not surprised it was those three, I think that work engagement is key that you've gotta give a damn right? You can't make it through tenure if you don't actually care, you can't dial it in, but the thing is, being a professor is an endurance event. This is not being a movie star where you show up at a film set for six weeks and work 20 hour days and then spend the next six weeks in your mansion in Malibu. Um it's really a grind, especially pre-tenure it's day-in, day-out and you uh- you can't take your foot off the pedal. Because if you do there's someone else out there who hasn't and they're kind of getting that extra paper, getting the grant that you wanted because you didn't put in that extra piece of effort. It's almost more like being a professional athlete with the kind of relentlessness of the whole thing. So that's I think why resilience and collegiality are in there because resilience really speaks to your ability to grind through all that. You are going to get rejected, right? I

168

mean uh I don't how many papers I've submitted in my- many, more than 100 I'm probably yeah well over 100 now. So when I get a rejection now I'm like 'Oh well we'll massage it, we'll send it to the next thing.' But the PhD students working on their dissertation and a paper from theirs gets rejected and holy smokes, the sky is falling. And it's like that throughout your career right, as you go through stages. So, your ability to bounce back from those because you are constantly evaluated by your peers, if you can't do that you will fail. Collegiality it's just whether or not you're spending your resilience on actually succeeding as an academic or dealing with the jerks at work. Right? If it's this endurance event and you've gotta spend all of your energy raging in the shower against the senior faculty member who's being a dick, you're not gonna have a lot left in the tank to get that grant written. So, I would almost say that collegiality, if you look deeper, I'll make a prediction for you, a hypothesis that collegiality is strongly negatively correlated in the sense that bad collegiality will lead to adverse outcomes…

Mark also explained that collegiality, work engagement, and resilience worked together to predict faculty success in his experience. He explained that every fiber of faculty work required one to be resilient in the face of both work and personal challenges or adversities such as rejection but especially because of the competition and pressures that exists in faculty work life. As a result, one requires endurance capacity and needs to be consistently energized and present in order to excel. Another inference drawn from Mark's [pseudonym] discourse was that the variable: collegiality anchors and supports (systemically and based on one's efforts) academics' engagement and resilience to the extent that he suggested that "poor or negative" collegiality may produce adverse outcomes.

Desmond [pseudonym], a senior academic with administrative role continued by expressing why he thought the three variables work together to determine faculty success at the U of S.

> The resiliency thing is hugely important. I'm sure we're all familiar in the hallway we work in, I have colleagues that I can look to say, they've got an excellent track record, year over year success in grantsmanship and the ability to recruit graduate students and so on as one measure of success and others of us who we get a research grant here and there, but I know my record. I've always had money but sometimes it's tri-council and sometimes it's elsewhere and when you have that different kind of record of scholarship it's not necessarily seen as a measure of success. You're seen as something lesser. I haven't had consistent tri-council funding but that's ok if you're willing to recognize other types of funding. Much of that is based on the fact that I've been able to collaborate with colleagues. My research is not germane to anything that happens in the prairies…so I've had to develop research collaborations outside the institute in order to maintain my scholarly work and then I have the opportunity to bring that scholarly work back to my classrooms. But as I say I'm sort of the odd man out of my hallway. So again, the idea of being persistent and resilient is something that resonates well with me.

Desmond [pseudonym], confirmed that for him resilience has been a huge part of his academic experience especially in the areas of grant funding and the ability to recruit graduate students. However, given the unique nature of his field or research focus, his success is heavily dependent on his ability to forge partnerships and collaborations beyond his institution. As a

result, the capacity to be persistent and resilient, as well as the propensity to be collegial has been key to his successes as a faculty member.

Another faculty member, Maurice [pseudonym] acquiesced with the finding that all three variables combined predicted faculty success or were key in incenting faculty success at the U of S.

> … I think these [variables] are absolutes, they- predictors or things that add to success. And it's neat for me when I think about resilience and my own, say, resilience through adversities and in academic life and how that collegiality can really help to build that. So, if it is those faculty hallway discussions or those key formal or informal mentors that you can go to and how those really sort of feed off of each other.
>
> Any success that I've had, it's being able to collaborate with multiple people around campus…

Finally, the personal account of faculty member, Dan [pseudonym] sums up the importance of these three variables to faculty success (or at least the collegiality and resilience variables) through his personal story of being successful through resilience and collegiality despite a negative experience in the early stages of his faculty career:

> The other thing I will say is from someone who had some health challenges along the way, that's probably the one thing that I really noticed that everybody's very collegial and everybody's been great. But when I had some health issues and was taking time there seemed to be a lot of people saying, 'Oh well, you're not so well, well get it to me Thursday regardless.' I felt personally, anyway, and this is my own experience that when I was much lower productive because of some health

171

problems there wasn't a whole lot of give and take or support on that side. And it was like Oh yeah well still gotta do what you gotta do and it was sort of just assumed that I would continue to do all the things that I had to do. So that was probably my only surprising and sort of feeling where certainly the collegiality part didn't [work] or I know everybody's gotta do their job and that's fine. But, certainly, reflecting [on] my experience has been if you're kind of this sub-optimal conditions for a fairly longer term of time that there wasn't a whole lot of recognition or support or give on that…But I think the resilience piece is, it comes from individuals, but it also comes from support. My first big grant that I got was from an NCE and I was off and running and I got this great big grant, and it was all good. And then the NCE itself was shut down, it was not renewed for a second term and all of the sudden I had, I was funding either through my own lab or others, 13 different grad students and all of the sudden we had no money. And so certainly professionally that was my biggest challenge in terms of resilience and that was in my third year already under you know, the most stressful time of preparing for tenure and promotion application. So, the fact that I was able to power through that was certainly partly my own massive effort to try and recover but also, I got a lot of support along the way in that regard.

While the initial category for the subsequent story (below) was 'A story of success through resilience,' after further analysis and review of the findings, the theme was quickly changed to and merged with Interconnected Predictors of Success.' The key nodes identified from the story include protected research time, personal trauma, didn't feel productive, professional environment, very supportive, supportive and encouraging [colleagues], [positive]

172

attitude, [initiative] do it my myself, much more engaged, developed relationships, sought own mentorship, guide, achieved personal and professional success, re-engaged. An unpacking of the story revealed the insight that some faculty members achieve success through a combination of resilience, a collaborative and collegial atmosphere, support from colleagues, institutional support for example protected time, and mentoring relationships, even while remaining engaged (and re-engaged) in one's work. As a result of this insight, the story provided a very clear connecting point (mixing) to the quantitative theme: Collegiality, Work Engagement, and Resilience: Strongest Predictors of Faculty Success and ultimately aligns with the emergent qualitative theme: 'Interconnected Predictors of Success.' The respondent explained the importance of collegiality, resilience, and work engagement in predicting her success at the U of S through storytelling and from the academic's lived experience.

> …I [was] training clinically in another province for about ten years. I did my residencies and fellowships there and then was looking for my faculty appointment after that…So, I was entertaining an offer in another province as well as Saskatchewan mostly because I wanted to have protected time for research and at that time Saskatchewan seemed more open than other post-secondary institution(s). I took the job at the University of Saskatchewan for about half of the pay of the other offer but because I was guaranteed protection of my time as well as a very generous start-up package. What ended up happening is when my letter of offer came, it actually didn't reference anything around my start-up funds [which was promised] and so when I followed up…the Dean [was away] and so someone was [acting in that capacity] and in that phone conversation I was told that what I was offered was not appropriate for my level of training and that the financial situation

173

of the college wouldn't allow for that. So, there were no guarantees. This was all while we were still living in that other province, but we had just given our notice at our place to live. My spouse [also] quit his job and we pulled our kids from [their] school. So, basically, I had no negotiating power to say, "I'm not gonna come." [Additionally], on the day we moved, [a family member] committed suicide. So, [this relative] also lived in the province we were in at the time. [It was] a combination of personal trauma and then this bad start at the U of S was kind of the beginning of my first year...The only good thing I would say that helped me getting through that in the professional environment was that my division [had] very supportive colleagues; [They were] very understanding. And so I think that support and that encouragement to for instance, applying for competitive funds and so forth to get myself going for start-up funds happened in those first six months. So, I kind of just took the attitude of, well, I'm just gonna do this myself anyways, [despite] not being offered anything from the university….[However, fast forward to today,] I would say I don't know when it happened, maybe in the last year or so but I certainly feel I am [now] much more engaged. Even on a broader scale outside of my division I feel more engaged in my department. I do feel like I've developed relationships and even sought out my own mentorship to help guide me and that I think has helped. Then I have achieved some successes too personally and professionally…I'm looking forward, that this is my - we are staying here…that helped me as well to maybe re-engage...

Respondents in the IP sessions generally agreed that collegiality, resilience, and work engagement were key to their own personal success. Some went further to indicate that the

predictor variables worked in consort to incent faculty success from their own experiences. They explained that the nature of faculty work life requires them to be resilient in the face of personal or work challenges, be energized or engaged to meet the performativity demands of faculty life even while remaining competitive with respect to inter alia research grant funding and publications. A review of their collective responses suggest that all the above variables are contingent on collegiality, that is, their ability to collaborate, support, and rely on mentoring and other collegial relationships that incents their successes as faculty members.

Collaborative Culture and Climate Critical to Faculty Success

Of the three significant predictor variables from the survey, collegiality seemingly had the greatest impact on faculty success at the U of S, according to the survey data. As a result, the panelists deliberated this finding during the IP sessions. An analysis of their responses revealed the following nodes: strong culture of mentorship, value collegiality, collaborative, lab access, department that values collegiality works, research collaborators, network of people, collaborative working atmosphere, collegium, professional practice, collaborative work affects moral, impacts your job/success and happiness, critical or necessary for success, collaborations. Subsequent interpretation of participants' responses suggests that critical to the success of academics is having a collaborative culture and climate in departments/colleges/schools at the U of S. As a result, an analysis and synthesis of the initial category of collegiality, greatest impact produced the code, Collaborative Climate and Culture Critical to Faculty Success.

Seppälä and Cameron (2015) confirmed this notion when they claimed that in increasing body of literature indicated that positive organizational culture (and climate) incented productivity. Part of their description of a positive culture aligned with this study's description of collegiality or a collaborative culture, which includes inter alia provision of support to

175

colleagues. Another category that emerged in the interpretation panel sessions was the role that culture plays in shaping success factors. After further analysis, this category was also synthetized with the ultimate theme, collaborative culture and climate is critical to faculty success.

The first two excerpts in this section support the theme that critical to faculty success is nurturing a collaborative culture within one's academic unit. This culture might be achieved inter alia through ongoing discourse, mentoring relationships, sharing research space, ideas, and other collaborative work, which were deemed critical to faculty success. As a result, these strategies and actions are ways departments, colleges, and schools demonstrate the value they place on a collaborative culture and ultimate success of their faculty. The responses of the following faculty members support the claim that a collegial culture and climate are essential to faculty success.

> My department has a very strong culture of mentorship and we value collegiality, we speak about it regularly and so that's been something that's been very helpful for my own success.

> …I've been very fortunate in our department I think we certainly, maybe personally there's differences, but when it comes to work, we all are fairly collaborative and get along. I certainly have had very good luck when I've gone to any colleague about questions, about lab access, about methods, about access to facilities or ideas or if they want to work with me on a project. I have met with an enthusiasm in their responses, which I really appreciate. So, I would say that I've been- when I hear from others, I realize how fortunate I am in in that I am in a department that values that, and it does work.

The above faculty members' contributions suggest that a critical part of their success as an academic unit is the value and emphasis placed on a collaborative and collegial culture in their department. Of course, mentoring relationships, and ongoing conversations, commitment to, and deliberate actions played a significant role in engendering this desired culture.

Additionally, an insight drawn from the tone and text of the last excerpt is the implication that some departments may not have a similar collaborative culture or climate as this faculty described in his/her unit based on his/her knowledge. If we were to take this finding and connect it with the quant finding that there were differences in collegiality across departments/colleges/schools: "The Tukey post hoc test revealed that faculty members in some departments/colleges/schools had higher levels of collegiality than those in the school of Nursing," both would be in alignment. Moreover, because participants in the IP sessions articulated that having a collaborative culture and climate influences academics' success, it would therefore, stand to reason that applying systemic changes that fosters a collaborative climate in such departments might lead to greater levels of success.

Additionally, faculty members in some units performed their tasks using some of these collaborative strategies: research collaborations, professional practice, and networks. Because of the nature of their work and their performativity goals, it is important that they forge such partnerships to be successful. A collaborative climate or atmosphere is, therefore, an essential ingredient or condition for faculty success. The excerpts below from faculty members describe how this collaborative culture and climate is essential to the work they do.

> Yeah, and I might add that like for myself, it's been development of a group of
>
> research collaborators has been really, crucial - all the way through. Because, having
>
> that network of people you can work together on new ideas but also people you can

177

bounce ideas off of is just so important. And I think it's always- collegiality it's

always really valuable to have a good friend in a different department.

Well certainly just in the practical sense of being able to do some of the research

that I want to do where I required access to other faculty member's labs. Maybe to

make use of some of their technicians or their technician's time, they collaborate

[on] things like that where I have never once been turned down. You know and so,

especially as you know as a new faculty member coming on board where I've got

lots of ideas but maybe not all the research tools that I need to accomplish that. So, a

very good collaborative working atmosphere even though in a lot of ways we're all

um competing, we're competing for grants, we're competing for funds, [however,]

we certainly when it comes down to actually getting the job done, I think we work

together quite well.

Both faculty members espouse the belief that a collaborative working atmosphere or

climate has enabled their success in academe. They were at varying stages of their careers: one

early stage and another mid-stage; however, it was interesting that both recognized the

importance of collaborative work such as collaborative research, shared resources, and networks

to their own success.

Other participants who shared similar views not only recognize its importance but also

suggested that a collaborative culture and climate also influenced morale among their colleagues.

This psychological state (morale) has been shown to impact productivity in several past studies

(Dayo, 2012; Neely, 1999; Weakliem & Frenkel, 2006). Weakliem and Frenkel (2006) even

suggested that morale had an approximately linear association with productivity. Therefore,

administrators in higher education might want to ensure that their systems, policies and

178

practices/norms support or incent a collegial or collaborative climate. The following excerpts faculty members not only support the theme but also suggest that a collaborative culture impacts faculty morale, happiness, and ability to secure funding and ultimate success of academics:

> I think again this is another area where we're quite different as a collegium, a group
> of librarians we need to actually work together quite a lot more than other
> departments because we have the professional practice component. Meaning that we
> have a lot of projects and committee work and a lot of what other departments
> would consider service probably. But it's within our area that we're trying to
> progress initiatives and so often, almost always, it needs a working group or some
> sort of team and so collaborative work is really integral and to have collegiality in
> that process is really important of course. And when you don't have that it really
> affects the moral and the amount of work that you can get done and of course if you
> don't get, progress the initiative- whatever the initiative is that's something that
> could impact on your job, on your um? What do you call it? Your success, your
> workplace success. So yeah collegiality.

> I know personally, to conduct my research and/or my teaching because we typically
> team-teach as well. Especially for research, it would be really, really difficult if I
> was constantly going up against other faculty members. If they didn't- if they
> weren't willing to assist me, it would be a tough, tough goal - it would be really hard
> going to work every day and it would be really, really hard accomplishing what I
> need to do.

> I think it is really critical just for the moral…Also, we tend to hire pre-tenured
> people who have, who are entry level like early career I guess and so they haven't

179

had the tenure track experience yet. So, they need that mentorship into what the process is and you can only get that from your colleagues really, from administrators I suppose but if you don't have that mentorship from your colleagues or you don't have that collegiality I, it's very hard for you to be successful I think. It impacts success; it impacts happiness. So it is really important to all the other facets of what I'm trying to do [Collegiality].

On the research success side, in basic sciences, I feel that collaborations are, as well, critical and um it is necessary for success to have good collaborations with the people in related or complimentary fields. And it also affects our ability to publish and get grants.

So, it's something we discuss a lot, trying to um build a culture of research in a profession that traditionally doesn't have a lot in that area.

Participants supported the claim that a collaborative culture is essential to the success if academics, however, they also asserted that it also affected their morale and happiness. Whilst it was the nature of some academic units to work collaboratively to the extent that this element is even considered in hiring practices (some more so than others), this might not be the same across all academic units. A collaborative culture and climate also influence academics' capacity to secure grant funding especially in scientific fields.

It appears that collegiality was the strongest predictor of faculty success (as determined by the survey data); mainly because of the very important role that a collaborative culture and climate played in the success of faculty work. Therefore, it stands to reason that administrators might want to implement strategies that nurture, foster, and incent a collaborative culture and climate within their academic units.

Work Engagement

With respect to work engagement, panel members agreed that work engagement was likely a key predictor of their success because one needs to be 'present', energized, and generally care about one's work in order to be successful given the demands of faculty work. To this end, they shared their perspectives on some of the causes of high versus low work engagement, noting that this understanding can give deeper insights into the correlation between work engagement and faculty success.

Intrinsic and Extrinsic Motivators of High Work Engagement

A mix of both intrinsic and extrinsic motivators was accountable for high work engagement among faculty members in this sample. An analysis of the responses also revealed many commonalities across responses and produced the following nodes: people, graduate students, highly engaged students, good people, smart people, positive relationships family energy, research area, engaging and encouraging administrators, productive feedback, highly motivated faculty, research collaborators, faculty members (colleagues), autonomy, choice, diversity of work. As a result of a synthesis of the emergent nodes in this theme, the code, intrinsic and extrinsic motivators of work engagement was revealed. Based on the significant finding that work engagement predicted faculty success at the University of Saskatchewan, participants in the IP sessions explored possible causes of work engagement as reflected in the excerpts below.

> I think a lot of this engagement does naturally ebb and flow from time to time. It'll be driven by things like how much energy your family is taking and many, many-many, many other things. One of the things I've found, like it comes back to it comes back to people all around. When I think about my graduate students, I've had

quite a few now and all of them have been good people, smart people. There's been

some where I've had very, very positive relationships.

It depends on how much energy you have available for the things that get you really

excited whether it's a, there's a research area that you're really excited about and

you want to work on. I mean when you're working with a student who is highly

engaged, you got a highly productive back and forth, students basically becoming

their own scientists as they're doing the work, it's really easy to be highly engaged.

Thinking about our administrators there are some who are actually doing quite a

good job of maintaining our engagement and encouraging us during some rather

challenging times.

For me it's really the people I work with, my collaborators on research, my students,

when I'm teaching and then you know, after becoming department head, the faculty

members in my department I don't wanna let them down so that's the big extrinsic

motivator for me but it's gonna be different for other people right?

The preceding responses revealed that, among the myriad causes of high work

engagement, most were centered on people, in that, the influence of or interactions with people

impacts engagement. Some examples include extrinsic motivators such as family's energy,

highly engaged students, research collaborators, engaging and encouraging administrators, and

positive relationships. Other factors that influenced high engagement among faculty members

include productive feedback and research interest. It appears that persons who were in the

faculty member's work orbit might contribute to their feelings of high work engagement and

perhaps these were the same people who could influence faculty members' success (for example

182

in the areas of teaching and research, as well as service given that at least one of the respondents above was a department head).

Another cause of high work engagement as postulated by one faculty member was that of the recruitment of motivated or highly engaged candidates. By recruiting highly engaged members of faculty, this may influence the climate of that work unit and vice versa. As a result, recruiting highly motivated academics was viewed as one of the reasons for high work engagement among faculty members as reflected in the excerpt of that faculty member's response below:

> I'll just say that we actually tried to hire for work engagement, this was something
> we looked at when we were interviewing faculty, was motivation. And, typically,
> people- we wanted to see people who were ambitious and engaged that was a big
> part of the interview process. And it's actually not that hard to find people because
> as we talked about earlier, tenure's the end of a very long trip and you've kind of
> been selecting for people who are achievement oriented at every step of the way.

This participant suggested that a means by which her academic unit incents engagement among faculty members is by first hiring highly engaged and motivated faculty members, a fundamental part of the unit's recruitment strategy. The participant claimed that such a strategy incents high work engagement within this particular unit.

The last two responses in this theme highlighted the factors of diversity of work, autonomy and choice as motivators of high work engagement among faculty members.

> I think with those kind[s] of descriptors that you're providing one of the first things
> that's kind of uh, a cause for me to be honest is autonomy and choice, right? So, for
> me, having a say in what are the things that I am investing my time and energy into.

And I mean, some of that is natural, right? So, if I have expertise and knowledge in

a certain area. I might be assigned those particular classes to teach while I might

have a more invested interest to engage in those activities because they connect with

my individual interests or my research areas or whatever it might be. So, I think for

me um that autonomy in some ways, obviously it's not just a free-for-all but having

some autonomy- and for me, I always say this, for me it's also variety. So, things

change constantly, sometimes that causes stress in terms of quantity on your plate

but, the variety of things that I have the opportunity to do as a faculty member, also

I think adds to my level of work engagement.

I do think the diversity of areas we get work in that's interesting, that makes us-

gives us a reason to show up. Yeah, I've had almost unlimited opportunities to

explore things that I was interested in doing, so I've never, ever been concerned

about having the energy in my workplace on a day-to-day basis. So, I like the

diversity of things that we're exposed to as faculty members, or the things we're

allowed to pursue. So, the diversity of one's work helps to energize and create that

work engagement.

In the preceding responses, additional factors that were identified as causing higher levels

of work engagement include autonomy and variety/diversity of work. It is, therefore, safe to

infer that the power of choice might be a motivating factor for faculty members in academia.

In summary, respondents appeared to agree that both intrinsic and extrinsic factors motivated

their levels or work engagement to the extent that some explicitly claimed that the nodes

identified increased their levels of work engagement. While both intrinsic and extrinsic factors

were highlighted, it was also noted that most of the factors were people centric, in that, they

included the influence or association with others, largely in the faculty members' work orbit. These factors included research collaborators, engaged students, and encouraging administrators. As a consequence, academic leaders might want to apply or leverage such findings to their context given that a strong, positive and predictive relationship exist between faculty success and work engagement.

Disincentives to High Work Engagement

Conversely, identifying some causes of low work engagement among faculty members provided even deeper insights into work engagement. To this end, faculty members reflected on their own experiences and shared some thoughts on the causes low work engagement of academics. Recall that work engagement was identified as a predictor of faculty success at the U of S; therefore, gleaning the causes of low work engagement might reveal insights to administrators as they aim to incent success among faculty members. A review of the responses to this theme revealed the following nodes: fraught relationships, energy sap, negative energy, overworking, too many expectations, and insufficient institutional support. The following represent some faculty members' responses on disincentives to high work engagement.

> Then there's some where the relationship with that person gets a bit fraught at times and as a faculty member of course one has to always no matter what you might be thinking be professional and keep the students' best interests top of mind at all times but that can become challenging when you've got a student whose direction has perhaps diverged from what might've been planned or what you were hoping for at the beginning of their program. So then that relationship starts taking more energy and I find that there is a little bit of, there can be an energy suck as that goes on and on. I can think of a colleague of mine who had a student who eventually had to

withdraw due to medical reasons but basically like that student kind of sucked that

individual, that faculty member's energy right out because the student needed so

much support.

Whereas if you have somebody who's a bit negative and, it can kinda, sorta, it sucks

energy from everybody rather than bouncing it back with a positive feedback.

Overworking, too many expectations of output and not enough support

institutionally.

That lack of support if that's not there and yeah, the sheer quantity can also take

away from it at times.

Overall, the causes for low work engagement among faculty members were all variables

that either demotivated faculty members or acted as disincentives to high work engagement and

by extension faculty success. Because of the significant predictive relationship between success

and work engagement in this study, the researcher concluded that these variables might also

negatively influence faculty success. As a result, administrators may consider systemic changes,

practices, and strategies that mitigate such variables in faculty work. A more detailed discussion

is presented in Chapter 5 of this study.

Resilience

The panelists also shared their thoughts on why resilience was among the strongest

predictor variables associated with faculty success. From those discussions emerged the themes

of workload and work life balance; two themes that the participants thought were central to the

discussion on resilience and faculty success.

Support for Faculty Work Life Balance and Prioritizing Success Indicators

A review of the responses to the initial 'work load work life balance' theme revealed the following nodes: 80 hours a week, balance, mental and physical health, satisfaction, 80% work, institutional support, success, limited hiring capacity, demand for increased enrolment, increased teaching workload, impact on research productivity, senior administrators, enormous fiscal challenges, senior administration, work life balance determines success, departments' support of faculty work life balance contributes to success. A synthesis of these nodes and analysis of the excerpts revealed an overarching theme of 'Support for Faculty Work Life Balance and Prioritizing Success Indicators'.

An example of the panelists' explanation of their workload as an academic and its attendant challenges is presented below albeit in a cynical tone. An axiomatic agreement during the IP sessions was that the immense workload of academics presented its share of challenges that requires them to dig deep and be resilient in order to survive or succeed.

> The advantage of our work is that we have the opportunity to determine how we use
> the 80 hours a week we spend in our jobs.

This seemingly cynical reference by John suggests that faculty members have an enormous workload to manage and part of being successful in such a situation is being extremely resilient.

The panelists also expressed that a resilience strategy that is used (or should be used) by faculty members in order to cope with the significant demands of faculty work is balancing one's work life with one's personal life. Faculty members implement this strategy in different ways. Dana [pseudonym] also shared her work life balance strategy, which is one of the ways in which she is able to bounce back from the pressure points of faculty work life:

187

Cause it's so true in so many ways and like, instantly relatable. I mean, I don't know. For myself, that term work-life balance for me- and I think it's different for everyone and everyone needs to find their own but for me it is not so much of a daily or weekly or monthly balance. I find mine over the course of a year, I try to find my work-life balance. Because I know there're going to be times where it is, unfortunately for me, 80% work. And then, I really try and embrace those times in the year where it isn't and it doesn't have to be that emphasis on work. So I mean- but how does the institution- and I found that that works okay for me and my mental and physical health and satisfaction, success. But that also wouldn't fly for some other people and some colleagues and friends of mine where it does have to be that daily balance. So, I'm not sure [laughs] how the institution can support this.

Maurice [pseudonym] then elaborated on the workload theme, citing an example of the great demands placed on faculty members and the resultant need to be resilient, which may explain its strong association with faculty success at the U of S:

I think we are in an interesting time in the evolution of our institution. I haven't seen senior administration backing off of their student enrollment plan but at the same time we've got enormous fiscal challenges in trying to support our current faculty complement at the same time that we're facing. I'll give you an example, (in one college) over the next five years the senior administration wants to add 45 hundred new students to the campus. Only a third of those are expected to arrive in the [in the college] as direct entry, either graduate or undergraduate, but we have no capacity to hire new faculty for the next three years. That increased workload in the college in terms of attention to teaching is going to impact the research element of

188

what we know are the- we know that that's what gets us reputation and advancement. It's not our teaching, it's our research. So, I can't square these things. The demand for increased enrollment, the absence of capacity to increase the faculty complement is gonna bring about a greater workload for teaching, it's gonna impact research productivity, and where does the senior administration want to go with that. These things just don't add up to me.

A review of Maurice's [pseudonym] contribution reveal that academics feel pressure to perform optimally in accordance with preset goals or targets that appear 'unrealistic' or 'impractical' to them given certain challenges such as fiscal and human resource constraints and the negative impact that these 'unrealistic goals' may have on research productivity and even teaching effectiveness. Because of this tension and the import of the two of the main pillars of faculty work (teaching and research), administrators might need to review their strategies to reconcile the seeming disconnect felt by faculty member. Faculty members expressed that 'overly ambitious targets' set by the institution such as the increasing enrolment figures (with no support or increase in human resources to meet these targets) significantly impedes their work, particularly their research productivity. This research productivity is so critical that it not only affects academics' success but also the success of the institution and by extension the institution's reputation and competitiveness.

Other thoughts or explanations on workload and work life balance and the role these emergent themes play in faculty members' resilience and ultimate success are highlighted in the following faculty members' responses.

Work-life balance should be an important part of determining success as faculty members.

189

Again, I just wanted to again come back to the life-work balance that I explained that departments and colleges who really support their faculty to find this balance are more successful.

Part of the discussion on faculty workload was the element of balancing one's work even when there are competing priorities or challenges among the success indicators of teaching, research, and administrative duties. To this end panelists discussed the implications that these challenges may or have had on faculty success from their experience and the need to be resilient if they are to be successful. The selected nodes in this initial category of 'Challenges associated with Prioritizing Success Indicators include: protective administrative requirements, all time spent on research and teaching, too much expectations, bombarded with teaching and administrative requirements, influences your productivity, hard, balance, protected, give protected time, minimize such duties (going for tenure or full professor), lowered teaching and administrative duties in first year, support time spent on research, research versus clinical, teaching is key, ongoing challenge, administrative burdens, and focus on research, writing grants and papers. However, an analysis and synthesis of these nodes together with a review of the excerpts below resulted in the theme's inclusion in or merger with the renamed code 'Support for faculty work life balance and prioritizing success indicators.'

I would say in terms of [workload] there was certainly protected administrative requirements. I also- we don't have children so that helped. It sounds bad, but I mean in terms of that I just spent all my time on research and teaching. And, so, I couldn't imagine trying- like, right now trying to have children and trying to teach them while trying to do all the other duties. It's really- it's too much that's placed upon people and what the expectations are. 'Cause research is something that you

190

basically do on the weekends and in the evenings 'cause you're just bombarded with

teaching requirements or administrative requirements the rest of the time. And if

you don't have that- that time to do all of that it- it will really influence your

productivity. And then it makes it quite hard to sort of climb those ladders. So, I

don't know how in terms of the balance but yeah had it not been protected, had they

expected me to be a Grad Chair during my being- while I was an associate or

assistant there's no way. I think I served as Grad Chair for a couple months and I

got no work done. So, yeah, the different units around the campus certainly need to

give protected time and to minimize such duties being placed on people going for

tenure or if they're trying- if they're aiming for full professor they shouldn't be

tasked with those things.

…At [my college] they give much lower teaching duties the first year. They also

encourage us to lower our amounts of service expectations as well. So, like, for

example the only committee they would let me be on was the social committee

where not a lot of time goes to it. So, and that was meant to support our time in

terms of spending that extra time on research. Um, yeah.

I would definitely echo having like protected times for instance, research versus my

clinical and teaching is absolutely key. I find that the clinical work can lead into

everything else so actually also having discipline around when I am purely gonna be

focusing on academic-related things as opposed to my clinical is an ongoing

challenge as a clinician researcher. In the early years not having any administrative

burden was a very big advantage to helping minimize all of the various competing

expectations. And then lastly as a clinician I should just say that being on what's

called an "alternate clinical funding plan," an ACFP as opposed to, for instance, typically how physicians would be paid would be fee for service. So, for every patient I see I would bill a fee. So, the incentive there is the more patients you see the more money you earn, the more time you spend on research or teaching takes away from that income. So, having yourself protected with a standard income also then helps someone be able to focus on the research and writing grants and papers because you're not worried about making enough to cover the mortgage.

An analysis and synthesis of the responses in this section revealed an overall theme of 'Support for Faculty Work Life Balance and Prioritizing Success Indicators.' Some participants even asserted that having a healthy work life balance not only contributes to good physical and mental health, but it also contributes to faculty members' success so much so that it is argued that 'academic units that support faculty members' work life balance are more successful.' This theme is aligned to the resilience category because it was revealed that in many cases having that work life balance is non-existent because of the heavy work load that academics carry coupled with or resulting from some 'unrealistic' administrative targets set. As a result, it is this resilience factor that is so highly associated with faculty success that they are forced to pull on (or draw from) in order to survive.

Additional Predictors of Faculty Success

Having collaboratively interpreted some significant findings from the initial survey, participants subsequently explored possible additional predictors of faculty success beyond the six predictors variables examined in the study's quantitative strand. Responses revealed the following nodes: luck, expectations, supportive work environment, timing, serendipity, chance favours the prepared mind, capability, preparation, opportunity, capacity to try new things,

192

support of colleagues and administration, confidence to experiment, versatility, access to research funds, and work life balance as seen in the excerpts below. Based on an analysis and synthesis of these nodes, participants found that a mix of controlled and uncontrolled elements or variables influenced or predicted faculty success, in that, there were some variables over which faculty had no control that respondents suggested might also predict success. Some of the uncontrolled variables included serendipity and timing – all factors over which they had no control. However, for the variables over which they had control, it would stand to reason that with the apposite interventions and or stimuli, faculty members' success might be incented by administrators, policies, practices, cultural elements, and even by the faculty themselves. If in fact future studies do reveal that any combination of these variables predicts faculty success, it would be insightful to know for example how faculty and administrators might leverage variables such as clear expectations and preparation such that they improved academics' success. The excerpts below from faculty members explain how these additional variables might predict faculty success in academia.

> I think there is an enormous amount of luck. So, I made a good choice for my PhD supervisor, I was also extraordinarily lucky that a tenure track position in a city I wanted to live in happened to come up at the right time. Because that was what? 11 years ago that position came up, there has been a grand total of one similar position at the U of S since and probably grand total of maybe five in Canada. So, there's an enormous level of luck at that stage because, you can be the best prepared person in the world but if a university you want to work at isn't hiring at the time when you're a post-doc and looking for a job that's- unfortunately you're not gonna be here regardless of your own skills and background.

193

Luck: it is a huge predictor like well getting the faculty position in the first place,

my spouse won a [prestigious] award. A big reason [he/she] won [the] award is that

two years after [he/she] got hired, a [research opportunity] exactly in [their] area got

funded and so my [spouse] was able to quickly like explode the size of [his/her]

group because all of this funding starting flowing in. I mean [he/she was] obviously

capable of it. [My spouse] executed once given those resources but had [he/she]

never been given those resources, would [the] award have been won? Maybe, not

right? [He/She] might not have been able to get to that level. So, serendipity if you

wanna be a little more polite about it but it's a huge thing.

Luck and timing: two unconventional variables over which one has no control are

believed to be other predictors of faculty success. Even though these variables were not

examined in this study, it is also worth recalling that the variables that were studied predicted

approximately 44% of the variability in faculty success at the U of S. It, therefore, means that

approximately 56% or the variability in faculty success is still unaccounted for. As such,

exploring other possible variables in future studies are essential. These respondents, therefore,

hypothesized that luck and timing may form part of this 56% of unaccounted variability.

On the other hand, some respondents claimed that while luck might have played a role in

predicting faculty success, preparation and capability are essential predictors of faculty success

to the extent that luck may not produce much success without the necessary ingredients of

preparation and capability. As a consequence, a comparably stronger case was being made for

those two variables being part of the unaccounted variability in faculty success.

Chance favours the prepared mind: So I think it's probably a lot of both, I think it's

people that are insanely capable but also certainly a matter of chance does play a

194

role in that but only to the degree that someone is already very, very capable and prepared and putting in those long hours regardless it's absolutely fundamental.

In additional to preparation and capability, other respondents proffered support of colleagues and administration, work life balance, clear expectations, versatility, and access to research funds as additional predictors of faculty success. Some of the preceding variables more so than others might be plausible and worth exploring in future studies. For instance, clear expectations, work life balance, and research support/funding were areas in which we found that participants had challenges at the U of S. Participants claimed these negatively impacted their levels of success or at least proved challenging in their quest to achieve success. The experiences described in earlier by faculty members suggest that such variables might be critical to academics' success. As a result, variables such as clear expectations, work life balance, and access to research funds might form part of the unaccounted variables that also predict faculty success at the U of S and therefore, worth exploring. The following quotes explain why or how these additional variables might influence or predict faculty success.

> I think something that's critical to develop in our academic lives is a work environment where you have the support of your peers and especially of your managers to try new things and to see if they work and to be given the opportunity to keep working at it even if the initial attempt is considered a failure. I think that's a very hard thing to do and especially amongst younger faculty members who are working towards renewal, probation and tenure. The capacity to try new things and they might not work the first time, or the grant proposal might not be supported this year, but I'll tool it up and submit it again. When you have the backing of your colleagues, when you have the backing of your department heads and colleagues,

195

deans to keep trying and experimenting or are you locked into some sort of stasis which doesn't allow you to explore and develop. And I think if you have the confidence to experiment then you're likely to have a more satisfying, successful career.

Again, I just wanted to again come back to the life-work balance that I explained that department and colleges who really support their faculty to find this balance are more successful.

There are rarely clear expectations; you don't really know how many papers that you should be publishing; what kind of grant you should get. The granting agencies put limits on the time that you have to apply while you're still a new prof and so the stress level's quite high. And then trying to teach and students [might be] looking to punk you and you've got a lot to learn quickly to just be respected. []

I think sort of something related is money. Like having access to funds [research].

I would also say versatility.

In my own success it's helped that I've had sort of multiple research programs going on at the same time and that in that regard, if one aspect was sort of moving slowly or maybe we didn't get funding I could then shift over to a different project and then bring in other collaborators. This helped me establish co-supervision. Maybe you get data from one thing that you could then just have some students sort of work on data without them actually being in the lab doing experimenting.

Overall, myriad variables account for faculty success as revealed from the quantitative findings in this study. Recall that collegiality, work engagement, and resilience combined predicted faculty success but only accounted for approximately 44% of its variability. It follows

then that 56% of the variability in faculty success is shared by other variables (unaccounted for in this study). While several possible variables were hypothesized in this theme as being additional predictors of faculty success, some appear more plausible than others based on earlier findings in this study. Additional predictor variables that appear to be logically plausible based on earlier findings include work life balance, clear expectations, access to research funding, and support of administrators (factors impeding or supporting faculty members' success based on respondents' lived experiences).

Summary of Qualitative Findings

This section detailed the findings from the interpretation panel sessions, which were a collaborative analysis of significant findings from the survey data including the finding that of the six predictor variables, only collegiality, work engagement, and resilience predicted faculty success. Participants in the IP sessions provided explanations for this and other findings from the qualitative strand. During the analysis of the qualitative data, the researcher reviewed, analyzed, and synthesized the data. This analysis resulted in emergent and re-defined themes and codes detailed earlier. The coding and analysis process was also detailed in this section and displayed pictorially and in tabular form. Finally, new and emerging themes included the additional predictors of faculty success, which were discussed and triangulated in Chapter 5 of this dissertation together with other themes.

Mixed Results or Triangulation of Data

This section addresses research question number 3: To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory, sequential design

method? The mixing processes in this study provided answers to research question number 3.

The mixing or integration process or technique used in this study is connecting both the

quantitative and qualitative data in a meaningful way for the purposes of explaining data.

Specifically, the interpretation panel method was deliberately selected as a means of explaining

the findings from the quantitative phase (survey). Guetterman (2019) suggested integration is an

intentional process that brings together data in both the quantitative and qualitative strands of a

research study and one such method is known as the joint display.

Traditionally there are typically two major forms of joint displays used in the explanatory

sequential design method namely participant selection joint display and interview questions joint

display.   However, a more conventional approach to the joint display was adapted known as the

Pillar Integration Process (PIP). The PIP is a four-stage process used to connect both qualitative

and quantitative data in a transparent and rigorous format (Johnson et al., 2017). Figure 4.13

presents the model of this method of integration, which illustrates its basics tenets or processes.

On either side of the central pillar are the main quantitative and qualitative findings and

themes/categories that are being connected through a systematic process of listing, matching, and

checking. From this process, meta-inferences or insights were revealed and depicted in the

central pillar as displayed in later Table 4.29.

Figure 4.13. *Pillar Integration Process Model*

The Pillar Integration Process (PIP) Model
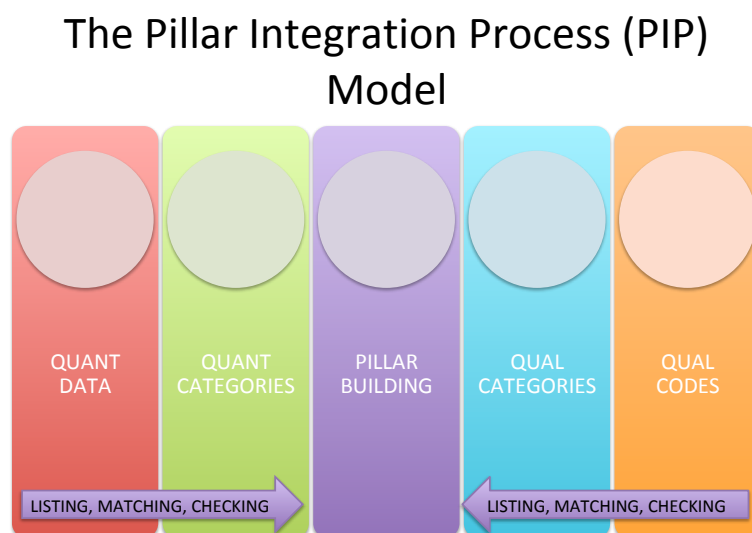
Johnson, Grove & Clarke, 2017

In Table 4.29 quantitative findings from the survey data that required further investigation or were either not initially included in the IP protocols and for which there emerged explanations, comparisons, or connections from the IP session findings are presented in the QUANT data column with its corresponding QUANT categories (Listing). From a review and analysis of the selected QUANT findings, they were then matched to their corresponding QUAL findings or categories based on some form of connection, which included inter alia explanations, comparisons, agreements or disagreements, or even gaps identified (Matching) together with their corresponding codes. The matches or connections were then analyzed and synthesized to produce meta-inferences in the pillar building theme section (column) of the joint display table (Checking).

Table 4.29. *Pillar Integration Process Using Field Data*

Case: Predictors of Faculty Success

QUANT Data	QUANT Categories	Pillar Building Themes	QUAL Categories	QUAL Codes
Resilience recorded the highest average (*M*= 4.04; *SD*=0.76) among the independent variables with 82% of participants typically responding well to life, even in adverse circumstances	Resilience is highly associated with faculty success	Resilience recorded the highest frequency because of the nature faculty work e.g., immense workload	'The advantage of our work is that we have the opportunity to determine how we use the **80 hours a week** we spend in our jobs' This seemingly cynical reference suggests that faculty members have an enormous workload to manage and part of being successful in such situations is being extremely resilient	Resilience is a major predictor of faculty success
I have a high # of external research grants for my discipline, rank, and stage of career (*M*=3.18; *SD*1.45) was the lowest averaging item in the research success dimension	Low levels of external research grants	Low level of external research grants was connected to increased workload and insufficient human resource capacity to meet increased demands, which may (inter alia) have an impact on faculty members' research productivity (including securing more external research grants)	"…That increased workload in the college in terms of attention to teaching is going to impact the research element of what we know are the- we know that that's what gets us reputation and advancement…" "…The demand for increased enrollment, the absence of capacity to increase the faculty complement is gonna bring about a greater workload for teaching, it's gonna impact research productivity"	Increased workload and insufficient capacity
A small proportion (45%) of respondents claimed that institutional resources and supports were accessible to support their research performance	Limited access to institutional (research) support and resources	The limited access to institutional research resources (RR) category was connected to the QUAL story in which respondent was denied RR was negatively impacted (disengaged, unmotivated etc.), but luckily rebounded some time thereafter. The mixed finding suggests a possible need for the institution to address greater	"…when my letter of offer came, it actually didn't reference anything around my start-up [research] funds [which was promised]"	Limited or no access to institutional resources to support research productivity

		access to institutional support and resources that supports academics' research productivity, which ultimately impacts the institution's reputation		
Only 56% of respondents were energized in their day to day work (lowest scoring item in WE scale)	Low levels of engagement among academics	Overworking, lack of support institutionally, and high [unrealistic] expectations were possible reasons only 56% of academics felt energized in their day-to-day work. Because WE is a predictor of FS at the U of S, innovation, systemic changes, and a review of the alignment of resources might be needed to incent increased work engagement	"Overworking, too much expectations of output and not enough support institutionally" "That **lack of support** if that's not there and yeah, the sheer quantity can also take away from it [engagement] at times"	Disincentives to High Work Engagement
Only 42% of academics were satisfied with their unit's organizational culture and climate	Dissatisfaction with academic unit's organization culture and climate	A collaborative culture appears to be desirable to academics (based on QUAL findings) because of its consequence to faculty work and success; therefore, success may require nurturing a collaborative culture within one's academic unit, thereby improving academics' satisfaction with their unit's culture and climate	Positive organizational culture incents productivity; culture is critical in shaping success factors and ultimately faculty success; However, some academic units at the U of S do not have a collaborative culture	Collaborative culture and climate impacts morale and productivity

In Table 4.29, the researcher visually displayed how the interpretation panel codes, categories, and results (qualitative phase) were connected to selected findings from the survey (quantitative phase). Codes that required further investigation or were either not initially included in the IP protocols and for which there emerged explanations, comparisons, or connections from the IP session. Insights of inferences were then drawn from the connecting model, which were displayed in the 'pillar building themes' column of the table, and which was

the basis of further discussions in Chapter 5 of this dissertation. Finally, the joint display also demonstrates how the findings from the interpretation panel sessions explained selected quantitative findings. Thus, it visually addressed the mixing question, 'to what extent and in what ways did the interpretation panels with faulty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory sequential design method?'

Summary of Chapter Four

Chapter 4 presented the demographic data, findings (quantitative, qualitative, and mixed) from the study. Firstly, demographic data and descriptive statistics of the variables under study were presented as a general backdrop and signposts for further findings including comparative findings, and correlational findings. Then the findings from the regression analyses were presented which addressed the question of a correlation between faculty success and the predictor variables as well as whether these variables predicted faculty success at the U of S. The results from these inferential statistics suggested that collegiality, work engagement, and resilience all predicted faculty success at the U of S even though all six-predictor variables were found to be associated with faculty success. Subsequently, the qualitative findings from the interpretation panel sessions were presented (first mixing of the data). The qualitative findings were gleaned from a collaborative analysis of the significant findings from the survey (quantitative phase of the study). A total of 16 faculty members participated in the intake analysis of the significant quantitative findings from which themes were developed and analyzed by the researcher. Finally, both datasets were then triangulated, using the PIP technique, whereby the findings from both datasets were connected using a joint display (second mixing of

the datasets) in response to the mixing question and which addressed the extent to which the

interpretation panel sessions helped to explain the quantitative findings.

Chapter 5

Discussion of Findings, Implications, and Conclusions

As indicated in Chapter 1, this study was designed to 1. Explore the relationship between faculty success and the independent variables, collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust, 2. Ascertain whether the independent variables predict faculty success at the University of Saskatchewan, 3. Explore the influence of collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust on faculty success through faculty members' lived experiences, and 4. Determine the extent to which interpretation panels provided a deeper understanding of the quantitative findings. In this chapter, key findings from the study in Chapter 4 were used to fully answer the research questions in this study. The researcher then placed these answers within the broader context of the extant literature found in Chapter 2. The study's methodology and research questions were also reviewed. The researcher also presented a discussion of the findings of the study. Additionally, implications of the study's results for policy, theory, and practice were presented as well as the study's conclusions and recommendations.

Overview of Study

This study focused on the predictors of faculty success in higher education. The study was bounded by a case in the province of Saskatchewan with its population being faculty members at the University of Saskatchewan, the premiere research post-secondary institution in the province. The overarching aim was to explore the relationship between faculty success and the previously stated predictor variables. The results of this study add to the existing literature of faculty success/performance, higher education performativity, resilience, and collegiality among others. The outcomes of the study might also inform higher education policy and practice.

204

Review of Rationale

Given the trend of an emphasis on post-secondary institutions' (PSI) accountability and faculty performance (Berg & Seeber, 2016; Braskamp & Ory, 1994), it was deemed useful to explore the relationship between faculty success and the six independent variables of collegiality, work engagement, resilience, organizational commitment, works satisfaction, and trust. Because human resources are critical to performativity success in organizations, in addition to the claim that faculty members are the main stewards of PSIs (Astin & Astin, 2000), it was apposite to explore the predictors of faculty success during this paradigm of significant emphasis on accountability and performance in HE. Bolman and Deal (2008) suggested that employee participation, empowerment, and fostering teams improve employee performance and success. Additionally, according to Owens and Valesky (2007) "social psychology is particularly useful in informing the educational leader about organizational behavior" (p. 19). Consequently, this study explored selected human motivations or factors that influences faculty success in PSIs.

Further as stated, several authors have underscored the importance of human resources to institutions' performance. Ayo and Fraser (2008) claimed, "the most significant resource and expense in HE lies with the institution's staff and their collective ability to support one another in transformative learning" (p. 57). Additionally, Mangiardi and Pellegrino (1990) agreed with this claim, suggesting that university performance maximizes when individual human resource performance is optimal. All these authors (and others) have affirmed the importance of human resources (and their performance) to the overall success of institution. As a result, exploring the predictors of faculty success is significant to understanding the state of performativity in the academy as well as gaining valuable insights into the factors that influence faculty members'

success. These insights might be useful to educational leaders in informing policy and practice in higher education.

Because of the rationale and purposes of this study as well as findings from a review of the extant literature on the key variables: faculty success, collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust, the researcher used selected theories or works as lenses through which to analyze and discuss the ultimate findings of the study. The selected works used include Blackburn and Lawrence's (1995) and Tierney's (1999) on the nature of faculty work, which helped to frame and contextualize academics' very dynamic and differentiated work (and the performativity culture within which they operate). All this in light of the context of the differentiation, changing dynamics as well as the perceived tensions among success indicators and how these variables influence academic success. Finally, the Social Determination Theory (SDT) was also used as a human motivation theory to understand the predictors of faculty success accounting for factors such as competence, autonomy, and relatedness.

Review of Research Questions and Methods

Recall that the aim of the study was to explore the relationship between the predictor variables and faculty success, ascertain whether these variables predict faculty success, and to explore the influence of the independent variables on faculty success through the lived experiences of faculty members at the University of Saskatchewan. As a result, the research questions that guided the study include:

Research Question 1: What, if any, relationship exists between collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust (independent variables) and faculty success (dependent variables)?

Research Question 2: Do collegiality, work engagement, resilience, organizational commitment, work satisfaction, and trust predict faculty success?

Research Question 3: In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?

Research Question 4: To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory, sequential design method?

An explanatory sequential design based mixed methods approach was used to collect and analyze data to answer the research questions in this study. The data analysis phase of the study included the analysis of the numeric data from the online survey followed by the textual data to garner its overall meaning, which was obtained from the interpretation panel sessions as well as the connecting of both datasets (mixing process).

Summary of Section

This section mainly introduced the chapter and laid the foundation of later sections in the chapter. The basic tenets of the study such as the purpose, rationale, and design elements of the study were also recounted in this section. The research questions, which will be answered next were also reviewed to frame the discussion of the findings that is presented later in this chapter.

Discussion of Findings

In this section, the four research questions that guided the study were answered based on findings from chapter 4 and the purpose of the study. The questions were answered relative to past findings from the extant literature and discussed through the prisms of the theories and works found in the conceptual framework, namely, the SDT and Schein's theory as well as the works of Blackburn and Lawrence (1995) and Tierney (1999). The significance of the findings in this study was also discussed in this section. There was consistency in the findings of this study with that of past empirical studies on faculty success and the six independent variables generally, as well as in the k-12, and PSE sectors, which is discussed in this section.

Research Question 1

What, if any, relationship exists between collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust (independent variables) and faculty success (dependent variables)?

One of the purposes of the study was to determine the relationship between faculty success and the six (6)-predictor variables of collegiality, work engagement, resilience, work satisfaction, organizational commitment, and trust relative to the research question 1.

According to the findings of the study, positive and moderately strong relationships exist between faculty success and the independent variables: work engagement, collegiality, organizational commitment, resilience, work satisfaction, and trust. These findings were similar to previous studies testing the relationships between performance and the six-predictor variables, albeit within different contexts in some cases (k-12 and non-academic settings) and within academia in other cases. In all cases, past studies revealed strong positive correlation between the independent variables and performance (individual or organizational) (Riketta, 2008;

208

Setiawan et al. 2016 Shore & Martin, 1989; Su et al., 2013; Varshney & Varshney, 2017). Based on the foregoing, at least a moderate relationship was expected among each set of variables in this study, that is, between faculty success and the independent variables discussed below.

Resilience and Faculty Success

Similar to the findings in this study whereby resilience was associated with faculty success (r=.328; p <.001), past studies have indicated correlative powers between resilience and performance. Past studies have been conducted on some of these variables, revealing correlative powers between resilience and performance generally. An empirical study conducted by Varshney and Varshney (2017) revealed, "resilience was found to have a significant positive correlation with adaptive performance (r=.402; p < .001), contextual performance (r=.610; p < .001), and task performance (r=.639; p < .001)" (p. 40). Additionally, Kumari and Sangwan (2015) found a positive correlation between resilience capacity and employee performance. Likewise, Luthans et al. (2005) claimed that there is a positive relationship between resilience and job performance. The findings in this study also revealed that of the six independent variables, a resilience item recorded the highest average (M= 4.04; SD=0.76) with 82% of participants typically responding well to life, even in adverse circumstances. It, therefore, stands to reason that resilience and resilience capacity appears to be a critical ingredient for faculty success at the U of S. As detailed later, the nature of faculty work coupled with both internal and external pressures to perform and their associated challenges may account in part for this finding.

It is also believed that a product of resilience is the development of the critical skills needed to perform optimally in academia. Resilience facilitates the development of skills such as relationship building, adaptability, and problem-solving capacities which all influence organizational outcomes. These skills also reflect some of the emergent themes in the qualitative

strand of this study. The qualitative data highlighted that faculty members relied heavily on building relationships, partnerships or collaborations, their ability to adapt to challenging circumstances, and problem solve as part of their coping strategies while building their resilience capacity. Resilience, therefore, while being strongly associated with faculty success (and consequently so) also builds critical skills needed to survive and excel in academia. Further, a part of part of being a resilient academic includes the idea of being resilient even when unwell. This was evidenced in the qualitative finding whereby there were scenarios in which academics shared their lived experiences of remaining resilient even when faced with similar challenges. This finding was also in alignment with Brammer's (2000) characterization of academic resilience, having a purpose and having the capacity to operate in alignment with that purpose even in the face of challenges, and within a given period, which is essential in academic life.

Resilience is also perceived to be an essential characteristic or criteria for excellent workers because of its potential to result in employees operating optimally in the face of challenging circumstances (Cooper et al., 2014), which turned out to be a similar result in academe. Further, Cooper et al. (2014) and Wagnild and Young (1993) suggested that positive attitude, emotional intelligence or stamina, resourcefulness, and flexibility were also key attributes (or outcomes) of resilience. These key attributes were also reflected in the stories and lived experiences of participants in the IP sessions. These deliberations revealed that faculty had to be very resourceful and flexible when faced with adverse circumstances, for example and which they maintained were key to their survival. These skills made a difference in faculty members' lives to the extent that those skills determined whether they received tenure and promotion, whether their employment contracts were renewed, whether they were able to secure

attractive research grants, and maintain reasonably high levels of research publications for their

stage of career.

Work Engagement and Faculty Success

Several studies have indicated correlations between engagement and performance

(Gruman & Saks, 2011; Simpson, 2009; Su et al., 2013) even though a significant number of the

extant literature on engagement and performance centers on organizational rather than individual

performance. For example, in a meta-study conducted on over 40 organizations, employee

engagement was positively correlated with organizational performance outcomes (such as

profitability) (Simpson, 2009). This finding supports the claim that a relationship exists between

employee engagement and performance.

However, the literature also suggested a need for more studies on engagement and

individual (rather than organizational) performance (Gruman & Saks, 2011). Our study is part of

a growing number that seeks to fill that research space. Like the findings in this study, there is

evidence to support the claim that a relationship exists between engagement and individual

performance (Xanthopoulou et al., 2008; Demerouti & Cropanzano, 2010), albeit our study

focused on faculty success. For example, a study by Tarus (2014), on employee engagement and

employee performance in Nairobi indicated that "there was a positive correlation (r) between all

the drivers of engagement and performance for example, one driver revealed an $r = 0.675$.

Similarly, this study reaffirmed this positive correlation between work engagement and faulty

success ($r=.409$, $p<.001$) at the University of Saskatchewan. As a result, it can be implied that

academics' vitality and passion for their work might influence their success. This passion and

energy for one's work might relate to their basic needs of competence, relatedness, and

autonomy. In other words, academics' need for autonomy and relatedness manifested by the

211

nature of faculty work may account for the level of energy and passion that they bring to their work which resulted in the association between engagement and faculty success in this study.

The nature of faculty work requires both academic freedom and the need to constantly collaborate mainly in research but also in teaching (and the scholarship of teaching and learning). Therefore, one of the basic tenets of the SDT theory, namely the 'universal needs for competence, relatedness, and autonomy' applies to the nature of faculty work. Deci and Ryan (2008) further suggested that a focus on the extent to which these needs are fulfilled might produce optimal results. It can then be implied that the extent to which some of these exigencies (e.g., autonomy and relatedness) are satisfied in academe, might influence how passionate and energized academics are about their work. Consequently, because of the association between engagement and faculty success, administrators might want to nurture and facilitate systems and processes that promote and engender competence, relatedness, and autonomy among academics.

Work Satisfaction and Faculty Success

Work satisfaction in this study was found to be associated with faculty success (r=.493; p<.001) at the University of Saskatchewan. Much like this study, several empirical studies were found indicating a relationship between work satisfaction and employee performance. A study by Lee and Mowday (1987) revealed, "prior job performance was significantly correlated with job satisfaction ($r = .11$, $p < .05$) ..." (p. 737). However, it is worth noting that the correlational finding by Lee and Mowday (1987) was found to be a weak correlation. While this study revealed a moderate correlation between work satisfaction and faculty success, the results of the current study also revealed that satisfaction did not predict faculty success at the U of S (discussed later). Based on the findings above, the argument can then be made that even though work satisfaction might be important to academics, it is not a strong enough indicator or

212

predictor of their success. Does this then mean that successful academics are not necessarily

satisfied academics or vice versa and if so, what then might be other implications of this trend?

And how might administrators respond to the satisfaction levels or index of academics?

It is also worth noting at this point that the work of academics is highly differentiated so

while some might be highly satisfied with their work, others might not be or the sources of

satisfaction may differ and, therefore, produce mixed or different results, which weakened the

overall relationship between faculty success and work satisfaction. A possible explanation for

this findings or mixed results in the correlation between satisfaction and success may be the very

nature of faculty work being so differentiated. Faculty work is highly differentiated on multiple

bases. Tierney's (1999) work supports this claim confirming the variation among faculty from

different disciplines and post-secondary types. For example, faculty members in community

colleges may place greater emphasis on teaching success more so than on research success in

much the same way that faculty from different academic departments within the same institution

(similar to this study) also have differentiated work and therefore, may have differentiated levels

of satisfaction, which influences their success. Similarly, the work or success expectations of

academics might also differ depending on one's discipline and employment type (for example,

success criteria for a part-time versus a full-time faculty or tenure versus non-tenure track

faculty, and research versus teaching faculty) and may help to explain this correlational finding

between faculty success and work satisfaction.

Because work satisfaction is a "pleasurable psychological state of being resulting from

the appraisal of one's work" (Hoppcock, 1935; Locke, 1976), the claim can then be made that for

academics' satisfaction levels is highly dependent on variables such as their students' success, as

well as their own research and teaching success. However, based on the responses in the IP

sessions, other variables that motivate academics (intrinsically or extrinsically) and ultimately lead to their satisfaction include happiness, personal success, being understood within the context of the organization, meaningful work, and a collegial atmosphere. As a result, it stands to reason that personal and professional fulfillment might lead to work satisfaction (which is associated with faculty success). It can then be implied that by implementing strategies that supports, encourages, and maximizes personal and professional fulfillment among academics, administrators might be able to influence satisfaction levels. These strategies must, however, be carefully implemented or customized in manner that acknowledges the differentiated work of academics as one size does not fit all (department types, discipline-specific, employment types etc.) in order to maximize success.

Organizational Commitment and Faculty Success

There was also a positive and moderately strong correlation between organizational commitment and faculty success in this study ($r = .440$; $p < .005$). Similarly, other studies found in the extant literature revealed an association between organizational commitment and performance. An empirical study by Riketta (2008) also indicated that there is an association between the two variables. In her meta-analytic regression study Riketta (2008) suggested that job attitudes (like organizational commitment) were more likely to influence employee performance than vice versa. The study revealed, "organizational commitment showed a moderately stronger association with employee performance than did job satisfaction, however, both variables' relationship to employee performance were statistically significant ($\beta = .06$)" (p. 476). While this finding of a relationship between commitment and satisfaction to performance is similar to this study's correlational finding, this study revealed that work satisfaction's ($r =$

.493, p<.001) had a moderately stronger relationship to faculty success than organizational commitment (r = .440, p< .001), which was different from Riketta's (2008) study.

Similar to a study by Shore and Martin (1989), wherein job satisfaction was found to be more closely related to supervisory ratings of job performance than did organizational commitment (.26 vs. .05; t (65) 1.68; p < .05), findings in this study also indicated a closer association between job satisfaction and faculty success than the association between organizational commitment and faculty success. The argument can then be made that academics' success is more closely related to their positive state of professional fulfillment than any formed attachments they might have to their employing organization or institution based on the conceptual definitions in this study. Simply put, loyalty to the U of S is not as closely aligned with faculty members' success as do their level of work satisfaction. This finding seems to also be the trend found in the literature. Consequently, this finding may also help to explain the inverse predictive relationship that organizational commitment had with faculty success such that, as their loyalty to the U of S increases, academics' level of success decreases. It, therefore, stands to reason that academics' attachments to and engagement with their work might be more relevant to their success than their attachments to the employing institution (organization).

Trust and Faculty Success

Trust was also positively associated with faculty success (r=.455;p <.001) at the U of S. Similarly, associations were found between trust and performance in the literature, although most of those studies were in fact based on team trust (Dirks, 2000, Jong et al., 2016) or based on organizational performance. However, the dimensions of this study were based on: trust in the decisions of academic heads, in administrative processes, and between faculty members. Therefore, this study focused on the multidimensional aspects of trust unlike most studies found

in the extant literature, which focused mainly on team trust.   This distinction might have

accounted for the variation in our later finding that trust did not predict faculty success at the U

of S, even though in another study (Robertson et al., 2012), trust did predict performance.

Collegiality and Faculty Success

Finally, in this section, collegiality was also strongly and positively associated with

faculty success in the current study. In the literature it was found that mentoring (a key

component of collegiality in the study) was among the top three most critical factors that were

important to individual faculty for their success (Stupnisky et al., 2015). Peluchette and

Jeanquart (2000) also confirmed in their study that mentored academics demonstrated higher

levels of objective faculty success to the extent that academics with limited or no such collegial

relationships were less successful than their counterparts with greater collegial relationships. As

a result, our finding of an association between faculty success and collegiality confirms the link

previous studies found between performance and most of the independent variables in this study.

These past studies also affirm the finding that of all the six independent variables,

collegiality was most significantly associated with faculty success. Notwithstanding the

importance of collegiality and collaboration to faculty success, it is of note that collaboration

might look different across various disciplines within academia as well as between the HE and k-

12 sectors. For example, the IP sessions revealed that some departments, schools, and colleges

in the sample population placed greater emphasis on teaching collaborations while other placed

more emphasis on research collaborations (even though, most emphasized research and other

forms of non-teaching collaborations). On the other hand, the K-12 system (which is not the

focus of this study) emphasized teaching collaborations similar to some departments in our

sample population.

Research Question 2

Do collegiality, work engagement, resilience, organizational commitment, work satisfaction, and trust predict faculty success?

Research question number two sought to determine whether the independent variables collegiality, resilience, work engagement, work satisfaction, organization, and trust predict faculty success at the U of S. Results from the regression analysis conducted revealed that of the six independent variables, only three variables: collegiality ($p < .001$), work engagement ($p = .029$), and resilience ($p = .002$) contributed statistically significantly to faculty success at the U of S. As a result, only collegiality, resilience, and work engagement predicted faculty success at the U of S. Combined, the three-predictor variables of faculty success accounted for or shared 44% of the variability in faculty success. The predictor variables combined had a moderate effect on faculty success at the University of Saskatchewan at the 95% confidence level. These findings mirror some past studies conducted on similar variables such as the study by Rich et al. (2010), which revealed that employee engagement, predicted employee performance. Further, Rich's et al. study found that, "individuals reporting higher levels of engagement tended to receive higher supervisor ratings of task performance" (p. 625). It follows then that those faculty members that were more energized, passionate, and present in academic life were predicted to be more successful than those who were not. The conversion of this high energy (physically, cognitively, and emotionally) (Kahn, 1992) is required to facilitate faculty members' success according to this study. Because of the nature of faculty work life, such high energy behaviours are required in order to survive the extensive and grueling demands of faculty workload resulting from both internal and external pressures to perform (predominantly research and publication), increasing

enrolment figures that also increased teaching workload, as well as the demands to serve in administrative and service capacities.

A direct reason for the significant demands on faculty work life is the desire to obtain tenure and promotion as part of the normal trajectory of an academic in most cases. This external impetus to perform at a level and quality that propels one along this promotional trajectory reflects a type of motivation known as controlled motivation as applied by the SDT theory. Deci and Ryan (2008) shared that controlled motivation describes a situation in which external regulations (such as the tenure and promotion process) inform one's behavior and is the result of external exigencies of rewards or punishment. They also explained that past studies have shown that both autonomous motivation (discussed later) and controlled motivation influences behavior but that autonomous motivation results in greater positive outcomes of better performance success and psychological wellbeing than controlled motivation. Therefore, SDT theory provided a window through which to view the tension between the motivation to succeed and the need for faculty work-life balance as described by the lived experiences of faculty members in the IP sessions. It then begs to reason, whether this connection between the SDT theory and the level of exhaustion and tensions as described by participants in the IP sessions might explain findings in this study, whereby academics' level of trust and satisfaction did not predict their success. Participants in the IP sessions explained that there is tension in prioritizing success indicators because of the increased demand on faculty brought about by ever increasing enrollment targets resulting in increased teaching workload and resultant challenges [of time and other resource constraints] that impacts their ability to meet the ever growing demand for increased research productivity. Additionally, administrators might want to assess the impact that this type of motivation (controlled) has had on the psychological health of employees in past

218

studies according to Deci and Ryan (2008), particularly those in heuristic fields such as academia. Therefore, the impact that the pressures to perform in an atmosphere of 'controlled motivation' may have had on faculty members' work life balance, health, and their wellness might be additional reasons that trust (for example in the administrative processes) and work satisfaction did not predict faculty success at the U of S.

As a result, academics faced with these professional (as well as personal) challenges would need to be vigorous, dedicated, and absorbed in their day-to-day work such that they produce optimal results even while facing the challenges of faculty work life. There is no doubt that academic life is fraught with many challenges, chief among them the pressures to perform as is evidenced by the now 'famous or infamous' slogan *publish or perish* that has been pervasive in academia. These and other challenges in academy are the reasons academics need a high degree of resilience and resilience capacity in order to survive the rigors of academic life to become successful. It, therefore, stands to reason that work engagement combined with resilience (and collegiality) predicted faculty success in this study. Further, Maslach and Leiter (1997) aptly described behaviours that were the opposite of engagement as 'cynicism, exhaustion, and inefficiency.' Faculty members are often forced to dig deep to avoid such emotional and psychological states of being so that they can perform optimally. Academics are then required to have healthy levels of bounce back energy and adaptation skills to meet the challenges inherent in academic life. The need for this bounce back energy might explain the finding that resilience recorded the highest frequency and average among all the independent variables in this study in addition to being a significant predictor of faculty success.

A part of demonstrating resilience energy in faculty life is being aware of when and how to collaborate and connect with other colleagues to support and be supported. This collaborative

culture and climate, which the interpretation panel sessions revealed, is significant to and required by academics as a precursor to and pre-condition of success. Therefore, it stands to reason that collegiality was part of the combined predictors of faculty success in this study. Even though in past studies the predictive relationship between collegiality and faculty success was either sparse or non-existent from the review of literature, collegiality appeared to seamlessly align with the other two variables of resilience (as described above) and work engagement because both heavily lean on or lend themselves to collaborative engagement and a collegial climate. Gruman and Saks (2011) alluded to this alignment in their description of engagement as "a situation where an employee displays emotional connectedness with fellow employees, cognitive valiance, and a high degree of passion for work" (p. 125). Work engagement, resilience, and collegiality are positive psychological variables that ought to be considered carefully by administrators and other stakeholders given its strong association with and predictive power to faculty success. Additionally, this study contributes significantly to the research space on collegiality based on its predictive finding, noting that most past studies on collegiality did not investigate this association (and within the post-secondary context).

However, this study also found that trust, organizational commitment and work satisfaction did not predict faculty success as was previously hypothesized. Unlike this study, past studies have revealed a predictive relationship between some of those variables and performance. For example, Biswas and Varma (2011) claimed that work satisfaction predicts employee performance. Their study on the antecedents of employee performance in India revealed that there is an association between job satisfaction and employee performance ($r = 0.067$, $p < 0.01$) (p. 182).

One possible explanation for the organizational commitment variable not predicting faculty success might be explained by the dynamics of faculty work life whereby the university as a collegium lends itself to greater commitment to one's work (whether that be collaborative or otherwise) rather than the institution itself. Additionally, the autonomy and responsibilities placed on academics by the commitment to academic freedom might also lend itself to greater commitment to faculty work (mainly research and teaching). This freedom enables academics to perform their work of research, innovation, and teaching without undue influence or interference from the institution but within the bounds of acceptable ethical standards and integrity. The academic freedom motivation aligns well with SDT's theory of autonomous motivation, which also includes feelings of volition.

Deci and Ryan (2008) explained that autonomous motivation leads to an experience of volition and that the experience of this type of motivation usually leads to or predicts positive results such as performance success and psychological wellbeing. It might follow then that this climate of academic freedom within the academy might help to explain the finding that organizational commitment did not predict faculty success at the U of S because academics are more commitment to and engaged with the work than with their employing institution and are usually keen with their commitment to academic freedom. Further, the preceding explanation might also support the finding of an inverse predictive relationship between organizational commitment and faculty success.

Research Question 3

In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?

The qualitative research question was addressed via the responses from the collaborative Interpretative Panel (IP) sessions, which were then analyzed and synthesized. Several themes emerged from the faculty responses in the IP sessions, including personal and professional fulfillment, interconnected predictors of faculty success, intrinsic and extrinsic motivators of high work engagement, disincentives to high work engagement, collaborative culture and climate critical to faculty success, and support for faculty work life balance and prioritizing success indicators. These emergent themes from the IP sessions provided a deeper understanding of the initial thematic categories from the survey data and which guided the discussions in the IP sessions. An analysis of the qualitative (mixed) findings revealed additional insights from the predictors of faculty success.

Faculty members articulated that a collaborative culture and climate, resilience, institutional support, and support from colleagues, a healthy work life balance, and a high level of work engagement were critical to their success as academics. As a result of their responses, it is safe to imply that while all six independent variables might influence faculty success, the three-predictor variables: collegiality, work engagement, and resilience combined significantly impacted faculty members' success at the U of S. Based on their responses it can be implied that faculty members experienced autonomous motivation during their work life.

Autonomous motivation, which includes intrinsic and extrinsic motivation, appeared to be a catalyst for faculty members' success. In some cases, the qualitative themes from the IP sessions described forms of intrinsic motivation (for example resilience and work engagement) while others delineated forms of extrinsic motivation (for example collaborative culture and climate, institutional support and support from colleagues) as described in the SDT theory of human motivation. Deci and Ryan (2008) in their SDT theory explained that autonomous

222

motivation includes both intrinsic motivation as well as extrinsic motivation identified with the value of their work to the extent that their work has been assimilated into their sense of self. As a result, factors such as resilience, collegiality and levels of work engagement were manifestations of academics' autonomous motivation. For example, a review of the stories of resilience as reported in the qualitative section of this study revealed that in a number of cases academics' resilience resulted from internal or intrinsic motivation whereby faculty members expressed the need to dig deep in order to bounce back from adverse or challenging situations in academic life or whether they were motivated to excel because of their personal satisfaction with their work. Studies using Deci and Ryan's (2008) theory also revealed that autonomous motivation usually results in more effective performance. This finding might then help to explain why collegiality, resilience, and work engagement predicted faculty success. Additionally, this insight into faculty members' motivation to perform is also instructive for administrators because of its positive effect on performance. Thus, the autonomous motivation stimuli highlighted in the IP sessions, as 'needing greater attention or support should be taken into account in planning faculty work. Some examples included the participants' desire for greater institutional support for research funding and the need for a collaborative climate and culture.

Faculty members also explained that the following might have accounted for the influence of the independent variables on faculty success: the claim that satisfied academics are usually more successful (whether it be their satisfaction from students' success, publications or other areas of academic life) than dissatisfied ones. It was also noted that their satisfaction might be either professional or personal but that both may contribute to academics' success. Mentoring relationships (collegial) and other collegial processes (such as peer reviewing during the tenure

223

and promotion process, external research grant review processes, journal publication peer review processes) were also thought to be critical to faculty members' success. Faculty members also highlighted the importance of the need for trust, which they thought was a necessary ingredient in the flexible work arrangements of faculty life also motivated their success. Another explanation for the influence was that faculty members' resilience was needed to survive or succeed in faculty life generally but especially during the normal trajectory of the tenure and promotion processes in academe. In light of the above findings, which offers some suggestions for the kinds of environmental and psychological factors that might incent faculty success at the U of S, it is apposite to note that even despite excellent conditions (especially environmental), a faculty member's mindset might also affect their success outcomes.

Another theme or finding from this study was the differences in faculty success across tenure. Specifically, a Tukey post hoc test revealed that faculty members in their post between 6-10 years (early career faculty) were more successful that later career faculty members (11-15 years). Participants in the IP sessions suggested that this might be the result of the differences in motivation and focus of faculty members at different stages of their career. Past studies from the extant literature (Braskamp, 1981; Stupnisky et al. 2015) appeared to confirm this explanation. Consequently, stages of career development play a key role in faculty members' perception of success. For example, early career faculty members might be more focused on and motivated by their need to achieve tenure, while later career faculty like Associate and Full Professor might be more focused on a sense of mission, difference making, making an impact in their field, and helping others (Braskamp, 1981; Stupnisky et al. 2015).

Research Question 4

To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive understanding of the predictors of faculty success, using the explanatory, sequential design method?

In reference to research question number four, the interpretation panels with faculty members facilitated a deeper understanding of the quantitative findings in multiple ways. Firstly, the very nature of the interpretation panel sessions allowed for mixed insights to be drawn because the objective of the sessions was to collaboratively analyze selected quantitative findings from the survey data. As a result, the method of data collection was designed to answer research question number 4 to the extent that findings from the IP sessions provided a deeper understanding of the quantitative data. Specifically, the IP sessions provided detailed explanations of the finding that collegiality, resilience, and work engagement were the only predictors of faculty success. even though all six independent variables correlated with faculty success, through the provision of contexts and examples for some of the other quantitative findings, and the provision of comparative perspectives.

Another deeper insight drawn from the survey finding as a result of the IP sessions was that academics require more support in the prioritization of success indicators (mainly that of research and teaching workloads) as well as for work life balance and general wellbeing. The following excerpts from the IP sessions provide contemporary evidence of the shifting dynamic of academic work that was eloquently described by Blackburn and Lawrence (1995) and its attendant challenges:

> …That increased workload in the college in terms of attention to teaching is going to
>
> impact the research element of what we know are the- we know that that's what gets us

reputation and advancement. It's not our teaching; it's our research. So, I can't square

these things. The demand for increased enrollment, the absence of capacity to increase

the faculty complement is gonna bring about a greater workload for teaching, it's gonna

impact research productivity, and where does the senior administration want go with that.

… So there are a lot of pieces to it for sure and like I say, getting your research published

and getting some, some level of success there. Publishing is a key part, we talk about

publish or perish and it is absolutely, 100% true.

Blackburn and Lawrence's (1995) work highlighted the dynamic and sometimes

challenging environment within which academics operate today and how these challenges might

influence faculty members' success. They competently explained the shift in the emphasis of

academics' work from teaching to being more research-focused with the advent of World War 2.

They informed their readers that before World War 2, teaching was the focus of faculty work.

The shift in focus today is on research intensity, which was echoed in the IP respondents' stories.

Jencks and Riesman (1968) referred to this shift in the role of academics as the

'professionalization of faculty.' This shift also resulted in increased salaries being aligned with

publication or increase in publication and the eventual slogan 'publish or perish' among

academics. Blackburn and Lawrence (1995) further explained that in today's academic climate,

success is highly dependent on being recognized for work done and usually this is in relation to

research (and not teaching) because even though teaching is still a vital part of academic life, a

faculty's reputation and by extension the reputation of their department and institution (national

and international) largely results from research not teaching. However, this transformation was

not without its challenges namely prioritizing success indicators and increased workload, and

faculty work life balance (and perhaps opportunities for administrators). These were expounded

226

in the IP sessions and revealed a significant way in which the IP sessions contributed to a more comprehensive understanding of the relationship between the independent variables and faculty success.

Secondly, the IP sessions were also instrumental in providing additional insights from the survey data that required further investigation or were not initially included in the IP protocols. From these deliberations, emerged explanations, comparisons, or connections from the IP session's findings or results. Consequently, a second round of connecting and analysis of quantitative and qualitative data was done using the PIP technique. Some pillar building themes that emerged during this process included:

1. Resilience recorded the highest frequency because of the nature faculty work e.g., immense workload;

2. Low levels of external research grants among respondents were connected to increased workload and insufficient human resource capacity to meet increased demands, which may (inter alia) have an impact on faculty members' research productivity (including securing more external research grants);

3. Need for the institution to address greater access to institutional support and resources that supports academics' research productivity, which ultimately impacts the institution's reputation;

4. Overworking, insufficient institutional support, and high [unrealistic] expectations were possible reasons only 56% of academics felt energized in their day-to-day work.

As a consequence of this additional connecting of the datasets, and in response to research question number four, the IP sessions were pivotal in contributing to a deeper

understanding of the relationships between faculty success and the independent variables, particularly resilience, work engagement, and collegiality.

Study's Significance

In this section, I connected the study's significance and initial research problem with the ultimate findings and initial conceptualization. In Chapter 1, I provided the intended significance of this study; here I expound on what I believe are the contributions of the study. The key variables significant to the study following the findings are collegiality, work engagement, and resilience and their relationship to faculty success. Moreover, collegiality had the most statistically significant relationship to faculty success at the U of S. Building on the literature on faculty success and the self-determination theory, findings from this study suggest that work engagement, resilience, and collegiality predict faculty success at the U of S by supporting academics' competence, relatedness, and autonomy. Therefore, administrators' support of faculty members' competence, autonomy, and relatedness according to the SDT theory, might yield more successful outcomes (for faulty members and the institution). From this synthesis, a re-conceptualization of the study was deemed appropriate as depicted in Figure 5.1.

Figure 5.1. *Study's Re-conceptualized Framework*
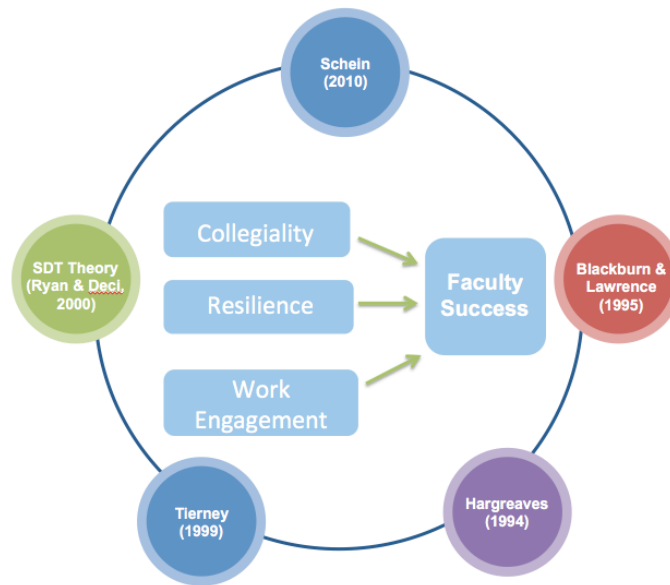
The re-conceptualized framework is the result of the study's finding; whereby three of

the independent variables: organizational commitment, work satisfaction, and trust did not

appear to predict faculty success; but collegiality, resilience and work engagement did so. I posit

that some of the initially described problems or gaps in contemporary higher education described

in chapter 2 might account for these findings. Recall that the corporatization of the academy has

resulted in intense pressure to perform, greater levels of accountability, and increased

competition regionally, federally, and globally in higher education.

PSIs that operate in today's competitive and internationalized landscape are required to

compete for international students (and faculty) to remain competitive in the face of declining

government funding and government-supported recruitment campaigns (Hemsley-Brown &

Goonawardana, 2007). This shift has resulted in the need for PSIs to transform, using more

adaptive and innovative solutions in their operations (Astin & Astin, 2000). Often these adaptive

strategies result in intense stress, overwork and unrealistic institutional targets (void of needed

institutional supports) to name a few of the challenges expressed by faculty members in this study. This intense competition often resulted in demands for increased research productivity in order to remain competitive (both at the faculty and institutional levels), and at times without the necessary support for faculty as revealed by the IP sessions. The corporatization also led to the quest for increased enrolment figures and competition for inter alia the best graduate students and faculty. However, the problem arises where insufficient resources and supports (e.g., financial, professional development, psycho-social), are given to faculty members to meet this moment of intense performance scrutiny and accountability pressures in the academy.

The consequence as described by participants in the interpretation panel sessions is a woeful disconnect between the desired goals (instrumentalist) of the academy and the practical needs of faculty members – needs that if met would facilitate faculty success and ultimately the success of the institution (a win-win scenario). These needs include those described by Ryan and Deci (2000): competence, autonomy, and relatedness needs. Academics' need for connectedness based on the very nature of their work, as a collegium is understandable and is critical to their success and by extension the success of the academy. If, however, there are other forces undermining the fulfillment of such needs, this might lead to less commitment to the organization and trust, which might negatively impact faculty success. Therefore, the foregoing might help to explain why trust and organizational commitment did not predict faculty success.

How then might PSIs navigate and negotiate this pervasive tension such that there is success at both the faculty and institutional levels and what then do the findings from this study mean for academic leaders? The implication of this re-conceptualized framework for academic leaders is that they might want to review their current systems and practices to ensure that space is created to develop faculty members' resilience, collaboration, and engagement capacities, all

factors that predict faculty success. Strategies might in include inter alia, greater promotion of

faculty members' autonomous motivation via more inclusion in decision making processes,

greater collaboration between faculty and administration, fostering and encouraging trusting

relationships among faculty and between faculty and administration (percentages for trust items

were very low with only 37% indicating that they trusted other faculty members within their

academic unit), continued promotion of collegial partnerships at various levels in academe.

Specifically, key stakeholders such as the Vice Provost, Faculty Relations might consider

promoting personal development and capacity building strategies and practices that incent

collegiality, resilience, and engagement within the academy. Additionally, in continuing to build

a culture of success at the U of S, administrators might want to reflectively review their current

state, using principles from Schein's theory. Possible reflective questions in continuing to build

a culture of success might include 1) what are the basic assumptions, values, and practices that

the U of S currently hold versus 2) what are the basic assumptions, values, and practices that the

U of S want to adopt or those that have become relevant to the success of faculty and the

institution? Finally, how might administrators collaboratively (with faculty members) bridge any

possible gaps between the two states or how might the current and the desired states of success

(academic and institutional) achieve greater alignment.

From the analysis of the interpretation panel responses, and the predictive findings, I

conclude that what is needed to successfully navigate and negotiate the tensions and challenge of

the corporatization of the academy (and its effects on faculty life) is balance. This need for

balance was pervasive throughout the multiple responses in the IP sessions. The literature on

faculty work suggests that academics in HE are perhaps more stressed than employees in other

fields, to the extent that the pressures to perform in the corporate academy has significantly

affected the psychological wellbeing of academics (Seeber & Berg, 2016; Catano, Haines, Kirpalani, & Shannon, 2010). The authors have suggested that a large number of faculty members experienced physical, mental, and health related symptoms. The result of this state of affairs in the academy is that faculty at times become burnt out, unsatisfied, and lose trust in the administration and systems they otherwise rely on to support their success. Consequently, these findings in the literature also support the exigency for balance in the academy. This balance I refer to transcends faculty work to include the institution and its interactions with faculty. As a result, my contribution to the research space based on the findings of the study and existing literature is the *double effect of balance in the academy* and how this might result in greater success for both the institution and faculty members if carefully navigated.

The Double Effect of Balance in the Academy

The contemporary pressures, expectations, and demands of faculty work life can be daunting for academics in all stages of career and counter-productive for HE institutions. These intense pressures to perform and competing priorities that characterize faculty life might result in ineffectiveness, low morale and satisfaction, burnout, and ultimate poor performance at both the faculty and institutional levels (Owens, Kottwitz, Tiedt, & Ramierez, 2018; Berg & Seeber, 2016; Braskamp & Ory, 1994; Layzell, 1999). The intentions of the new operating paradigm in academia include: improved research and teaching productivity, higher university ranking/branding, more external funding, increased enrolment, and competitiveness. However, these operational objectives may become counter-productive if the strategies and means to the achieve the outcomes result in faculty burnout, demotivation, dissatisfaction, low organizational commitment, poor collegiality and resilience capacity among other employee attitudes and

psycho-social states of being that have been traditionally been associated with performance effectiveness.

I, therefore, propose that in order to achieve optimal performance outcomes in HE, there needs to be a *two-tier level of balance*. The double effect of balance model was informed by the literature on faculty success as well as the findings of this present study. However, the research also went further by taking a 'step back' approach, assuming a 'big picture' and balanced posture to review the study's findings and extant literature on faculty success. The result was that balance in the academy was critical to faculty and institutional success. Further, the double effect of balance model reveals some perceived advantages (for both faculty and the institution) of balance in the academy, which ultimately results in a win-win scenario for both faculty members and the HE institution. This model is also supported by the traditional win-win principle in organizational theory that usually produces successful organizational outcomes.

On the first level, balance (harmony, alliance, commitment, mutual benefits) between institutional and faculty goals and objectives - goals that do not necessarily result from controlled but rather autonomous motivations and collaborative efforts is needed. There are multiple ways in which this *tier-one* balance might be achieved. Cooperative strategies may facilitate the achievement of this balance and result in a more collaborative climate that fosters better understanding between the two agents, improved alliances, and mutually beneficial performance outcomes. The strategies include ongoing conversations and dialogue, participation and inclusion, professional development and capacity building initiatives, mutual consultations (not the kinds of consultations that takes place after the fact), responsiveness and flexibility (in both directions as depicted by the arrow in Figure 5.2), and other mutual trust and corporation building strategies.

The second level or *tier-two* balance refers to the achievement of balance in academic

work at both the faculty and institutional levels as reflected by the two columns in Figure 5.2.

For faculty members these might include work life balance, higher levels of engagement and

motivation, and personal and professional success. On the other hand, for the institution, balance

as reflected in Figure 5.2 may result in improved relationships between faculty and

administration, improved enrolment and research productivity augmented by mutually agreed

supports and resources to achieve established goals and ultimately improved rankings supported

by faculty.

Figure 5.2. *Double Effect of Balance in the Academy*
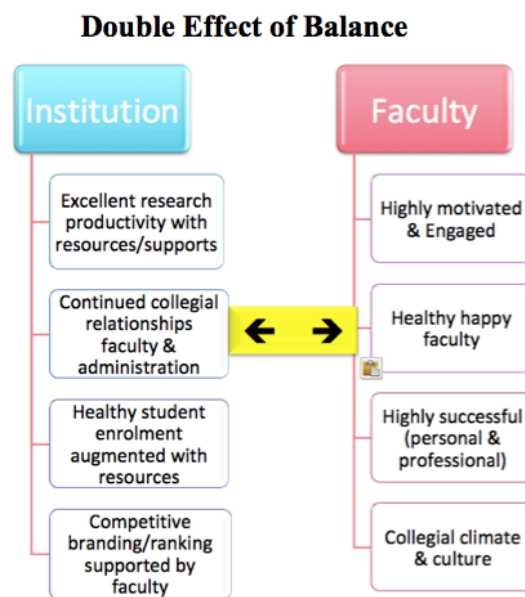
The multidirectional nature of the balance being presented by this study requires effort in

both directions (from faculty to administration and from administration to faculty) as depicted by

the arrow in figure 5.2. The two directional nature described earlier as well as the two-tiered

nature of the balance that is required for faculty success explains the conceptualization of the

double effect of balance in the academy model presented in Figure 5.2. What this means is simply that balance is needed between both tiers (institution and faculty) of academic life as revealed by this study as well as balance within each tier in order to optimize success in academia and result in a win-win scenario for both faculty members and the institution.

Implications for Theory, Further Research, Policy, and Practice

In this section, the implications of the study are discussed. First, the study's theoretical and methodological implications are highlighted, describing its contributions to the field of study. Second, a description of the implications for policy and practice is also presented, offering some recommendations for senior policy leaders in post secondary institutions and finally, the study's research implications were also discussed including suggestions for future studies.

Theoretical Implications

The theoretical implications for this study are multifaceted, in that, it includes both methodological and theoretical consequences. Firstly, this study adds to the research on faculty success in multiple ways including testing variables in the western Canadian context that are not usually tested using the current research design until now. Additionally, this study contributes significantly to the research on collegiality based on its predictive findings, noting that most studies on collegiality are qualitative and have not empirically investigated same (and within the post-secondary context). Stupnisky et al. (2015) found that the most frequently used predictors of success (which were mainly done using qualitative studies) have been little studied using quantitative methods. They, therefore, suggested that further research on the predictors of faculty success using quantitative methods was needed. As a result, this study not only addressed that gap but also provided additional methodological value by using both quantitative and qualitative methods to understand the problem.

235

Consequently, the study's explanatory sequential design based mixed methods approach also added value to the research. By using a mixed approach to investigate the problem, the researcher was able to capitalize on the strengths of this method by compensating for the weaknesses of using either approach alone (quantitative or qualitative). Because of this advantage of the design, deeper insights into the study's quantitative findings were revealed from the mixing (connecting) process from the IP sessions. Additionally, the relative novelty of two techniques used in the study also contributed to its methodological value. These techniques include the interpretation panel sessions, which provided multiple levels of analyses: initial analysis of the quantitative data prior to the sessions, then a second round of analysis of the findings (collaboratively), thirdly, another round of analysis of the findings of the IP sessions, then finally, an additional mixing and meta-analysis and connection of both datasets. The other relatively new technique used in this study relates to the final mixing of the data using the PIP technique, which was established in 2017. The adaptation of this technique represents one of its first applications in the research space. Finally, the development, adaptation and ultimate testing of the scales used in the study also has methodological implications, in that, future studies can adapt all scales used in this study because they were tested and found to be psychometrically sound. Consequently, the above methodological choices facilitated a very robust understanding of the predictors of faculty success.

Research Implications

Even though this study on the predictors of faculty success yielded significant findings and insights relevant to current and future stakeholders in academia including academics and administrators as well as for the research space, there are areas not captured by this study that can inform further studies in the field. Firstly, while this study examined six possible predictor

236

variables of success (three of which predicted faculty success), it did not account for other possible predictors of faculty success. As a result, I recommend that future studies test other variables not captured by this study, including but not limited to the ones suggested by participants in the interpretation panel sessions: clear expectations, work life balance, luck or serendipity, institutional support, and versatility.

Beyond the testing of additional independent variables (for which I recommend expanding the explorative variables beyond six independent variables), I also recommend that future studies conduct additional analyses to include a principal component analysis, using the same research design. This analysis would enable the researcher to determine which of the independent variables in this study contributes more significantly to faculty success. Results of such analyses might also inform the numbers and types of additional variables to include in future studies.

The final set of recommendations and implications for future study include using a larger sample size. I recommend that future studies expand on our study to include a larger sample size that incorporates different types of post-secondary institutions. From this added element, a comparative study that analyses findings across types of post-secondary institutions may be conducted that would inform practice in not just research-intensive post-secondary institutions but also non-research-intensive ones such as community colleges, and technical institutions. In such a study, analyses could also include comparisons across disciplines and fields of study, which might make for a more wide-ranging study, which offers scope for greater generalizations. Finally, because the last stage of the data collection process took place at the outset of the covid-19 pandemic (April 2020), the researcher was not yet able to glean the impact of the covid-19

pandemic on faculty success, another area of study that might yield useful and practical insights for HE, and in which I recommend future studies.

Implications for Policy and Practice

The study was viewed through the lenses of the social determination theory and other works such as Blackburn and Lawrence (1995) and Tierney (1999); various works on culture also guided the study, particularly in unearthing the importance and role of culture in academic life and how these influence faculty successes. Administrators in academe may benefit from insights drawn through application of these works or theories in their quest to improve the performance and competitiveness of their overall institutions.

Implications for senior leaders in post-secondary institutions include leveraging the comparative insights drawn from the application of the SDT theory whereby past studies found that autonomous motivation more so than controlled motivation led to greater psychological wellbeing and more efficient performance outcomes among employees in fields such as academe. When applied to the findings of the study, it was revealed that faculty members (based on the nature of their work) were more aligned with an autonomous type of motivation than the controlled type. This characterization largely stems from their culture, policies, and practices including that of their culturally embedded practice and policy of academic freedom. It is, therefore, recommended that senior leaders in post-secondary institutions implement policies and programs that incents improved psychological and performance outcomes for faculty members.

Further, the findings of the IP sessions suggested that academics believe that greater institutional support is needed to support success. According to respondents, institutional support is needed to support their psychological wellbeing and work-life balance as well as institutional research support, which they thought were critical to their success as faculty

238

members. Senior educational leaders then might want to implement policies that promote positive psychological wellbeing for faculty members and provide greater (and perhaps targeted) research support.

In addition to implications for senior leaders and policy makers in academe, there were also implications for middle managers such as deans and heads of departments. Deans graduate chairs, and heads of departments are usually responsible for the line decision-making within academic units. This important role cannot be overlooked to the extent that insights drawn from this study also has implications for them as it relates to faculty members' success. Along with faculty members, deans, heads of departments, and graduate chairs play a pivotal role in shaping and influencing the culture of the academic unit. This role played by the academic leaders aligns with Schein's (2010) claim that culture is analyzed on multiple levels including the basic values, belief, heroes, and practices shaped or influenced by these leaders. Further, these beliefs, values, assumptions, and artifacts played a vital role in the participants' worldview as well as their performance behaviours.

One of the major findings from the study was that a collaborative culture and climate was integral to faculty members' success. It would then follow that there is a role for academic unit administrators in facilitating and nurturing the development of such a culture, inter alia, through the practices, norms, and values established and embedded within academic units. Beyond leading by example, academic unit administrators might also implement systems and practices that facilitate and promote a collaborative culture. Norms of collegiality in the educational setting include mutual observation, cooperative work planning, and joint learning. Similarly, Nias et al. (1989) suggested the use of strategies, such as treat days, praise and recognition,

239

displaying empathy, and discussion of ideas and resources promote a collaborative culture and in turn influences informal collegial practices.

Hargreaves and Dawe (1990) suggested that collegial practices in education should not be overly 'contrived' or instrumentally mandated. They explained that the pitfalls of contrived collegiality or organizationally mandated collegiality include employees feeling forced and stifled, employee resistance, and does not promote values of trust and support. On the other hand, collaboration and a collaborative culture results in the antecedent variables of performance such as empowerment and employee motivation. Because of its benefits including impacting morale and productivity and motivating greater psychological outcomes, academic unit administrators are encouraged to promote and foster a collaborative culture and climate within their units.

Like collegiality, the other two major predictors of faculty success in this study (resilience and work engagement) were intertwined in influencing academics' success. Gruman and Saks (2011) agreed that employee engagement is fundamental to organizational competitiveness and achievements. While Cooper et al. (2014) affirmed that resilience is an essential characteristic or criteria for excellent workers because of its potential to result in employees operating optimally in the face of otherwise challenging circumstances. The data also indicated that the nature of faculty work requires faculty members to be resilient so much so that resilience recorded the highest average among the independent variables (M= 4.04; SD=0.76). Consequently, unit administrators might want to build the resilience capacity of academics though professional development practices and other support interventions and activities. These support interventions should be planned and organized proactively with a view of building

critical skills such as relationship building, adaptability, and problem-solving capacities, which influence organizational outcomes like faculty success.

Similarly, I recommend that unit administrators in academe implement support systems and practices that encourage high work engagement of faculty members. Because the results of this study revealed that overworking, lack of support institutionally, and high [unrealistic] expectations were possible reasons only 56% of academics felt energized in their day-to-day work, it then stands to reason that there is an opportunity for administrators to incent high engagement among academics. Additionally, given that work engagement is a predictor of faculty success at the U of S, administrators might want to implement innovative ideas, systemic changes, and a review of the alignment of resources to motivate increased work engagement among faculty members in academe. Further, an application of the SDT theory suggests that the extent to which academics' basic needs of autonomy and relatedness are satisfied might influence how passionate and energized they are about their work. Because of the association between engagement and faculty success, administrators might want to nurture and facilitate systems and processes that promote and engender competence, relatedness, and autonomy of academics in higher education.

Concluding Remarks

This study focused on discovering insights from the predictors of faculty success. As a result, the study examined the relationships between faculty success and the psychosocial dimensions of faculty life: collegiality, work engagement, work satisfaction, organizational commitment, resilience, and trust using an explanatory sequential mixed methods design approach. The major results of the study and answers to the research questions were discussed in this chapter applying the social determination theory (Ryan and Deci, 2008) and other works

such as Blackburn and Lawrence (1995) and Teirney (1999) to facilitate a deeper understanding of the results of the study. From this deeper understanding the *Double Effect of Balance in the Academy* insight was then conceptualized and explained as a major recommendation to the academy and contribution to the research space. Implications of the study for theory, future research, policy and practice were also discussed.

In closing, conducting this study was also a time of significant personal growth and reflection for me. Ultimately, this developmental journey tested my own personal and professional resilience greatly, as I navigated extremely challenging and adverse circumstances along the way, which caused me to oscillate at times, but only deepened my understanding of faculty members' lived experiences. Interacting and engaging with the research material was a blessing on my journey because the process of conducting the study motivated me and gave me great resolve to complete the journey at times when I most needed it. The journey also increased my personal efficacy and deepened my research and professional development skills in numerous ways. While I acquired greater skills in designing and conducting research studies generally, my competence in mixed methods approaches (while adapting novel techniques) was also sharpened.

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243

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Appendix A

Survey

Exploring the Predictors of Faculty Success

Consent form will go here with agreement allowing survey to open to participants

Thank you for agreeing to take part in this survey. By completing the questionnaire you will be able to provide your feedback on the predictors of faculty success in your department/college. The collegiality, faculty engagement, satisfaction, commitment, and items from the faculty success scales were adapted from past studies, while the faculty resilience, trust, and items from the success scales were self-developed based on content validity. This questionnaire is being administered by a PhD. candidate in the department of Educational Administration at the University of Saskatchewan.

Your individual responses are strictly confidential, results of which will only be reported as a statistical summary of findings and not on an individual level. At the end of this survey, if you wish to be entered into the draw, please indicate your interest and you will be taken to a page (separate from and unassociated with your survey responses) where you will be asked for contact information to facilitate the draw.

Faculty Success

On a scale ranging from strongly disagree to strongly agree, please indicate the extent to which you have met your personal, interpersonal, or the institution's success with respect to each of the following success indicators: -

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
Perceived Scholarly Success **RESEARCH**						
1. I have a high number of refereed journal articles and/or books published for my discipline, rank and stage of academic career	☐	☐	☐	☐	☐	☐
2. I publish high quality	☐	☐	☐	☐	☐	☐

journal articles (based on number of citations) for my discipline, rank and stage of academic career						
3. I have a high number of external research grants for my discipline, rank and stage of academic career	□	□	□	□	□	□
TEACHING 4. Overall, my student evaluation ratings are excellent	□	□	□	□	□	□
5. Overall, peer assessments of my teaching are excellent	□	□	□	□	□	□
6. Overall, my contributions to graduate student advisement and committee work are seen as excellent	□	□	□	□	□	□
7. I am highly engaged in the improvement of courses and/or programs	□	□	□	□	□	□
8. I regularly engage in innovative teaching practices	□	□	□	□	□	□
9. In my teaching and research, I feel a sense of choice and freedom	□	□	□	□	□	□
10. I feel confident in my teaching and research performance	□	□	□	□	□	□

Interpersonal Success						
11. COLLEAGUE SUPPORT Interaction with and support from my colleagues has a strong influence on my level of success	☐	☐	☐	☐	☐	☐
RELATEDNESS 12. I feel supported by the people I care about when it comes to teaching	☐	☐	☐	☐	☐	☐
13. I feel supported by the people I care about when it comes to conducting research	☐	☐	☐	☐	☐	☐
Institutional Support for Success						
14. Institutional resources and supports are accessible to support my teaching performance	☐	☐	☐	☐	☐	☐
15. Institutional resources and supports are accessible to support my research performance	☐	☐	☐	☐	☐	☐
16. I am an active member of committees that work to support our institutional	☐	☐	☐	☐	☐	☐

goals						
17. I am highly engaged in regional, national or international association(s), such as editorial boards, research grant review committee, disciplinary associations, etc.	☐	☐	☐	☐	☐	☐
18. I am an active member of committees that work to support our departmental, college or school goals	☐	☐	☐	☐	☐	☐

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Collegiality

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
19. Our faculty members provide strong collegial support	☐	☐	☐	☐	☐	☐
20. Professional interactions among our faculty are cooperative and supportive	☐	☐	☐	☐	☐	☐
21. There is a feeling of trust among my colleagues	☐	☐	☐	☐	☐	☐
22. I can count on most of my colleagues to help me, even though this help may not be part of their	☐	☐	☐	☐	☐	☐

official assignment						
23. The faculty members in my academic unit tend to hide their failures and mistakes from each other**	☐	☐	☐	☐	☐	☐
24. I frequently participate in my academic unit's social events	☐	☐	☐	☐	☐	☐
25. Faculty members in my academic unit support new colleagues' career development efforts	☐	☐	☐	☐	☐	☐
26. Faculty members in my academic unit actively mentor colleagues	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
27. In our academic unit, we regularly observe one another's teaching as part of sharing and improving teaching strategies	☐	☐	☐	☐	☐	☐
28. Faculty members in my academic unit are open to being observed in their teaching by their colleagues	☐	☐	☐	☐	☐	☐
29. My teaching has benefitted from my	☐	☐	☐	☐	☐	☐

being open with colleagues about my successes and challenges						
30. My research has benefitted from to being open with colleagues about my successes and challenges	☐	☐	☐	☐	☐	☐
31. I usually consider the feedback that I receive from my colleagues and respond appropriately	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
32. Colleagues in my academic unity regularly cooperate and collaborate	☐	☐	☐	☐	☐	☐
33. Most faculty in my academic unit participate actively in meetings	☐	☐	☐	☐	☐	☐
34. Faculty in my academic unit have worked together in pursuit of the accreditation and/or approval of new programs and	☐	☐	☐	☐	☐	☐

courses					
35. Most faculty members in my academic unit contribute actively to making decisions about our program(s) and curricula	☐	☐	☐	☐	☐	☐
36. My colleagues and I collectively analyze our academic unit's programs and initiatives with some regularity	☐	☐	☐	☐	☐	☐
37. In our academic unit, faculty members encourage each other to contribute ideas and suggestions	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
38. My colleagues and I regularly share teaching materials or resources	☐	☐	☐	☐	☐	☐
39. My colleagues and I have worked out good arrangements for sharing lab space or other	☐	☐	☐	☐	☐	☐

research/teaching resources						

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Organizational Commitment

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Not Applicable**
40. I would happily spend the rest of my career in my current academic unit	□	□	□	□	□	□
41. I feel a strong sense of belonging to my academic unit	□	□	□	□	□	□
42. Right now, staying with my department is a matter of practical necessity rather than a desire**	□	□	□	□	□	□
43. I have a strong sense of commitment to the people in my academic unit	□	□	□	□	□	□
44. I have a strong sense of obligation to remain in my department	□	□	□	□	□	□

**=reversed items

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Work Satisfaction

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
45. I am satisfied with the recognition given to me for the work I've done	□	□	□	□	□	□
46. I am satisfied with my remuneration (salary and benefits)	□	□	□	□	□	□
47. I am satisfied with the way my academic unit is managed	□	□	□	□	□	□
48. I am satisfied with my academic unit's organizational culture and climate	□	□	□	□	□	□
49. I am satisfied with the level of leadership that exists in my academic unit	□	□	□	□	□	□

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Work Engagement

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
50. In my day-to-day work, I feel energized	□	□	□	□	□	□
51. I am passionate about my day-to-day work	□	□	□	□	□	□
52. My day-to-day	□	□	□	□	□	□

work inspires me						

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Trust

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
53. I trust the decisions and actions of my academic head	□	□	□	□	□	□
54. I trust the administrative processes in academic unit	□	□	□	□	□	□
55. There is a high level of trust among faculty in my academic unit	□	□	□	□	□	□
56. Junior faculty members can trust senior faculty in my academic unit	□	□	□	□	□	□

Indicate the extent of your disagreement or agreement with each of the following items, as these relate to your academic unit (department or college/school, if not departmentalized).

Resilience

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
57. I adapt well to organizational changes	□	□	□	□	□	□
58. I am flexible and responsive to changes in my work environment	□	□	□	□	□	□
59. I am able to operate optimally in my job even when faced with	□	□	□	□	□	□

challenging situations in my personal life						
60. Typically, I respond well to life, even in adverse circumstances	□	□	□	□	□	□
61. I bounce back quickly from difficult situations	□	□	□	□	□	□

Demographics

Please fill out the following questions by checking the applicable responses to you and by entering the relevant information in the space provided.

62. What is your gender?	□ Male □ Female □ Other
63. What is your age as of June, 2019?	□under 30 □30-39 □ 40-49 □50-59 □60-69 □ 70 or over
64. What is your highest educational level?	□ Undergraduate degree(s) □ Master's degree(s) □ Doctorate(s) □ Diploma □ Other, Specify _____
65. What is your position title?	□ Assistant Professor □ Associate Professor □ Full Professor □ Faculty with administrative role _____ Other categories _____
66. How long have you held your current faculty position?	□ under 12 months □ 1-5 years □ 6-10 years □ 11-15 years □ 16-20 years □ 21 or more years

THANK YOU FOR YOUR PARTICIPATION!!! ☺

Appendix B

Draft Interpretation Panel Guide Questions

The interpretation panel questions are represented by the study's research questions. Given the study's explanatory sequential design method, the specific questions (or themes from which the questions will be developed will be determined from the results of the quantitative phase) and will generally emanate from the broader research questions.

1) What, if any, relationship exists between predictor variables and faculty success in your department at the University of Saskatchewan?

2) Do the independent variables (collegiality, work satisfaction, work engagement, organizational commitment, resilience, and trust) predict faculty success in your department at the University of Saskatchewan?

3) In what ways have the predictor variables been perceived to influence faculty success in your department at the University of Saskatchewan?

4) To what extent and in what ways did the results from the interpretation panels with faculty members contribute to a more comprehensive understanding of the relationship between the predictor variables and faculty success, using the explanatory sequential design method?

The Ethics Application

Behavioural Application

PART 1: KEY INFORMATION

Title*: **Exploring the Predictors of Faculty Success: A Mixed Methods Study**

Level of Risk: * Minimal risk

Expected Start Date: * 2019-06-30

Expected End Date: * 2019-10-31

If applicable, explain why this application is time sensitive:

Principal Investigator

Name:	NSID:	Email:	Phone:	Organization (Department):
Keith Walker	kdw744	keith.walker@usask.ca	306-966-7623	Educational Administration

Sub-Investigator(s)

Name:	NSID:	Email:	Phone:	Organization (Department):
N/A				

Student(s)

Name:	NSID:	Email:	Phone:	Organization (Department):
Kenisha Blair-Walcott	**Kab055**	**Kab055@usask.ca**	**3062919981**	Educational Administration

Primary Contact

Name:	NSID:	Email:	Phone:	Organization (Department):

| Keith Walker | kdw744 | keith.walker@usask.ca | 306-220-0614 | Educational Administration |

Secondary Contact

Name:	NSID:	Email:	Phone:	Organization (Department):
N/A				

Sponsor(s)

Sponsor:	Pending / Awarded
N/A	

Agency(ies)

This project is funded: *	☐ Yes ☒ No
The funding supporting this project will be administrated at the University of Saskatchewan	☐ Yes, complete Part A
	☒ No, complete Part B

Part A: For Grants and Contracts administered by the U of S:

Project Application(s) Directly Associated with the Fund(s) Supporting this Project. **N/A**

Specify the UnivRS internal ID# (for pending grants or contracts):   **N/A**

Project(s) Directly Associated with the Fund(s) Supporting this Project **N/A**

Specify the UnivRS internal ID# (for awarded grants or contracts):   **N/A**

Part B: For Grants or Contracts not administered by the U of S:

Agency:	Pending / Awarded
N/A	

Location(s) Where Research Activities Are Conducted

Enter every location where this research will be conducted under this Research Ethics Approval: * **University of Saskatchewan Campus**

Country(ies):* List all countries where you will be conducting your research under this Research Ethics Approval. **Canada**

If this project will be conducted within schools, health regions, or other organizations, specify how you will obtain permission to access the site. Submit a copy of the certificate or letter of approval when obtained.

Not Applicable

If you do not plan to seek approval, provide a justification:

Other Ethics Approval

This project has applied for/received approval from another Research Ethics Board(s) *	☐ Yes ☒ No

If 'yes', identify the other Research Ethics Board(s):   **N/A**

Conflict of Interest

Confirm whether any member of the research team or their immediate family members will:

Receive personal benefits over and above the direct costs of conducting the project, such as remuneration or employment: *	☐ Yes ☒ No
Receive significant payments from the Sponsor such as compensation in the form of equipment, supplies or retainers for ongoing consultation and honoraria: *	☐ Yes ☒ No
Have a non-financial relationship with the Sponsor such as unpaid consultant, board membership, advisor or other non-financial interest: *	☐ Yes ☒ No
Have any direct involvement with the Sponsor such as stock ownership, stock options or board membership: *	☐ Yes ☒ No
Hold patents, trademarks, copyrights, licensing agreements or intellectual property rights linked in any way to this project or the Sponsor: *	☐ Yes ☒ No
Have any other relationship, financial or non-financial, that if not disclosed, could be construed as a conflict of interest: *	☐ Yes ☒ No

If yes was answered to any question(s), explain the personal benefit(s) and how the conflict will be managed: **N/A**

Part 2: PROJECT OVERVIEW

Project Overview

Summarize this project, its objectives and potential significance: *

In an era where great emphasis is being placed on performance in the post-secondary education sector, one has to explore not just the market drivers of performance, but also the pyscho-social drivers, which my lead to faculty success.   The following psycho-social variables may contribute to faculty success: collegiality, work engagement, work satisfaction, commitment, trust, and resilience. At the professorial level, inter-organizational, and intra-departmental relationships, such as patterns of mutual encouragement, mentoring and

coaching, become drivers of performance and warrant exploration. Additionally, other work related variables may correlate with faculty performance or success. As a result, there has been significant interest in exploring performance-related variables in higher education. Some areas of performance focus include faculty accountability, productivity, efficacy, and citizenship contributions. Traditionally, there has been an emphasis on values of isolation and competition in faculty performance based on the nature of scholarship (Astin & Astin, 2000). Therefore, a study of psycho-social variables such as collegiality, work engagement, and satisfaction and its impact on faculty success is timely.

Purpose of the Study

Having identified some of the contemporary challenges to faculty performance in this new era of possible declining collegiality, this study seeks to gain insights into the predictors of faculty success. Specifically, the study is bounded by the case of the province of Saskatchewan. To this end, the University of Saskatchewan will be examined. There are challenges entailed with exploring this topic on a national scale because among other things, Canada is a federation. According to Jones (2009) Canada's status as a federation makes it "one of the most decentralized PS education (PSE) systems in the developed world" (p. 360). As a result, each province governs its own higher education system, resulting in differentiation among them.

No study of this nature was found on the Western Canadian context (of which, Saskatchewan is a part). Further, very few empirical studies have been conducted on variables such as collegiality and faculty performance (or success) (Miles, Shepherd, Rose & Dibben, 2015). Additionally, no mixed methods studies on the topic were found in the western

Canadian context. Therefore, the study's empirical and methodological value will be of significance to the province (with insights for wider Canadian HE system), as well as the research space on faculty success and performance.

I will examine the relationship between collegiality, work satisfaction, work engagement, trust, organizational commitment, resilience and that of faculty success. The six selected variables will be measured to determine if they are predictors of faculty success. These variables were selected based on investigation of past empirical studies on the relationship between these variables and performance in other areas (Meyer & Herscovitch, 2001; Mayer & Schoorman, 1992; Macey et al., 2009), which revealed some form of construct association. Because these variables are highly associated with strong performance in past studies, I will assess the relationship between them and faculty success.

Provide a description of the research design and methods to be used: *

This is a mixed methods design-based research. This method was deemed appropriate to respond to the research questions (See below).

The Research Questions

The study proposes to analyze the relationship between the independent variables collegiality (C), work satisfaction (WS), work engagement (WE), organizational commitment (OC), resilience (R), and Trust (T) and the dependent variable faculty success (FS). The research questions that guide the study include:

Research Question 1: What, if any, relationships exist between collegiality, work satisfaction, work engagement, organizational commitment, resilience, and trust (independent variables) and faculty success (dependent variables) at the University of Saskatchewan?

Research Question 2: To what extent does collegiality, work satisfaction, work engagement, organizational commitment, resilience, and trust predict faculty success at the University of Saskatchewan?

Research question 3: In what ways have the predictor variables been perceived to influence faculty success in your department at the University of Saskatchewan?

Research Question 5: To what extent and in what ways did the results from the interpretation panels with faculty members contribute to a more comprehensive understanding of the relationship between the predictor variables and faculty success, using the explanatory sequential design method?

Methodology – A mixed methods design-based study (explanatory sequential mixed methods design) is proposed as the selected methodology. This methodology is generally aligned with the pragmatist paradigm in the literature. According to Creswell and Plano Clark (2007), "Pragmatism is typically associated with mixed methods research. The focus is on the consequences of research, on the primary importance of the question asked rather than the methods, and multiple methods of data collection inform the problems under study" (p. 23). This approach therefore, aligns with the purpose and objectives of the study.

Methods – quantitative (survey) and qualitative (interpretation panels) methods will be employed in this study. The survey will be administered in the quantitative strand (1st phase) of the study, while four (4) interpretation panel discussions with 4-6 faculty members (not necessarily those who participated in the survey) will take place during the qualitative strand (2nd phase) of the study. Subsequently, the researcher will analyze and interpret the findings and results of both phases, which will represent part of the triangulation or integration process.

This study is a correlative and comparative study - in part, this is a correlative study that will test the relationship between the predictor variables and faculty success as well as to gain in-depth explanations of the quantitative results while comparing the results across departments and colleges. The researcher will assume an exploratory and confirmatory stance. The study will test the view that a relationship may exist between the predictor variables and faculty success (confirmatory stance). Further, the researcher will gather more in depth information on participants' experiences via the interpretation panels (exploratory stance). As a result, a mixed methods approach is being proposed in alignment with the study's purpose and worldview or theoretical paradigm of Pragmatism.

Sampling Approach

For this study, both qualitative and quantitative sampling methods will be employed based on the study's design. As Teddlie and Yu (2007) claimed, "mixed methods sampling strategies involve the selection of units or cases for a research study using both probability sampling (to increase external validity) and purposive sampling strategies (to increase transferability)" (p. 78). Therefore, for this study, the purposive sampling strategy will be used in the qualitative phase (to ensure that faculty members with the requisite experience and knowledge in the area are sampled), while a multiplicity of quantitative sampling techniques will be used or adapted for the quantitative phase.

Sampling – quantitative strand. The sampling strategy that will be used in the quantitative component of the study is based on multiple methods. Specifically, the fourth method of sampling in mixed methods studies identified by Teddlie and Yu (2007), 'Sampling Using Multiple Probability Techniques' will be used. The rationale for the use of this

285

technique is because of its basic design and appropriateness for this study. According to Teddlie and Yu (2007), "A simple random sample is one is which each unit (e.g., persons, cases) in the accessible population has an equal chance of being included in the sample, and the probability of a unit being selected is not affected by the selection of other units from the accessible population" (p. 79). This technique primarily incorporates multiple traditional sampling methods used in quantitative studies, such as random sampling, stratified random sampling, and cluster sampling. The University of Saskatchewan was purposively selected as the institution under study because of practicality and accessibility. However, within the institution, the population will be placed in clusters or categories of faculty (for example faculty per department/college). The participants (based in their naturally occurring population) in the quantitative phase will then be selected using the random sampling technique in the quantitative strand, whereby the survey will be circulated widely across the naturally occurring population by (colleges/departments/units), thereby giving equal opportunity for participation in the survey and allowing for comparisons across colleges and or departments.

Even though the entire population will have an equal opportunity of participating in the survey, the research has developed a threshold of desirable sample sizes for the quantitative phase, highlighted below. The sample size for the quantitative phase is proposed to be no less than 10-15% of the total population.

Duration and Location of Data Collection Events

Outline the duration and location of data collection for the following, if applicable: **End of June to September, 2019 at the University of Saskatchewan campus**
Audio/Video Recording(s): **N/A**

Ethnography: **N/A**

Group Interview(s):   **N/A**

Focus Group(s)/Interpretation Panel Discussion: **Four to six faculty members will**

participate in 4 online interpretation panel discussions to analyze the initial findings

from the survey as part of the exploratory objective of the study. Duration - 30 – 45

minutes per session

Home Visit(s): **No**

Individual Interview(s): **No**

Non-Invasive Physical Measurement(s): **No**

Participant Observation: **No**

Questionnaire(s): **25-35 minutes to complete questionnaires (time-frame for returns – 6 weeks, with 3 follow-up reminders at intervals, if necessary)**

Secondary Use of Data or Analysis of Existing Data: **N/A**

 Other: N/A

Internet-Based Interaction

Confirm whether this project will involve internet-based interactions with participants, including e-mails: *	☒ Yes ☐ N

If a third party research or transaction log tool, screen capturing or website survey software or masked survey site is used, describe how the security of data gathered at those sites will be ensured:

The survey will be programmed and administered online by the Social Sciences Research Laboratories (SSRL). The SSRL will program the survey using the survey programming platform called Voxco, a Canadian-owned company with servers located in Canada. Data will then be retained by the SSRL using a secure University of Saskatchewan shared drive (shared by SSRL staff). The server is managed by the University of Saskatchewan ICT department, and data is backed up daily.

Describe how permission to use any third party owned site(s) will be obtained: **The University of Saskatchewan via SSRL has permission/license to use this tool.**

If participants may be identified by their email address, IP address or other identifying information, explain how this information will remain private and confidential: **The participants are not using their emails. They will only click on the link and answer the questions. Moreover, I will ensure that no open group emails will be sent to participants; emails will be securely stored separately from data.**

Anonymity and Confidentiality

Confirm whether participants will be anonymous in the data gathering phase of the project: * Yes, for the survey phase; No, for the interpretation panel discussions. NOTE: For the draw to win a prize, participants will be informed that **To protect survey response data from draw data, a separate link will be provided at the end of the survey for participants to complete a small survey to collect personal data such as their email such that the winner of the draw can be identified and prize of a gift card with the value of $150 delivered. Participants will be taken to this new page (separate from and unassociated with your survey responses) where they will be asked for contact information to facilitate the draw.** **The information (emails) of participants will be kept confidential until after the draw and successful contact with winner - then all draw data will be removed and destroyed.** **For the interpretation panel discussion, at the end of participation, participants will be given an opportunity to enter their names in a draw (box provided) for the opportunity to win a $100 gift certificate. The draw will be conducted at the end of the series of focus group sessions and winner notified. After which, all names and personal information will be destroyed by shredding.**	☐ Yes ☒ No

If 'No' was answered to the previous question, explain how the confidentiality of participants and their data will be protected, and include whether the research procedures or collected information may reasonably be expected to identify an individual: **See below**

Identify any factors that may limit the researchers' ability to guarantee confidentiality:

For the quantitative phase of the study, the data gathering process will be completely anonymous (online survey). On the other hand, complete anonymity cannot be guaranteed for the qualitative strand, given the nature of interpretation panels, whereby participants will be interfacing with other participants.

I will undertake to safeguard the confidentiality of the interpretation panel discussions, but cannot guarantee that other members of the group will do so. I will advise participants to 'please respect the confidentiality of the other members of the group by not disclosing the contents of this discussion outside the group, and to be aware that others may not respect their confidentiality.'

Additionally, to protect the confidentiality of participants, data will be presented in aggregate form so that it is not possible to identify individuals who participated in both strands of the study (this will also be communicated to participants before, during, and after participation).

Further, consent forms for interpretation panels will be stored separately from other

data or information received from participants so that it will not be possible to associate a name with a given response.	
Limits due to the nature of group activities, such as a focus group where the project team cannot guarantee confidentiality: Interpretation Panels are special forms of focus group sessions, a method, which by its nature cannot guarantee confidentiality of participants. Participants will be encouraged to maintain confidentiality of responses and reminded that results will only be reported as aggregate. Therefore, no identifying information will be included as stated above	☒ Yes ☐ No
Limits due to context: individual participants could be identified because of the nature or size of the sample:	☐ Yes ☒ No
Limits due to context: individual participants could be identified because of their relationship with the project team:	☐ Yes ☒ No
Limits due to selection: procedures for recruiting or selecting participants may compromise the confidentiality of participants, such as those referred to the project by a person outside the project team: Only in the qualitative phase, mainly because of the purposive sampling that will be done to include persons with the requisite knowledge and expertise in the area of study	☒ Yes ☐ No

Other confidentiality limits: **No**

Risks and Benefits

Explain the psychological, emotional, physical, social or legal harms that participants may experience during or after their participation: **N/A**
Describe how the above risks will be managed. If appropriate, identify any resources to which they can be referred: **N/A**
Describe the likely benefits of the research that may justify the above risk(s):   **N/A**

Part 3: Community Engagement

Aboriginal Peoples and Community Engagement

Aboriginal communities, peoples, language, culture or history is the primary focus of this project: *	☐ Yes ☒ N
Aboriginal people will comprise a sizable proportion of the larger community that is the subject of research even if no Aboriginal-specific conclusions will be made: *	☐ Yes ☒ No ☐ Not Applicable
There is an intention to draw Aboriginal-specific conclusions from this project: *	☐ Yes ☒ No
This project will involve community-based participatory research: *	☐ Yes ☒ No

There will be a research agreement between the researcher and community:	☐ Yes ☒ No

Aboriginal Engagement and Community-Based Participatory Research

If 'yes' was answered to any of the above questions, complete the following:

Outline the process to be followed for consulting with the appropriate community: **N/A**

Describe the organizational structure and community processes required to obtain approval within the specific community(ies): **N/A**

Describe any customs and codes of research practice that apply to the particular community(ies) affected by the project: **N/A**

Describe how the research plan will consider mutual benefit to the participating community(ies), support capacity building through enhancement of the skills of community personnel and the recognition of the role of elders and other knowledge holders: **N/A**

Describe how the community representatives will have the opportunity to participate in the interpretation of the data and the review of research findings before the completion of any reports or publications: **N/A**

Describe how the final project results will be shared with the participating community(ies): **N/A**

Please note that aboriginal peoples will not be explicitly excluded from the study.

PART 4: RECRUITMENT AND CONSENT

Participant Recruitment

Indicate the expected number of participants and provide a brief rationale for the number: *

An advertisement/recruitment notice to participate in the study will be sent through the U of S communication channels, inviting faculty members to voluntarily participate in this study. The study aims to sample approximately 150 faculty members from the U of S for the survey phase and approximately 16-24 faculty members for the interpretation panel discussions (to be purposively selected). The rationale for number of participants for the survey was to sample well using the indicator of 10-15 % of the population for the quantitative phase (using random sampling). This is to confirm that only publicly available contact information will be used in the purposeful sampling for the interpretation panel discussions.

A separate link to the enter for a draw for a small incentive which can only be accessed after completion of survey will also be included in accordance with ethics guidelines.

Describe the criteria for including participants: * **Participants will be selected based on their employment as faculty members in the selected post-secondary institution as well as their willingness and availability to participate in the study**

Describe the criteria for excluding participants: * **non-academics; unwillingness to participate and unavailability**

Provide a detailed description of the method of recruitment, such as how and whom will identify and contact prospective participants: *

The survey will be programmed and administered online by the Social Sciences Research Laboratories (SSRL). The SSRL will program the survey using the survey programming platform called Voxco, a Canadian-owned company with servers located in Canada. Data will then be retained by the SSRL using a secure University of Saskatchewan shared drive (shared by SSRL staff). The server is managed by the University of Saskatchewan ICT department, and data is backed up daily.

The participants in the interpretation panel discussions will be purposively sampled by my supervisor/principal investigator, Keith Walker and I. As such, recruitment will be by sending direct invitations to these individuals based on the knowledge of and experience in the area of study. The strategy of oversampling will be used. As such, direct invitations may be sent to approximately 30-40 faculty members with the objective of sampling at least 16-24 participants.

If the project involves vulnerable, distinct, or cultural groups, or if the project is above minimal risk, describe the research team's experience or training in working with the populations: **N/A**

Explain any relationship between the researchers and the participants, including any safeguards to prevent possible undue influence, coercion or inducement: * **N/A**

Provide the details of any compensation or reimbursements offered to the participants: **N/A**

Consent Process

Describe the consent process: At the beginning of the survey, participants will be informed of the nature of the study, inviting their consent to participate, as indicated in the consent form.

A similar process will take place with the interpretation panel discussions whereby participants' consent will be sought in writing prior to completion of the discussion as indicated in the relevant completed consent form.

Specify who will explain the consent form and consent participants: * **Participants in the survey will read the first part (consent page) and check "the box" to agree, in order continue with the questions** for the survey and **The principal investigator and or student researcher will explain consent form and consent to participants for the interpretation panel discussions.**

Explain where and under what circumstances consent will be obtained from participants: *

I will explain to the participants the rationale of the interpretation panel. I will read out the contents of the consent form that clearly outlines their rights and the voluntary nature of their participation. Participants will demonstrate consent by signing the consent form, which will be sent to them prior to the day of the panel discussion because these will take place virtually.

Describe any situation where the renewal of consent might be appropriate and how it may be Obtained: * **N/A**

If deception of any kind will be used, justify its use, describe the protocol for debriefing and re-consenting participants upon completion: * **N/A**

If any of the participants are not competent to consent, describe the process by which their capacity or competency will be assessed, identify who will consent on his/her behalf (including any permission or information letter to be provided to the person or persons providing alternate consent), as well as the assent process for participants:

This study targets only participants relevant to its objectives who are, by definition, faculty members at post-secondary institutions. I, therefore, do not envision the need for recruitment of participants incompetent to provide consent. However, should any participant exhibit difficulties in consenting, I will explain the process in the simplest terms possible in local language. Participants who will completely be unable to consent will be excused from participation.

Describe how and when participants will be informed about their right to withdraw, including the procedures to be followed for participants who wish to withdraw at any point during the project: *

Participants will be informed of their right to withdraw during the initial invitation to participate in both strands of study. Participants in the survey will be unable to withdraw their survey data following submission of survey as stated in consent form because participation is anonymous.

Participants in the interpretation panel discussions will again be informed of this right during these sessions and in any subsequent follow-up communication with participants. If participant decides to withdraw, all data supplied by the participant will be destroyed and all record of his/her participation in the study destroyed. They will be informed that whether they choose to participate or not will have any effect on their employment position or how they will be treated. They will also be informed that their right to withdraw data from the study will apply until December 30, 2019 (after results have been disseminated, data has been pooled, etc.). After this date, it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw their data.

PART 5: SECURITY AND STORAGE

Data Security and Storage

Identify the research personnel responsible for data collection: * **The Student Researcher (Kenisha Blair-Walcott) will be responsible for data collection**

Specify who will have access to raw data, which may include information that would identify participants: * **The principal investigator and student researcher**

Describe the data storage plans, including the arrangements for preventing the loss of data: *

Throughout the data collection and analysis period, data will be transported on a password protected personal laptop, backed up on PAWS storage. A copy of the survey data will be held by Dr. Keith Walker (supervisor of this research) for required period of storage of at least 5 years post publication.

Transcripts of interpretation panels, survey results, and researcher notes will be stored in a locked cabinet in the office of the principal investigator

Confirm whether the Principal Investigator will be responsible for data storage: *	☒ Yes ☐ No

If no, specify the reasons and indicate who will be responsible for data storage:

Specify how long data will be retained: *Consent forms will be stored separately from data for a minimum of 5 years following publication. All physical data or forms will be destroyed by the process of shredding following the storage period.*

If other, specify duration and provide justification: **N/A**

Explain how the collected data is intended to be published, presented, or reported: * **Final Dissertation and possible journal publications**

Describe the final disposition of research materials: *   **Upon successful defense of dissertation, the digital data will be permanently erased on the computer by Eraser software (windows 10) and digital files and other data will be conveyed to Professor Walker who will store these data in a locked cabinet, designated for this purpose in one of his offices for stipulated 5 year period. He is the only person with access to this file cabinet.**

State whether data will be transferred to a third party: *	☐ Yes ☒ No

Organization(s) where data will be transferred: **N/A**

Indicate how data will be transferred to the third party: Choose an item.

If other, please specify: **N/A**

PART 6: DECLARATION OF PRINCIPAL INVESTIGATOR

By submitting this application form, the Principal Investigator (PI) attests to the following:

- the information provided in this application is complete and correct.
- the PI accepts responsibility for the ethical conduct of this project and for the protection of the rights and welfare of the human participants who are directly or indirectly involved in this project.
- the PI will comply with all policies and guidelines of the University and affiliated institutions where this project will be conducted, as well as with all applicable federal and provincial laws regarding the protection of human participants in research.
- the PI will ensure that project personnel are qualified, appropriately trained and will adhere to the provisions of the Research Ethics Board-approved application.

- that adequate resources to protect participants (i.e., personnel, funding, time, equipment and space) are in place before implementing the research project, and that the research will stop if adequate resources become unavailable.
- any changes to the project, including the proposed method, consent process or recruitment procedures, will be reported to the Research Ethics Board for consideration in advance of implementation.
- will ensure that a status report will be submitted to the Research Ethics Board for consideration within one month of the current expiry date each year the project remains open, and upon project completion.
- if personal health information is requested, the PI assures that it is the minimum necessary to meet the research objective and will not be reused or disclosed to any parties other than those described in the Research Ethics Board-approved application, except as required by law.
- if a contract or grant related to this project is being reviewed by the University or Health Region, the PI understands a copy of the application, may be forwarded to the person responsible for the review of the contract or grant.

DOCUMENT(S)

Please provide a list of documents that are being submitted along with this application: e.g. Consent forms, questionnaires, interview questions, data collection sheets, recruitment materials.

Survey
Interpretation Panel Guide
Consent Form
Recruitment Notice

Appendix D

Behavioural Research Ethics Board Certificate of Approval

Appendix E

Behavioural Research Ethics Board Certificate of Approval Amendment

UNIVERSITY OF SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)   25-Mar-2020

Certificate of Approval Amendment

Application ID: 1279

Principal Investigator: Keith Walker

Department: Department of Educational Administration

Locations Where Research Activities are Conducted: University of Saskatchewan Campus, Canada
Virtual,Online space, Canada

Student(s): Kenisha Blair-Walcott

Funder(s):

Sponsor:

Title: Exploring the Predictors of Faculty Success: A Mixed Methods Study

Approved On: 23/03/2020

Expiry Date: 26/06/2020

Approval Of: Behavioural Amendment Form (23-March-2020)

Amended Consent Form

Acknowledgment Of:

Review Type: Delegated Review

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 2014). The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this project, and for ensuring that the authorized project is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month prior to the current expiry date each year the project remains open, and upon project completion. Please refer to the following website for further instructions: https://vpresearch.usask.ca/researchers/forms.php.

Digitally Approved by Diane Martz, Chair
University of Saskatchewan

Appendix F

Consent Forms

<div style="text-align:center">

Consent Form

</div>

UNIVERSITY OF SASKATCHEWAN

<div style="text-align:right">

Department of Educational Administration
College of Education
University of Saskatchewan
Participant Consent Form

</div>

You are invited to participate in a research study entitled: Exploring the Predictors of Faculty Success: A Mixed Methods Study

Researcher(s): Kenisha Blair-Walcott, PhD. Candidate, Department of Educational Administration, University of Saskatchewan; kab055@usask.ca

Supervisor: Keith Walker, Department of Educational Administration, 306-220-0614 (office cell number)

Purpose(s) and Objective(s) of the Research:

- The purpose of this study is to examine the relationship between collegiality, work satisfaction, work engagement, trust, organizational commitment, and resilience with that of faculty success. The study hopes to determine predictors or determinants of faculty success in an era of great emphasis on performance in the post-secondary field.

Procedures:

This study is being conducted at the University of Saskatchewan among the population of faculty members in various departments, schools, and colleges. In this mixed methods study, an online survey was circulated to participants for completion with a time commitment of approximately 20 minutes. First level analysis of the survey findings was done and themes developed for the qualitative phase – **interpretation panel discussions** in which approximately 24 faculty members were selected to collaboratively interpret the findings from the quantitative phase via 4 virtual sessions with 4-6 faculty members. Thereafter, a final analysis and triangulation or integration of the results will be conducted.

In appreciation for your time and participation in the interpretation panel, you will have an opportunity to enter to win a draw of a gift certificate valued at $100. The draw will be conducted at the end of the series of interpretation panel sessions and the winner notified. After which, all names and personal information will be destroyed by shredding.

The sessions will be conducted virtually using the Cisco WebEx platform due to the current pandemic being experienced. The sessions will be recorded for note-keeping and transcription purposes and the recording destroyed thereafter.

Potential Risks:
- There are no known or anticipated risks to you by participating in this research. However, participants are encouraged to only answer those questions with which they are comfortable.

Potential Benefits:

- The results of this study may be beneficial not only to the body of research in the field of faculty development and performance but also to the U of S and other post-secondary institutions that might use the results of this empirical study to evidence their decision-making in the areas of faculty development and performance. Finally, other faculty members may find useful the finding of such a study in their quest to become successful in their careers.

Confidentiality:

- To protect the confidentiality of participants, data will be presented in aggregate form so that it is not possible to identify individuals. Consent forms will be stored separately from other data or information received from participants so that it will not be possible to associate a name with a given response in the qualitative phase.
- For the interpretation panel discussions, the researcher will undertake to safeguard the confidentiality of the discussion, but cannot guarantee that other members of the group will do so. Please respect the confidentiality of the other members of the group by not disclosing the contents of this discussion outside the group, and be aware that others may not respect your confidentiality.
- Although the data from this research project will be published and presented at conferences, the data will be reported in aggregate form, so that it will not be possible to identify individuals. Moreover, the Consent Forms will be stored separately from the interpretation panel transcripts and researcher notes, so that it will not be possible to associate a name with any given set of responses. Please do not put your name or other identifying information on the research materials used.

Storage of Data:

- The principal investigator is responsible for the storage of data and both the principal investigator and the student researcher will have access to the data. Transcripts of interpretation panels and researcher notes will be stored in a locked cabinet in the office of the principal investigator for a period of at least 5 years following publication. All physical data and forms will be destroyed by the process of shredding after the storage period expires.

Right to Withdraw:

- Your participation is voluntary and you can participate in only those discussions that you are comfortable with. You may withdraw from the research project for any reason, without explanation or penalty of any sort. Should you wish to withdraw, you may leave the online focus group meeting at any time; however, data that have already been collected cannot be withdrawn as it forms part of the context for information provided by other participants.
- Whether you choose to participate or not will have no effect on your employment position or how you will be treated.
- Your right to withdraw from the study will apply until June 1, 2020 (results have been disseminated, data has been pooled, etc.)

Follow up:

- To obtain results from the study, please email the principal investigator for a copy of the research results at keith.walker@usask.ca.

Questions or Concerns:
- Contact the researcher(s) using the information at the top of page 1;
- This research project has been approved on ethical grounds by the University of Saskatchewan Behavioral Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent

I read and explained this consent form to the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand it.

_____

Name of Participant

_____   _____

Researcher's Signature   *Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

You are invited to participate in a research study entitled: Exploring the Predictors of Faculty Success
Researcher(s): Kenisha Blair-Walcott, PhD. Candidate, Department of Educational Administration, University of Saskatchewan; kab055@usask.ca
Supervisor: Keith Walker, Department of Educational Administration, 306-2200615 (office number); keith.walker@usask.ca

Purpose(s) and Objective(s) of the Research:

The purpose of this study is to examine the relationship between collegiality, work satisfaction, work engagement, trust, organizational commitment, and resilience with that of faculty success. The study hopes to determine predictors or determinants of faculty success in an era of great emphasis on performance in the post-secondary field.

Potential Risks:
- There are no known or anticipated risks to you by participating in this research**.** However, participants are encouraged to only answer those questions with which they are comfortable.

Potential Benefits:
- The results of this study may be beneficial not only to the body of research in the field of faculty development and performance but also to the U of S and other post-secondary institutions that might use the results of this empirical study to evidence their decision-making in the areas of faculty development and performance. Finally, other faculty members may find useful the finding of such a study in their quest to become successful in their careers.

Confidentiality:
- To protect the confidentiality of participants, data will be presented in aggregate form so that it is not possible to identify individuals. Consent forms will be stored separately from other data or information received from participants so that it will not be possible to associate a name with a given response in the qualitative phase.
- This online survey will be completely anonymous, thereby, assuring confidentiality of responses.
- Although the data from this research project will be published and presented at conferences, the data will be reported in aggregate form, so that it will not be possible to identify individuals.

Storage of Data:
- The principal investigator is responsible for the storage of data and both the principal investigator and the student researcher will have access to the data. Survey results, and researcher notes will be stored in a locked cabinet in the office of the principal investigator for a period of no longer than 5 years**.**

Right to Withdraw:
- For participants in the survey, please be aware that, you will not be able to withdraw once your response has been submitted since data will be anonymous and impossible to disaggregate. You are free to omit any question
- Whether you choose to participate or not will have no effect on your employment position or how you will be treated.

Follow up:
- To obtain results from the study, please email the principal investigator for a copy of the research results at keith.walker@usask.ca.

Questions or Concerns:
- Contact the researcher(s) using the information at the top of page 1;
- This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent
By completing and submitting the questionnaire, **YOUR FREE AND INFORMED CONSENT IS IMPLIED**

Survey and IP Sessions Recruitment Notices

UNIVERSITY OF
SASKATCHEWAN

ARE YOU INTERESTED IN
THE PREDICTORS OF
FACULTY SUCCESS?

A study investigating the predictors of faculty success at the **U of S** may reveal insights useful to faculty and administrators.

We invite your participation in this highly relevant study by completing a very short 15/20 minutes survey. Simply click on the link below and you will be directed to the survey.

LINK HERE

University of Saskatchewan

Department of Educational Administration
College of Education

Dear Faculty Member,

You are invited to participate in an interpretation panel discussion for the study, "Predictors of Faculty Success". In this forum, you will collaboratively review and interpret selected findings from an initial survey, previously administered to faculty members at the University of Saskatchewan.

Your participation is completely voluntary and you are free to participate in discussions with which you are most comfortable. By participating in this study, you will help us to investigate the variables determining faculty success in post-secondary institutions. The results of this study may be beneficial to the body of research in the field of faculty development and performance and faculty members in their quest to become successful in their careers.

In appreciation for your time and participation in the interpretation panel, you will have an opportunity to enter to win a draw of a gift certificate valued at $100. For more information about this study, you may contact:

Kenisha Blair-Walcott – kab055@usask.ca
Professor Keith Walker (Supervisor) – keith.walker@usask.ca; 306-306-220-0614
(office cell number)

This study has been reviewed by, and received approval on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board.
Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Study's Alignment Diagram

Research Question	Conceptual Framework Relational Elements	Instrumentation Scales and Items (Adapted Vs. Self-developed Scales) Interpretation Panel Questions	
		Scale/Theme	**Items/Questions**
Research Question 1: What, if any, relationships exist between faculty success and collegiality, work engagement, resilience, trust, work satisfaction, and organizational commitment?	Predictor Variable: Collegiality *Coaching relationships*	Mutual Trust and Support Network (Adapted – Shah, 2011)	Our faculty members provide strong collegial support Professional interactions among our faculty are cooperative and supportive There is a feeling of trust among my colleagues
Research Question 2: Do collegiality, work engagement, resilience, trust, work satisfaction, and organizational commitment predict faculty success?	*Peer observing relationships*		Faculty members in my department support new colleague's career development* Faculty members in my department support new colleague's career development*
	Mentoring relationships		Faculty members in my department support new colleague's career development* Faculty members in my department actively mentor colleagues formally

Informal/Social relationships		I can count on most of my colleagues to help me, even though this help may not be part of their official assignment
		I frequently participate in my department's (or unit's) social events
Peer observing relationships	Openness About Teaching & Research (Adapted – Shah, 2011)	We regularly observe one another's teaching as part of sharing and improving teaching strategies
		The faculty members in my department (unit) hide their failures and mistakes from each other**
		Faculty members in my department are open to being observed by their colleagues while teaching
		My teaching benefits from being open with colleagues about my successes and challenges
		My research benefits from being open with colleagues about my successes and challenges
		I usually consider feedback received from my colleagues and respond appropriately
Collaborative decision-making relationships	Collaborative Decision-Making (Adapted – Shah, 2011)	Colleagues in my department regularly cooperate and collaborate
		Most faculty in my department (or unit) participate actively in meetings

		Faculty in my department work jointly in pursuit of the accreditation and approval of new programs and courses in our department (or unit)
		Most faculty members in my department contribute actively to making decisions about curriculum
		My colleagues and I collectively analyze our department's programs and initiatives
		Faculty members encourage each other to contribute ideas and suggestions
Sharing relationships	Sharing Resources (Adapted – Shah, 2011)	My colleagues and I share teaching materials or resources
		My colleagues and I share lab space or other research resources
Dependent Variable: Faculty Success	Faculty Success (Self-developed - Clark, 1989; Fairweather, 2002; Kurz et al., 1989; Tierney, 1999)	RESEARCH I have a high number of refereed journal articles or books published for my discipline
		I publish good quality journal articles (based on number of citations) for my discipline
		I have a high number of external research grants for my discipline
		TEACHING My student evaluation ratings are excellent

		I am highly engaged in the improvement of courses and/or programs
		I regularly engage in innovative teaching practices
		FACULTY SERVICE
		I have administrative roles in my department, college or unit (e.g., Committee Chairs, Department Heads)
		I am highly engaged in national or international association related activities
		I am an active member of committees that work to support institutional goals
Predictor Variable	**Organizational Commitment** (Adapted – Meyer et al., 1993)	I am an active member of committees that work to support departmental goals I would very happily spend the rest of my career in my department
		I feel a strong sense of belonging to my department
		Right now, staying with my department is a matter of necessity rather than a desire**
		I have a strong sense of commitment to the people in my department
		I have a strong sense of obligation to remain in my department
	Work Satisfaction	I am satisfied with the

	(Adapted – War et al., 1979)	recognition given for work done
		I am satisfied with my remuneration
		I am satisfied with the way my department is managed
		I am satisfied with my department's organizational culture and climate
	Work Engagement (Adapted – Lee and Ok, 2015)	In my day-to-day work, I feel energetic
		I am very passionate about my day-to-day work
		My day-to-day work inspires me
	Trust (Researcher-developed – Barber, 1983; Brown et al., 2015; Butler, 1991; Mayer et al., 1995)	I trust the decisions and actions of my department (or unit) head
		I trust the administrative processes in my department or unit
		There is a significant level of trust among faculty in my department (or unit)
		Junior faculty members can trust senior faculty
	Resilience (Researcher-developed – Britt et al., 2013; Cooke et al., 2016; Cooper, et al., 2016;	I adapt well to organizational changes
		I am flexible and responsive to changes in the work

		al., 2014; Wagnild and Young, 2014)	environment I operate optimally in my job in the face of challenging situations in my personal life I usually respond positively to adverse circumstances I bounce back quickly from difficult situations
Research Question 3: In what ways have the predictor variables influenced faculty success at the University of Saskatchewan?	Collegiality: *Coaching relationships* *Mentoring relationships* *Peer observing relationships* *Sharing and collaborative decision-making relationships* Employee Engagement Resilience Organizational Commitment Work Satisfaction Trust	Significant themes developed from survey findings: - Positive relationship between faculty success and the six-predictor variables - Strong predictors of faculty success: collegiality, work engagement, and resilience - Differences in faculty success across title and gender - Perceived tensions among areas of faculty productivity (research, service, and teaching)	1. How have you understood or experienced faculty success at the U of S? 2. The survey findings indicated that collegiality, work engagement, and resilience predicted faculty success at the U of S. How might these three-predictor variables work together or separately to foster faculty success? 3. How might faculty success look different across gender? 4. How might faculty success look different across titles? 5. How have you understood or experienced collegiality as a faculty member? 6. How might you explain the finding that collegiality was the strongest predictor of faculty success? 7. What might be some of the antecedent causes of high versus low

	- Perceived challenge of misalignment between faculty work expectations and actual faculty work	work engagement? 8. A theme coming out of the open-ended questions on survey was that of the challenges of a tension between or among some of the areas of faculty productivity (research, teaching, and service), how might these be explained from your personal experiences as faculty members? 9. Another finding from these open-ended questions was the theme of: 'disconnect between workload expectations and the reality of faculty work on the ground.' From your experience, how would you describe the alignment between workload expectations and your actual work in teaching, research, and service? 10. From your experience, what are some other factors that might influence your success as an academic or hinder it?
Mixing Question: To what extent and in what ways did the interpretation panels with faculty members contribute to a more comprehensive	The final analysis of findings from both survey and interpretation panels determined the extent to which the panel discussions contributed to a more	The final analysis of findings from both survey and interpretation panels determined the extent to which the panel discussions contributed to a more comprehensive understanding of the relationship between the

understanding of the predictors of faculty success, using the explanatory sequential design method?	comprehensive understanding of the relationship between the two main variables. Answering this mixing question is also an important aspect of the mixed methods study known as mixing the data	independent variables (predictor variables) and the dependent variable (faculty success).

* - Question repeated twice in this table to show alignment with study's collegiality elements; however, question was represented once on survey in the category of Mutual Trust and Support Network

** Reverse order/scoring done during the statistical analysis phase

Appendix I

Certificate of Re-approval

UNIVERSITY OF SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)   06-Jul-2020

Certificate of Re-Approval

Application ID: 1279

Principal Investigator: Keith Walker

Department: Department of Educational Administration

Locations Where Research Activities are Conducted: University of Saskatchewan Campus, Canada
Virtual,Online space, Canada

Student(s): Kenisha Blair-Walcott

Funder(s):

Sponsor:

Title: Exploring the Predictors of Faculty Success: A Mixed Methods Study

Approval Effective Date: 17/06/2020

Expiry Date: 16/06/2021

Acknowledgment Of:
* Original Ethics Approval Certificate
* Amended Approval Certificate.

Review Type: Delegated Review

* This study, inclusive of all previously approved documents, has been re-approved until the expiry date noted above

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 2014). The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this project, and for ensuring that the authorized project is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month prior to the current expiry date each year the project remains open, and upon project completion. Please refer to the following website for further instructions: https://vpresearch.usask.ca/researchers/forms.php.

Digitally Approved by Diane Martz
Chair, Behavioural Research Ethics Board
University of Saskatchewan

1 / 1

311

Appendix J

Ethics Course Certificate

PANEL ON
RESEARCH ETHICS
Navigating the ethics of human research

TCPS 2: CORE

Certificate of Completion

This document certifies that

Kenisha Blair-Walcott

has completed the Tri-Council Policy Statement:
Ethical Conduct for Research Involving Humans
Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **6 December, 2016**