What Employees Want: How Do Psychological Safety and Servant Leadership Competencies Interact

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Faculty of Education

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Declaration of Committee

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Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

a. human research ethics approval from the Simon Fraser University Office of Research Ethics

or

b. advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University

or has conducted the research

c. as a co-investigator, collaborator, or research assistant in a research project approved in advance.

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Abstract

Psychological safety and servant leadership competencies are constructs that, individually, have amassed a robust amount of literature, but research connecting the two is still emerging. Although psychological safety is a feature of the workplace, it is understood that leaders play a role in encouraging its existence, and while there are several leadership styles to choose from, previous research indicate that servant leadership competences are best suited to meet the post-secondary goals of service, responsibility, relationships, and ethics in a positive manner. Through a 23-item questionnaire, I examined the perceptions of both constructs by staff working at Simon Fraser University, a Canadian post-secondary institution located in the Lower Mainland of British Columbia. Regardless of the specifics of their experiences, the employees who responded to the survey wanted validation of their efforts and appreciated truthfulness, honesty, humility and a high level of care from their leaders, and support and understanding from their teams.

Keywords: psychological safety; servant leadership competencies; quantitative research method; workplace interactions

Dedication

I dedicate this to my parents, who immigrated to Canada to provide their family opportunity, and to my siblings for being there for me through thick and thin.

I also dedicate this to my mentor, Dr. Tanya Behrisch, who first convinced me to pursue a master program. Under your gentle guidance and easy understanding that I need time and space, my growth has exploded in ways that will never be fully encapsulated on a page. Kyay: zu: tin ba de—thank you, Siehma-yeh. May you continue to be blessed.

Acknowledgements

Thank you to Dr. Dan Laitsch and Dr. Rebecca Cox for all your patience with me, and my educational cohort for your support through this process.

Thank you to my work colleagues and friends for cheering me on and raising my flagging energy and motivation or helping point me in the right direction over these two years.

Research **can** be fun. Sometimes.

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List of Acronyms

CPHR	Chartered Professional in Human Resources
FAS	Faculty of Applied Sciences
SFU	Simon Fraser University
WIL	Work Integrated Learning

Introduction

I have trained in the martial arts for much of my adult life and attained a black belt in two different styles; the most meaningful one has also been my most recent achievement: my Shodan (1st degree) black belt in Shotokan Karate. Though I have met a standard of excellence through grit and determination and earned the right to use the honorific of Sensei, I am not a naturally gifted fighter. I do, however, gravitate towards the martial arts philosophy and the example my own Senseis model: I am to support my team members in a multitude of ways—as a cheerleader, as a uke (training partner), as a Sensei with my own knowledge to impart—and always, to respectfully submit myself as an eternal student of my craft. I transfer and adapt this same mentality into other avenues of my life, and I have since met a mentor away from the mat that prioritizes a similar ideology. But perhaps without these prior experiences to embrace intelligent failure and grow positively as a result (Edmondson, 1999; Hirak, Peng, Carmeli, & Schaubroek, 2012), I would not have learned to fully appreciate another leader and team that makes it safe to explore.

The inner workings of people fascinate me, and I completed an undergraduate degree in Psychology; while those studies adopted a traditional Postpositivist viewpoint, and a singular and narrow one, it did formally introduce me to studying individuals and what makes them tick, so to speak (Creswell, J. W., & Creswell, J. D., 2018). I have been a part of several different teams before my tenure at Simon Fraser University (SFU) and have observed how co-workers of various backgrounds and circumstances have dealt with interpersonal situations. I ventured into the Human Resources industry and finished my credentials part-time while working. At first, I wanted to positively influence a work-life balance for my colleagues; and after readings on leadership and organizational structure and my ability to establish interpersonal connection quickly, I gravitated towards building high performing teams. I currently work at SFU as a program assistant in the Faculty of Applied Sciences (FAS) Co-operative Education unit, and it houses five different schools and programs. This unit is one of six in the Work Integrated Learning (WIL) department. WIL's mandate is to provide career education and access to co-op opportunities to students enrolled in several faculties: FAS, Business, Communications, Arts, Science, and Environment and Health Sciences. Each program or school, for example, has a program assistant whose tasks include posting co-op job

positions and facilitating interviews and co-op offers for their portfolio, and at one point, my unit dealt with the largest number of co-op students and employers per staff member every semester. Historically, we have had several staff leaves due to health and wellness concerns and anecdotally, some of these leaves were related to aspects of the workplace. Recognizing this, my former program manager built a more positive environment and helped mitigate the number of leave requests by prioritizing her relationships with her direct reports and encouraging the team to collaborate with each other and fail without fear of retribution. She leads from the heart. I have since incorporated many aspects of my manager's value system with my own leadership beliefs.

I have witnessed the energy in a room change completely because of a kind word from another. I have helped change the energy myself: without knowing every detail that led to a person's discouraged countenance, my former program manager said that I helped alleviate that person's stress and anxiety. During this time, I earned my Chartered Professional in Human Resources (CPHR) designation. While it is fair to say that I have always been an empathetic individual, I was now conscious of what I was doing: I was kind, encouraging, humble, and welcomed all questions and insights. The WIL Department has recently de-siloed units-program assistants, for example, now post co-op job positions, facilitate interviews and co-op offers from a shared inbox irrespective of their home portfolio-and we continue to streamline processes. As a result, my immediate team has expanded in size and diversity. I have instinctively tried to create a safe environment for Team 2.0. For example, I have lauded several individual privately for demonstrating leadership qualities. During a morning of technological issues and over a hundred related messages, one individual expressed confusion and frustration in a public channel. I replied reassuringly that it was not an easy fix, and we were all trying to troubleshoot. When another team member chimed in and demonstrated not only camaraderie but an understanding that technological issues made an already busy day even busier, I knew that if I had not spoken first that opportunity for reassurance may not have transpired. By the time Team 2.0 assembled, I had read LinkedIn posts by Dr. Amy Edmondson and my forays into her research led me to identify one of the throughlines in all these experiences: I was helping to build psychological safety.

Furthermore, SFU appears to be making a leader's relationship with their staff a priority. In November 2022, representatives at Simon Fraser University began community conversations regarding a People Plan that would serve as a blueprint for the next five years. From 16 meetings and roundtable discussions with more than 500 attendees and 1,350 written comments, six themes that became SFU's framework were created, and three directly touched on our relationships and our comfort in the workplace: Leadership and Organization Development, Experience and Well-being, and Employee Group Relations (SFU). The Leadership and Organization Development initiative, for example, aims to establish a working group that will design and implement policies and guidelines that will develop leaders who use a people-centered lens to eventually improve the staff and faculty work experience, which relates to the Experience and Well-being initiative (SFU). The Employee Group Relations theme discusses a strategy to support long term positive relationships and a framework to stabilize relations with employee groups (SFU). Many of these priorities found in the People Plan also match up well with existing plans such as What's Next: the SFU Strategy and the Equity Compass (SFU). The Student Affairs Division of Student Services has also distributed a Professional Development Plan in late 2023 for staff to document their professional development endeavors. This is a new process likely meant to encourage lifelong learning practices. After reviewing the research on psychological safety, I see connections between it and the framework of SFU's initiatives.

Literature Review

Research on Psychological Safety

Research on psychological safety started when Schein and Bennis (1965) believed that psychological safety was crucial in ensuring an employee felt secure enough to change his/her behaviour for the betterment of an organization's goals. In 1990, Kahn positively linked psychological safety and employee engagement during his research on organizational change. Khan utilized several data collection methods: observation, document analysis, self-reflection and in-depth interviews. From the interviews, Kahn created 186 experiences complete with descriptions of behaviors, internal experiences and contextual factors and asked participants to rate whether that example expressed engagement or disengagement, and to what degree. Khan discovered employees'

interpersonal relationships, group and intergroup dynamics, management style and process and organizational norms all influenced psychological safety after calculating descriptive statistics from these ratings. Furthermore, he noted that supportive and clear expectations from management and strong interpersonal relationships allowed employees to fail without consequence, a characteristic that he connected with psychological safety (Kahn). Edmonson set out to understand the underlying structures and cultures of hospital work teams and how errors occurred in the mid-1990s, and in doing so, "accidentally stumbled upon" (2019, p. xv11) the phenomenon's importance. She then focused solely on psychological safety and learning behaviour and examined the conditions learning occurred in organizational work groups naturally using both quantitative and qualitative methods, as she felt that such a study was missing from the literature of the time (1999). Edmondson defined learning behaviour as "seeking feedback, sharing information, asking for help, talking about errors, and experimenting" (1999, p. 251). Based on this work, she concluded that psychological safety is a "feature of the workplace [that ensures an environment is safe for interpersonal risk taking and] that leaders can and must help to create" (Edmondson, p. 8 and 13). According to Edmondson, a psychologically safe work environment encourages dialogue on any number of topics. Often employees keep silent because they believe speaking up will lead to an embarrassing result, that they will upset someone, or they fear retaliation. They also tend to err on the side of caution, but in being silent – or giving other implicit theories of voice more precedence – being cautionary can hurt an organization (Edmondson). Lechner and Mortlock utilized interviews and therefore, a qualitative study, to conclude that psychological safety is built if the team itself is willing to invest time and effort in three ways: reframing problems as opportunities, connecting with each other on a human level and discussing the rules of the game, or in other words, a mutual understanding of team boundaries, behaviors, and goal setting (2021). Edmondson has studied psychological safety over the past three decades and is consistently cited as a resource on the subject (Coutifaris & Grant, 2019; Hirak et al., 2012; Lechner & Mortlock, 2021; Mayfield, M. & Mayfield, J., 2021; Wang, Ahmad, Arshad, Tin, Ahmed, and Ali, 2021). It is Edmondson's definition that will be relied upon in my study.

The existence of psychological safety alone does not guarantee high performing teams, but there are certainly some circumstances that greatly hinder its effects (Edmondson, 2019). Fear is not a useful motivating tool as it dampens learning and

cooperation, and a team stops taking risks because they expect derision or because they believe helping another will lead to being taken advantage of in some way (Edmondson; Mayfield, M. & Mayfield, J., 2021). Moreover, leaders that do not show genuine and authentic interest in individuals, an ability to connect with them (Lechner & Mortlock, 2022), a willingness to admit to their own mistakes or view feedback as helpful (Rego, Melo, Bluhm, Pina e Cunha, & Reis Junior, 2019), and/or demonstrate a frequent lack of motivating language do not promote a psychologically safe environment (Mayfield, M. & Mayfield, J.). Examples of motivating language were encouraging professional development, showing trust in their employees, and providing helpful information (Mayfield, M. & Mayfield, J.). More recent research, then, seems to draw connections between a leader's competencies and building an environment of psychological safety.

Research on Servant Leadership

Although a cursory Google search suggests that there is very little agreement as to the title of the styles that have been identified, research on different leadership styles is robust. There were over 31,000 hits for "transformational leadership" and roughly 2,000 hits for "authoritative leadership" in the Bennett Library catalogue of SFU, for example.

A search for "servant leadership" produced 10, 238 results. In 1970, Greenleaf stated that the goal of servant leadership was to serve those you lead and prioritize their growth to become healthier, freer, and more autonomous individuals. The SFU Faculty Agreement (SFUFA) outlines service as one of faculty's responsibility to the post-secondary community (SFUFA, 2024). Moreover, in a concise review of Wheeler's (2012) handbook for academic leaders within higher education, Barnes (2015) reiterates that, despite the challenges of complexity, competition for resources and prestige commonly found in post secondary institutions, servant leadership is best suited to meet the goals of service, responsibility, relationships, and ethics in a positive manner. It is for these reasons that I chose to examine servant leadership in tandem with psychological safety.

Eva, Robin, Sendjaya, van Dierendonck, & Liden (2019) defined servant leaders in terms of three considerations: that these leaders care about someone or something outside of themselves, that they prioritize one on one relationships with their direct

reports, and that their overall concern is for the larger community. It is a holistic and interdisciplinary approach that seeks to prioritize follower well-being and growth and by doing so, had a positive affect on job performance, turnover, absenteeism and organizational citizenship behaviours (Eva et al. 2019; Van Dierendonck, Stam, Boersma, de Windt, & Alkema, 2014). I use Eva et. al's definition in my study.

Furthermore, meeting organizational goals resulted in first focusing on the psychological needs of followers (Van Dierendonck et al., 2014). Other researchers have delved into specific competencies, as Rego et al. observed psychological safety and its positive relationship with leader-expressed humility. Mayfield, M. & Mayfield, J. (2021) observed psychological safety's relationship to the skillful use of motivating language. Research connecting psychological safety to any leadership style competencies is still ongoing but based on the definitions of both psychological safety and servant leadership competencies—and a growing understanding of a leader's role in building psychological safety—the two align well (Abbas, Saud, Suhariadi, Usman & Ekowati, 2020; Coutifaris & Grant, 2022; Hirak et al., 2012). My research question sought to solidify and understand this relationship between psychological safety and servant leadership.

The Research Question

Do a sample of staff at SFU believe servant leadership competencies interact with a workplace environment of psychological safety?

Methodology

I investigated the above question through a pragmatic worldview lens. Pragmatists do not view the world in absolute terms, nor are they committed to one system of philosophy or reality (Creswell, J. W., & Creswell, J. D., 2018). It acknowledges the differences in responses gathered in a predominantly social context–psychological safety and perceived servant leadership competencies occur in dynamic and open systems—and as it is flexible enough to suit a quantitative approach, I chose it for my study (Creswell, J. W., & Creswell, J. D.). These potential differences in responses were addressed in my open-ended questions, as I did not guide or prompt participants in an interpretation. I believe that there is a positive connection between psychological safety

and servant leadership competencies, but this is a bias. Researcher biases can affect approaches to method and the interpretation process and ergo, it was important to allow the data to tell its story. For example, I asked participants to define interpersonal risk but did not provide its definition and thereby eliminated a leading question (DeCarlo et al., Cummings, Agnelli, & Laitsch, D. (2022).

Survey Design

To explore my research question, I provided a survey that utilized a quantitative method for data collection. As my literature review found that surveys (Abbas et al., 2020; Mayfield, M. & Mayfield, J., 2021; Wang, Ahmad, Arshad, Tin, Ahmed, and Ali, 2021),interviews (Akanji, Mordi, Ituma, Ajibade Adisa, & Ajonbadi, 2020; Lechner & Mortlock, 2021) and mixed method approaches (Edmondson, 1999) were used in this area of research, I felt confident in adopting a quantitative approach.

Some of these questions were drawn from existing surveys; questions three to 11, 17 and 18 were taken from Edmondson's (2019) Psychological Safety Survey and questions 12 to 16 and 19 from Liden, Wayne, Meuser, Hu, Wu, & Liao's (2015) short form of the Servant Leadership Survey (SL-7). I then created a handful of questions that established a relationship between both psychological safety and servant leadership competency constructs.

I used several survey instruments. One was SurveyMonkey, where I created a custom template with a link that I emailed to participants (Creswell, J. W., & Creswell, J. D., 2018). I downloaded spreadsheets from the software to assist with data analysis and to reduce data entry errors (Creswell, J. W., & Creswell, J. D.). With Edmondson's (2019) Psychological Safety Survey and Liden, Wayne, Meuser, Hu, Wu, & Liao's (2015) short form of the Servant Leadership Survey (SL-7), I modified the language on some of these questions, and this could have altered their validity and reliability, specifically, their Cronbach's alpha values. Cronbach's alpha measures the reliability of a set of survey questions and ranges from 0 to 1; 0 indicates that there is no correlation between items, and 1 indicates that the items are unidimensional (Frost, 2024; DeCarlo et al.; 2022). Examples of unidimensional scales are height, weight or volume, and in this case likely a false positive, as a multidimensional scale allows for several attributes that make up the psychological safety construct, for example (DeCarlo et al.). A value of 0.7 is often used

as the benchmark (Frost, 2024). For example, Edmondson's (2019) Psychological Safety Survey original versions of Questions 3 to 11 had these Cronbach's alpha values (see Table 1):

Table 1 Cronbach's Alpha Values – Edmonson's (2019) Psychological Safety Survey

Question	Cronbach's Alpha
In this unit, it is easy to speak up about what is on your mind	.94
If you make a mistake in this unit, it is often held against you	.94
People in this unit are usually comfortable talking about problems and disagreements	.94
People in this unit are eager to share information about what doesn't work as well as share information about what does work	.74
People in this unit are comfortable checking with each other if they have questions about the right way to do something	.74
If you make a mistake on this team, it is often held against you.	.82
It is safe to take a risk on this team.	.82

In addition, Edmondson examined 53 teams with a total of 496 individuals using a cross-sectional survey design and a sequential explanatory mixed method approach (Creswell, J. W., & Creswell, J. D., 2018). After administering a survey, she followed up with teams with low scores on several of her variables via observation and interviews (1999).

Additionally, I modified some items on Liden et al. (2015) short form of the Servant Leadership Survey (SL-7). Three different sample populations in this study, 729 undergraduate students, 218 graduate students and 552 leader-follower dyads, resulted in Cronbach alpha scores of .80 or higher and the construct, convergent and criterion validity of the SL-7 was very high (2015). While Edmonson utilized design and approach differences to gain a greater understanding, Liden et al. studied US, Chinese and Singaporean samples (2015).

A pilot group consisting of my classmates from my Educational Leadership cohort reviewed my proposed questions. All 13 members of my cohort were invited to participate as my pilot group. The six who volunteered were provided a definition of psychological safety and servant leaders, a list of my questions, and asked for feedback on what questions they thought were useful, what questions were not, or what questions are missing (Barry, 2023; Decarlo et al., 2022). The pilot group returned feedback in less

than a week by email. Comments included concerns with particular phrases in Edmondson's original questions, such as "keeping cards close to your chest" and "held against me," verb tenses and general language suggestions. I took all feedback into consideration and adjusted some questions. For example, I altered Edmondson's original question, "Keeping your cards close to your chest is the best way to get ahead in this unit" to "I had to be very cautious of sharing how I really felt in case I would upset someone," as using easy-to-understand vocabulary and sentence structure in my questions would ensure all my participants were experiencing them similarly (Stoop & Harrison, 2012; Henninger & Sung, 2012). In eliminating this idiomatic expression, however, I have also altered the original question's intent to delve into a selfish pursuit of ambition to caring about the feelings of a team member.

There are several aspects to crafting a question that must be considered; the questions asked, the specific wording used and even the order of questions are just a few aspects a researcher must be mindful of (Gideon, 2012; Iarossi, 2006). It is vitally important to properly plan and design a survey that will produce quality results and useful data (Oldendick, 2012; Iarossi, 2006). My pilot group also reviewed my openended questions to provide feedback on their reliability, content and face validity. A pilot group ensured that the survey effectively addressed my research question (Barry, 2023; Decarlo et al., 2020).

Research Participants

I invited staff at SFU to participate in my study. Originally, I chose SFU to observe teams in a large organization, and after the pandemic and a reported \$12 million financial shortfall in the 2023/2024 fiscal year (SFU, 2023) my interest in these teams have grown. Both circumstances can add to the stress and uncertainty among teams. SFU is a post secondary institution with three campuses (Burnaby, Surrey and Vancouver) located in the Lower Mainland of British Columbia. The university has a student population of approximately 37,350 students (SFU, 2024) and 2,257 full time continuing staff—excluding faculty—in both academic and non-academic departments (SFU, 2024).

I used a combination of convenience and snowball sampling. First, I sent my questionnaire to my SFU professional contacts via an email invitation that included a link to SurveyMonkey. A consent form on the landing page explained that participation was

voluntary and there was no compensation or incentive for doing so. Additionally, participants could exit the survey at any time, but once submitted, their responses became a part of a dataset that would be analyzed and disseminated in aggregate form. The survey did not ask for personal identifiers or any information that might identify participants. The online survey was hosted by SurveyMonkey, which is US owned, and all data would be stored for a maximum of five years on SFU secure servers that had IT support. Snowball sampling is often used to contact participants who may not otherwise wish to come forward. Given SFU's current climate of uncertainty and staff not wanting to jeopardize their job security, a reference from someone they know may have convinced them to complete my survey (QuestionPro, 2024). My instructions stated that there was no obligation to pass along my survey and based on the template that I used from the University of Regina (2024), I added that the individual contacted should not be a direct report or someone that they had commanding influence over. I also included a copy of a script to send with that communication to their contacts.

Nineteen participants viewed my survey. Of those 19, six did not answer any questions, and four partially completed the entire survey. The responses to the demographic items indicate that most of the participants had been with their teams for three or more years and, based on their birthdates, seven participants fall within the approximate age range of 23 and 43, and five fell within the approximate age range of 44 and 59. Research points to generational differences in values, beliefs, habits and attitudes, and therefore each age group may respond to leadership styles differently (Macovei & Martinescu-Bădălan, 2022), and while there is some agreement, one researcher does not necessarily agree with another with regards to the specific range (Prund, 2021). Much of my sample would fall under Generation Y, individuals who are children of globalization, and Generation X, individuals focused more on business (Prund). A small sample, however, makes it difficult to identify any intergenerational management strategies, and not every member of a generation holds the same values as others in the group.

All participants began the survey by identifying a leader or team to discuss, and then answered 17 5-point Likert scale questions that measured psychological safety and servant leadership competences on a team and/or leader of their choice. There were two multi-parted open-ended questions, a request that they define interpersonal risk, and then two demographic questions.

Data Analysis

Before any analysis could begin, I reverse coded any responses to the negatively crafted questions I had used. I reverse coded Likert scale data for Q4, Q9, Q16 and Q17 (EZ SPSS Tutorials, 2024). The use of descriptive statistics to explain Likert scale data is debated amongst research circles, and some assert that it is incorrect to assume that the average of "strongly disagree" and "disagree" is "disagree-and-a-half". Interpretating such a calculation has inherent limitations (Barry, 2017) while others claim that it depends on several factors (Sullivan & Artino, 2013). Following Barry's reasoning, I deemed standard deviation as an inappropriate measure, and it was not utilized for my descriptive statistics. I did analyze the mean of data from my Likert scales, however, first the data that related to psychological safety as a set, and the set of responses that examined servant leadership competences (Salkind, 2013). I then compared the means of both constructs. I used Microsoft Excel to examine this descriptive statistic, and to calculate the correlation between both constructs.

I used SPSS (Statistical Package for the Social Sciences) to create a correlation matrix and calculate Cronbach's alpha. Correlation is a type of bivariate analysis that indicates relationship, but not causation (QuestionPro, 2024; DeCarlo et al., 2022). The correlation coefficient, a value ranging between 1 and -1, indicates the direction and magnitude of the relationship between two variables, for example, psychological safety and servant leadership competencies (DeCarlo et al.). A correlation coefficient with an absolute value between 0.5 and 0.75 indicates a strong correlation, and a positive correlation occurs when one variable increases, the other does, as well (DeCarlo et al.). Alternatively, a negative correlation occurs when two variables change in opposite directions and are indirectly related (Salkind, 2013; DeCarlo et al., 2022). There are several options as to which correlation test will be used, and while decisions are based on specific characteristics inherent with the data set, any decision can be defended (Sullivan & Artino, 2013). As I have declined to use standard deviation as a descriptive statistic, I will dismiss the use of Pearson's correlation, a parametric test that assumes a normal data distribution (Sullivan & Artino, 2013). Spearman's correlation, in contrast, is a nonparametric test and does not assume the data will be distributed normally and can be utilized with small ordinal samples (Statistics Solutions, 2024; Sullivan & Artino, 2013). As such, Spearman's correlation was used. The correlation matrix also helped to

establish criterion validity, or the degree that participants' responses measured fell within expectations (Decarlo et al., 2022). The expectation, in this case, is that servant leadership competencies are correlated with psychological safety.

As I wanted to further confirm the relationship between the two constructs, psychological safety and servant leadership competencies, I chose to examine their correlation coefficient. as previous research indicated a strong relationship between my constructs that moved in the same direction (Abbas et al., 2020; Coutifaris & Grant, 2022; Decarlo et al., 2022; Hirak et al., 2012; Salkind, 2013).). Eleven items that dealt with psychological safety (n=11) and six items that dealt with servant leadership competencies (n=6) were tested (Decarlo et al.).

Finally, Cronbach's Alpha confirmed reliability values in two ways: 1) items that dealt with psychological safety, and 2) items that dealt with servant leadership competences.

According to Tracy (2010), there are eight criteria associated with excellent qualitative research; while my study is quantitative in nature, I did use thematic analysis on my open-ended responses. My study demonstrated self-reflexivity, transparency about the methods and challenges and transferable findings. As I did not interact with any of the participants during data collection, self-reflexivity occurred while I formulated my research question, and any examination of bias occurred while I was crafting questions and when I read responses (Tracy). I have also documented my research process objectively and honestly (transparency and acknowledged the limitations to my study). Additionally, readers can relate my research to their own experiences in the workplace, and this demonstrates transferable findings (Tracy). Open-ended questions were analyzed using themes (Miles, Huberman & Saldaña, 2019; Saldaña, 2013). Depending on the amount of text provided, this is completed in a series of steps as data is coded (Saldaña, 2013). Generally, the open-ended responses provide were no longer than four sentences, and while responses were rarely verbose, they were also focused and to-the-point. My first review identified themes by specific terms used and how often. My second review considered the general connotation of the response. The identified key themes in no order, then, were:

validation and support (what employees sought from their leaders)

- concern (highlighted student or work team example)
- leader attributes (honesty and humility)
- trust

I then analyzed all the responses to my items to reveal a holistic understanding of an individual's response using the descriptive method (Creswell, J. W., & Creswell, J. D.).

Findings

Participants were asked to answer the items of my survey while keeping in mind the answer they provided for Q2 "Keep a certain leader and/or team from your time at SFU in mind as you answer all these questions. It does not have to be a current leader and/or team. Without identifying factors, why did you pick this leader and/or team experience to use?"

Likert Data Findings

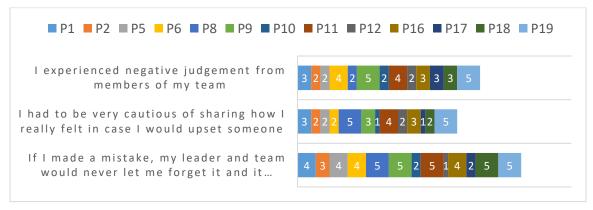
Figures 1 to 4 illustrate the pure scores for all the Likert responses per participant. From these, it appears that most participants have had positive experiences of psychological safety in their workplace and exposure to a leader with servant leadership competencies. Figure 1 displays every participant's response to the positively crafted psychological safety items.





A few of the psychological safety items were crafted negatively, to help counter the possibility that participants were answering the next item with very little consideration and not paying attention to the task at hand. Figure 2 summarizes their answers.

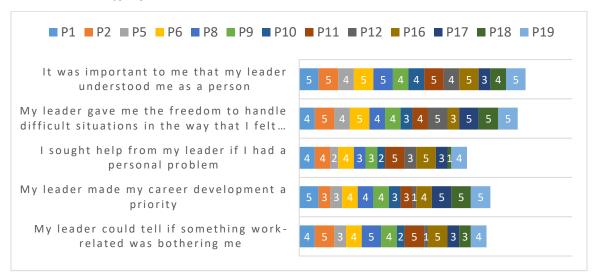
Figure 2 Psychological Safety Responses to Negatively Crafted Items



It would appear that there are neutral experiences with situations that weaken psychological safety, but overall, this sample has experienced workplaces that feature it.

Pure responses to positively crafted servant leadership competency items in Figure 3 show participants all experienced leaders who demonstrated servant leadership competencies.

Figure 3 Servant Leadership Competency Responses to Positively Crafted Items



In Figure 4, only 1 item dealt with a negatively crafted servant leadership competency question, and there is variation across the sample—some had a positive experience, and others had a negative one.

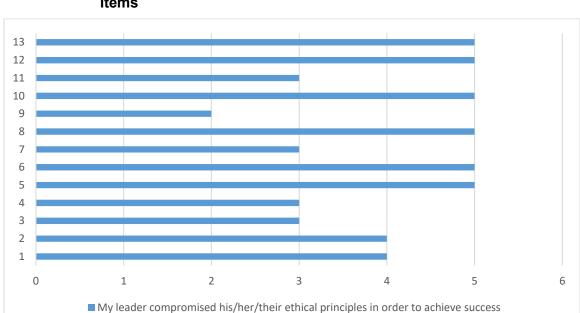


Figure 4 Servant Leadership Competency Responses to Negatively Crafted Items

Mean

I calculated the mean for each participant's response to all the psychological safety items in Figure 5. From this analysis it appears that Participants (P) 10, 12 and 17 did not experience an environment of strong psychological safety, but it is not necessarily nonexistent, either. Participants (P) 5, 10 and 12 have an average or lower experience with a servant leader. This does confirm that both psychological safety and servant leadership competencies are present in each individual's experience. Participants (P) 1, 2, 6, 8, 10, 11, 16 and 17 appear to have had a leader who demonstrated stronger servant leadership competencies but a lower environment of psychological safety. Alternatively, P 5, 9,12, 18 and 19 experienced more psychological safety than a leader with servant leadership competencies. Interpreting mean calculations cannot be relied upon, however, it did illustrate an individual's general leanings on the constructs within the confines of the specific team and/or leader they chose, as well as the example they highlighted.

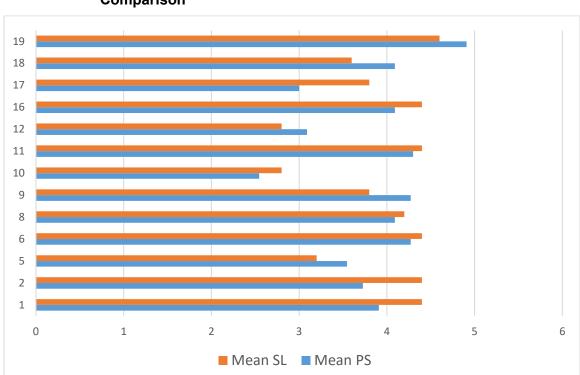


Figure 5 Psychological Safety & Servant Leadership Competencies - Mean Comparison

Correlation Matrix – Specific Items

Table 2 is a correlation matrix created using Spearman's correlation. Statistically significant correlation results indicate that the relationship between two items is not by chance (Harder, 2010), and overall, both items changed in the same direction. For example, the correlation coefficient between Q11 "My leader and my teammates valued my ideas" – from Edmondson's (2019) Psychological Safety Scale – and Q19 "It was important to me that my leader understood me as a person" – from Liden et al.'s (2015) Servant Leadership Scale – is 0.563*, which indicates a strong correlation, both variables increase in the same direction, and is also a statistically significant The correlation coefficient between Q4 "If made a mistake, my leader and team would never let me forget it and it affected their opinion of me" and Q12 "My leader could tell if something work-related was bothering me" is strong at 0.574* (DeCarlo et al., 2022). This also is statistically significant. Q13 "My leader made my career development a priority" and Q18 "I was comfortable enough to disagree with a teammate's viewpoint" had a weak correlation of 0.26 Statistically significant results are in bold below. These results helped establish criterion validity.

Question	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19
#3	1.00																
#4	0.50	1.00															
#5	0.00	-0.17	1.00														
#6	0.50	.610 [*]	0.00	1.00													
#7	0.45	0.38	0.00	0.39	1.00												
#8	.583 [*]	0.55	0.00	0.43	0.51												
#9	0.44	.760**	0.29	0.49	0.32	0.28	1.00										
#10	0.02	.554*	-0.18	0.54	.613*	0.27	0.30	1.00									
#11	0.17	.602 [*]	0.00	0.53	.583*	0.38	.664*	.680*	1.00								
#12	0.04	.574*	0.00	0.36	0.54	0.54	0.42	.659*	.737**	1.00							
#13	0.31	0.34	0.00	0.29	0.26	0.10	.577*	0.21	.724**	0.15	1.00						
#14	0.41	0.51	0.13	0.43	0.40	0.46	.676 [*]	0.12	.560 [*]	0.25	0.51	1.00					
#15	0.34	0.40	0.15	0.41	0.51	0.40	0.21	0.33	0.09	0.53	-0.40	0.09	1.00				
#16	0.03	0.13	0.48	0.25	0.39	0.31	0.51	0.14	.648*	0.43	0.45	.730**	0.02	1.00			
#17	0.53	-0.10	0.00	0.11	0.29	0.50	-0.20	-0.15	-0.01	0.15	0.05	-0.21	0.22	-0.07	1.00		
#18	0.52	.867**	-0.16	0.57	0.45	0.46	.756**	0.48	0.55	0.49	0.26	.672*	0.41	0.30	-0.23	1.00	
#19	0.36	0.38	0.50	0.52	0.44	0.44	.683*	0.23	.563 [*]	0.20	0.51	.805**	0.05	.774**	-0.11	0.45	1.00

Correlation Coefficient - Constructs

To further explore the strength of the relationship between my constructs, I decided to calculate the correlation between psychological safety and servant leadership competencies by comparing the mean of each construct. The correlation coefficient between my two constructs was 0.77 which is considered strong.

Cronbach's Alpha

Cronbach's Alpha is used as a measure of internal consistency reliability and reveals if items on a survey are consistent with each other and can produce similar results over and over (Salkind, 2013). In other words, Cronbach's alpha measures the reliability of a set of survey questions and ranges from 0 to 1, and a value of 0.7 is often used as the benchmark (Frost, 2024). Cronbach's Alpha incorporates variances in its equation (Salkind). As I adjusted the wording of several items, it was possible that I had affected the original Cronbach's Alpha computations, and recalculated. The resulting calculations are below.

A Case Processing Summary for psychological safety indicates that there was a missing value to one of the items for a participant and that participant was completely deleted from the analysis (BrunelASK, 2016). This is expressed in Table 3.

Table 3 Psychological Safety Case Processing Summary

		N	%
Cases	Valid	12	92.3
	Excluded ^a	1	7.7
	Total	13	100.0

a. Listwise deletion based on all variables in the procedure.

A Cronbach's alpha value of 0.85 was calculated for the psychological safety items in Table 4. As the benchmark is normally 0.70, 0.851 indicates strong reliability (Frost, 2024).

Table 4 Psychological Safety Cronbach's Alpha

Reliability Statistics

.851	847	10
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items

In Table 5, a Case Processing Summary for servant leadership indicates that there were no missing values for any participant, and all responses were included in the analysis.

Table 5 Servant Leadership Case Processing Summary

		N	%
Cases	Valid	13	100.0
	Excludeda	0	.0
	Total	13	100.0

Listwise deletion based on all variables in the procedure.

A Cronbach's alpha value of 0.70 was calculated for the servant leadership competency items in Table 6. This is equal to the benchmark and considered a strong value.

Table 6 Servant Leadership Competencies Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.701	677	6

Open-Ended Data Findings

Participants answered the open-ended items of my survey based on their experiences with the original leader and team that they had identified in Q2. Analysis of these responses revealed five key themes: validation and support (what employees sought

from their leaders), concern (a highlighted student or work team example), leader attributes (honesty and humility), and trust. I also asked participants to define interpersonal risk.

Theme: Validation and support

When participants discussed their leaders, many referred to receiving positive acknowledgement from that individual. When answering Q20 (c), "How did your leader's reaction make you feel [about the time in the last year when you chose to handle a situation on your own and decided to not ask your supervisor for guidance]?" they responded:

At first, they requested additional information and specifics I was not comfortable providing. They indicated they were there to support me if necessary but did not pursue the matter with me further and I believe they concluded I would handle it professionally.

Supported and seen.

Examples of responses to Q20 (d) "Do you think you'll try to handle future situations on your own?" were:

good, there's enough trust built here that generally i know i would have support from my supervisor even in tough situations and based on years of experience working with this leader.

The above responses reveal that there is a strong and positive relationship between the participant and his/her/their current leader. However, others chose to highlight a situation in which they did not receive positive acknowledgement, and it seems clear that they would have appreciated some sort of validation. This is expressed by a participant's response to Q20 (d) "Do you think you'll try to handle future situations on your own?"

I wish they'd ask me about the situation and show a bit more interest in how I solved it. I guess this could show that the leader trusts me, though.

The participant above did not receive the response he/she/they were seeking, but there is some rationalization that perhaps that meant he/she/they were trusted. It could suggest that, even at its lowest point, the relationship between leader and direct report is neutral. The inability to clearly express another relationship is clear from an answer to Q2 "Keep a certain leader and/or team from your time at SFU in mind as you answer all

these questions. It does not have to be a current leader and/or team. Without identifying factors, why did you pick this leader and/or team experience to use?" a participant responded:

I picked this leader/team because I still question the leadership style they used, the action responses that the leader got from the team and the ways that psychological safety was maintained or not.

As I did not provide any sort of operational definitions for the constructs of psychological safety and servant leadership, it would be interesting to ascertain what this individual's definition of psychological safety was. Interestingly, this participant also wanted more validation and, despite his/her/their ambivalent description of their leader, noted that said leader "genuinely [admitted] to making a mistake." One of the competencies of servant leadership is prioritizing relationships with direct reports, and if sincerity was communicated in this situation, perhaps the relationship is not as ambivalent as first described. Due to the nature of my research method, I am unable to delve further into this response.

Furthermore, when answering Q20 (c), "How did your leader's reaction make you feel [about the time in the last year when you chose to handle a situation on your own and decided to not ask your supervisor for guidance]?", a participant wrote:

Seemed that they didn't care too much but listened. I'm asking if it was only superficial though.

Overall, however, it appears that several participants sought a high level of care and attention from their leaders, and a leader high in servant leadership competencies would demonstrate this.

Theme: Student Concern/Team Concern

Participants described a situation in which they took care of an issue without approaching their leader for advice or guidance first. This was meant to establish context for the follow-up questions; participants either referred to an issue with a student or their team, and one participant referred to an issue involving an employer. Some of the answers to Q20 (a) "Describe [a time in the last year when you chose to handle a situation on your own and decided to not ask your supervisor for guidance]" dealt with student interactions:

I had a student who was not happy with a decision I made, and asked to speak to my supervisor.

Dealt with a delicate student situation during their work term.

A virtual one-on-one session with a neuro divergent student where the student became agitated during the session. I suggested to the student we take a short minute or two break and reconvene to decide on whether to continue.

A student was having troubles on their work term and wasn't receiving support from their work supervisor.

Other answers to this question dealt with a situation with a team member:

Team conflict regarding schedule.

A team conflict about a process that needed change.

sudden absence of a team leader indefinitely.

A colleague with a strong personality and seniority attempted to deliver workload and have conversations that were already in the making, meaning the entire situation was somewhat scripted and not authentic. This was during a critical time in the departments approach to change management.

The above response is interesting, as the participant volunteered information to describe the experience as scripted, inauthentic—and perhaps manipulative—and, therefore, unappreciated. Psychological safety is a feature of a workplace (Edmondson, 2019), and that suggests that it is a part of the team's culture. Scripts and inauthenticity weaken the affects of psychological safety as their presence could make the environment less viable to interpersonal risk taking and failing without retribution, and if servant leadership competencies assist leaders in building psychological safety, this perceived disregard for how another felt weakens psychological safety as well.

Theme: Leader attributes

Many participants favorably highlighted honesty and humility characteristics in their leaders. When answering Q21 (a), there were several responses that confirmed this:

my leader was generally quite open and honest for many situations if/when she can disclose the info, understandably this can't and likely not done most of the time. She would apologize for example if she dropped the ball on something, ask for support as needed and present solutions or discuss about it.

Our leader has on numerous occasions mentioned times of poor decisions or not managing a situation in the best way. I don't believe I can offer a specific example of such a time, other than to say they can be humble and admit to making such mistakes.

When answering Q21 (b) "How did [your leader] tell the team [about their his/her/their poor decisions with the team]", participants explained:

The first one tended to self-deprecate themselves when making mistakes and felt bad for a long time. The second one was not too open about making mistakes, it felt like they tried to keep their image intact. But the team knew the mistakes made and I wish the leader wouldn't trusted that we wouldn't be too hard on them. For me, honesty is important and admitting your mistakes comes with it.

They were very honest and took the responsibility of their mistake.

Within a team meeting our leader has admitted to making mistakes and reminding us of our 'humaness'. It is how we learn and grow.

In answering Q21 (c):

For a leader to be humble creates an environment that is more safe and trusting.

In answering Q1:

Most recent SFU leader and/or team that comes to mind with an overall positive experience

I felt particularly safe to interact with this leader, share perspectives and disagree on issues.

This team is built on history and expertise and exhibits both positive and negative attributes in terms of working together cohesively

They are empathetic, positive and take an active interest in professional development.

Taking an interest in a direct report's professional development is a servant leadership competency. A trusting environment, or an ease to disagree with a leader or share perspectives are aspects of psychological safety.

In answering Q21 (d):

Empowered to make certain decisions on my own and increased my respect for them

another noted servant leadership competencies in a leader that prioritized his/her/they growth and development.

Theme: Trust

Many participants mentioned trust. While an environment of psychological safety blends trust and respect, Edmondson (2019) makes a distinction between the two. Trust exists between two individuals or parties and describes an expectation that an individual can be counted on in a future moment. Psychological safety, in contrast, is a feature of the workplace and describes a "temporally immediate experience" (p. 17). Lechner and Mortlock further contend that psychological safety pervades a group and is the invisible glue of teamwork (2021). Several participants identified trust in their various responses to survey items:

good, there's enough trust built here that generally i know i would have support from my supervisor even in tough situations and based on years of experience working with this leader.

I wish they'd ask me about the situation and show a bit more interest in how I solved it. I guess this could show that the leader trusts me, though.

But the team knew the mistakes made and I wish the leader wouldn't trusted that we wouldn't be too hard on them. For me, honesty is important and admitting your mistakes comes with it.

For a leader to be humble creates an environment that is more safe and trusting.

These responses show a desire for leaders to demonstrate servant leadership competencies (Eva et al., 2019) and admitting shortcomings signals an openness to receive feedback that will strengthen psychological safety (Edmondson, 2019).

Interpersonal Risk

I also asked participants to define interpersonal risk and did not provide them with a definition or additional information. If a workplace environment has psychological safety, then individuals should feel safe to take an interpersonal risk, be vulnerable with their team and willing to make mistakes and be open about them (Edmondson, 2019). Some examples of responses were:

Taking a personal risk that could impact others on your team

I don't know exactly, but I assume it is about being able to take risks in the workplace knowing that the team and your leader are supportive no matter what.

An "interpersonal risk" in the workplace for me can mean taking a chance or facing uncertainty in how i communicate or interact with others. This could mean there might be positive or negative outcomes/consequences from speaking up, sharing ideas, addressing conflicts etc. There's also the risk of stepping out of my comfort zone to foster better relationships and collaboration even if it feels uncomfortable.

It means speaking up with a supervisor or group and being willing to disagree with a process or challenge a change. To be able to accept that others are going to disagree with your thoughts and ideas.

To me, Interpersonal risk means that I should not forget that despite being friendly and close with my team members and other staff in the office, I should always act professional and remember that as long as people work together in the same office we're not close friends. I experienced some ex-colleagues acting unprofessionally by talking about uncomfortable subjects (e.g. private/intimate relationship details, mean gossip about other colleagues, judging other people's appearance, etc.) and it made me feel that those ex-colleagues didn't have boundary and unprofessional. Such feeling made me think that I really want to avoid interacting with those "unprofessional" ex-colleagues and I stopped respecting them even if they're good at what they do. At the same time, I did self-reflection if I do anything like that at workplace and try to learn from such experience. It's also a reminder to reflect upon my own behaviour.

The ability to move past one's fear or even imposter syndrome and find your voice to ensure you are heard within the noise. Stepping up and voicing an opinion, thought, concept or decision, and not molding it for group approval or convenience. It takes risk to find this space and move into it. I do think that we grow into this level of confidence, and only a rare few who are born with it.

There is agreement in the sample population that interpersonal risk is related to the relationship between individual and other members of their team, and it involves a belief that whatever decision or behavioral response the individual chooses, there will be support and non-judgement (Edmondson, 2019). The amount of interpersonal risk-taking that said team permits is dependent on how much psychological safety is evident.

Other Responses

Some participants chose to leave some open-ended questions completely blank, two participants answered questions with "N/A", and three participants answered, "Do you think you will handle future situations on your own?" with a "yes." Unfortunately, I am unable to follow up with participants to ask why they marked fields as such.

Holistic Findings

All participants have experienced some level of psychological safety and servant leadership competencies with their highlighted teams and with their leaders. In this section, I highlight the experience of Participants 5, 10, 12, and 17. I chose to share the experiences of these four participants because of the diversity in their responses: participants 10 and 12 doubted that their workplace encouraged psychological safety and/or they did not have a leader who expressed strong servant leadership competencies, and participants 5 and 17 had strong positive experiences of both constructs.

Participant 5

Participant 5 stated that they chose the "most recent SFU leader and/or team that comes to mind with an overall positive experience" and stated that they have been a part of this team for three to five years. The scores of their Likert scale data for both psychological safety and servant leadership competency constructs were positively correlated, and the mean of these ratings were neutral. The situation that they oversaw on their own had a positive result and they noted that they felt their relationship with their leader encompassed trust. That they were provided the opportunity to manage a situation on their own indicates that the leader demonstrates servant leadership competencies (Eva et. al, 2019). Moreover, they felt that their leader was "quite open and honest [and she] would apologize if she dropped the ball, ask for support as needed" and that their team "is usually quite supportive and understanding." Trust and respect are necessary to build an environment of psychological safety, and this team also demonstrates support, and their leader displays a willingness to admit a poor outcome (Edmondson, 2019). Furthermore, their definition of interpersonal risk seems on point with Edmondson's:

An "interpersonal risk" in the workplace for me can mean taking a chance or facing uncertainty in how i communicate or interact with others. This could mean there might be positive or negative outcomes/consequences from speaking up, sharing ideas, addressing conflicts etc. There's also the risk of stepping out of my comfort zone to foster better relationships and collaboration even if it feels uncomfortable.

This individual is part of Generation X and prioritizes business but there isn't enough information gathered on this person to confirm this. The number of years this person has been on this team denotes a strong familiarity with team members.

Participant 10

Participant 10 has been on a team for six to ten years and chose a leader that /they felt that there were diverse perspectives and leadership styles that were difficult to navigate. Though it is entirely possible that a single leader applies different leadership styles to different situations, this comment suggests that it is an assessment of several people. This individual's ratings of the psychological safety Likert items are neutral:

I try to avoid conflict or uncomfortable situations. if I run into a situation in the future I would talk with my supervisor for guidance before dealing with it.

As this person states that they try to avoid conflict and does not feel safe to bring up any concerns, it would support their assertion that their workplace does not have psychological safety (Edmondson, 2019), but the Likert ratings do suggest there is some. Participant 10 was unable to share a situation in which they handled matters on their own in the last year and answered these fields as "N/A". They did choose to highlight the hiring of a temporary employee into a continuing position, only to have said individual vacate that position in a year. This example was entered as a response to the item, "Did your leader ever discuss his/her/their poor decisions with the team?" It is never clearly stated, but it seems as if Participant 10 considers this decision by their leader a poor one. Moreover, there is no indication that, from Participant 10's perspective, the leader took accountability for this result. These responses could explain why their Likert ratings of psychological safety are low. Although they expressed doubt, they seemed to agree with Edmondson's definition of interpersonal risk:

It means speaking up with a supervisor or group and being willing to disagree with a process or challenge a change. To be able to accept that others are going to disagree with your thoughts and ideas.

Alternatively, this might not be the leader's and team's failure to establish a psychologically safe environment, but rather this individual's admitted predisposition to choosing not to share to begin with. A review of their responses to the servant leadership competency items reveals similarly low overall ratings, with the understanding that a response to the "N/A" items would have provided more information. This individual is also a part of Generation X. The number of years this person has been on this team denotes a strong familiarity with team members.

Participant 12

Participant 12 falls into Generation X and has been on their team for six to ten years. They questioned whether their team expressed characteristics of psychological safety and their ratings on psychological safety and servant leadership are also neutral. His/her/their responses to the open-ended items reflect a similar neutrality. Several comments suggest that this individual wants their leader to take a greater interest in them:

I wish they'd ask me about the situation and show a bit more interest in how I solved it. I guess this could show that the leader trusts me, though.

Yes, I'm confident I can resolve most situations. But I still would like my leader to help through some difficult situations and show more interest

The leader was OK with the result but didn't ask too many questions

The individual seems to want to believe that trust exists with their leader, and trust is required to build psychological safety (Edmondson, 2019). It also seems clear they seek positive acknowledgment from their leader which is a servant leadership competency (Eva et. al, 2019).

Participant 17

Participant 17, another member of Generation X and has more than 10 years of familiarity with his/her/their team introduced said team and leader in a balanced manner:

This team is built on history and expertise and exhibits both positive and negative attributes in terms of working together cohesively

In other comments this person stated that while they were comfortable "taking on their own leadership" they did appreciate that they had a safe space to use if needed. In addition, they state that their leader is humble and willing to admit to mistakes (Edmondson, 2019). Their definition of interpersonal risk also mirrored Edmondson's:

The ability to move past one's fear or even imposter syndrome and find your voice to ensure you are heard within the noise. Stepping up and voicing an opinion, thought, concept or decision, and not molding it for group approval or convenience. It takes risk to find this space and move into it. I do think that we grow into this level of confidence, and only a rare few who are born with it.

This person's ratings for psychological safety were neutral, and while their ratings for servant leadership were a little higher in comparison, it still aligns with their comments regarding balance.

After other holistic analyses, all participants identified wanting a level of care from their advisors, and when psychological safety was present on their teams, they seemed to appreciate it.

Limitations

There are several limitations to this study. Firstly, the target population, or the group that received my survey, was a small sample of SFU staff from an undetermined number of departments. It is impossible to ascertain how many individuals were invited to participate unless I collected this number from my respondents. Furthermore, while the snowball technique may have provided me access to staff who would otherwise decline participating, it limited my ability to generalize these results to the greater population (QuestionPro, 2024). SFU is a large organization, but it is not the only organization in existence. Moreover, the convenience of such a technique could result in individuals of similar socioeconomic status or ethnic backgrounds to their contacts (QuestionPro).

Secondly, I did not provide a deadline or an accurate time estimation in my first round of recruitment. When I was approved by the Office of Research Ethics to extend the deadline, I was also approved to make those amendments in my recruitment scripts.

Finally, I would take another look at my questions. I cannot ask participants for examples from the past year if I have previously stated that any team and/or leader can be discussed, leaving the choice of team and/or leader open to either over their professional career. Additionally, asking for recollections from the last year still might be so far in the past that participants could not easily speak of an appropriate example to provide. I also would have asked additional guestions. I feared survey fatigue would set in, but participants spent an average of 8 minutes on my survey, and in hindsight, I could expand the length and scope of the survey. I based my servant leadership questions on Liden et al.'s (2015) Servant Leadership Scale which only had 7 items, but perhaps I should have based it on a different one that covered more situations. I could have reminded participants that the open-ended questions were probing situations with the same leader and team that they used to answer the Likert questions to ensure continuity. When I asked about the leader's reaction to the individual taking on an issue independently, I could have also asked how the team responded. When a participant skipped a question or answered "n/a", it was difficult to ascertain the reason for this decision. Therefore, more open-ended question such as, "if you do not have an appropriate scenario for the question before, please provide another example of a positive or negative interaction with your team/leader" may have helped eliminate participants from choosing not to answer and garnered more responses to my research question. I could also delve deeper into why that individual stayed with their team and leader for as long as they did. Finally, the last question could have been, "Is there anything else you would like me to know about your experiences with this team or leader?" to capture any comments or information that I would have otherwise missed.

Discussion

To be affective, these constructs—psychological safety and servant leadership competencies—and their related behaviours have an undercurrent of authenticity from teams and leaders. One participant mentioned the lack of authenticity in an interaction with a team member and another commented on superficiality, and both situations resulted in a negative impression—perhaps encouraging doubt and some distrust. Depending on the individuals involved and the circumstances, rebuilding a safe environment and demonstrating a suitable level of care may be difficult and could have been avoided.

Trust and psychological safety, though related, are defined by Edmonson (2019) as two different entities, and Lechner and Mortlock (2021) agreed. Trust is built between two individuals, and psychological safety is a feature of the work environment (Edmondson). Several participants mentioned trust, and while the existence of trust (and respect) is required to build psychological safety, it would be interesting to examine how much trust is needed. While one would think that teams take on their leader's characteristics and attributes, perhaps the participant who provided a rather ambivalent assessment of their leader despite suggesting that their leader readily admitted to an error and thus, seemed to invite feedback, it was still not enough to encourage a greater amount of psychological safety.

It would be interesting to delve further into individuals' experiences that have been part of the same team pre-pandemic and gauge potential differences in a longitudinal study, similar to the research that Coutifaris & Grant (2022) and Hirak et al. (2012) completed, as well as a more detailed survey study.

The proposed priorities in SFU's new People Plan and Equity Compass frameworks need to become second nature to the community to promote long term success. In early 2024, SFU offered a Cultivating Psychological Safety Workshop to staff two different times. Unfortunately, the second session was cancelled. However, psychological safety was not only highlighted in SFU's People Plan Annual Report, "[prioritizing a well-being strategy] will positively impact the well-being of staff and faculty by guiding action at multiple levels to foster healthy and psychologically safe SFU environments where people can flourish," (SFU, 2024, p. 6), and they also noted that 182 leaders attended (SFU). I hope, then, that more training for leaders on psychological safety will be offered. It seems clear that the SFU community is eager for additional professional development opportunities; over seven new mini workshops held in Spring 2024, there were 537 registration submissions and an average of 50 attendees each session (SFU). These professional development opportunities can then be documented on a Student Affairs Professional Development Plan (PDP), a new process that was distributed by the Student Affairs Division of Student Services in 2023. Even a section that states "How do you think you have advanced psychological safety principles in the workplace?" will keep this topic in front of mind for everyone. Consider all this with Barnes' (2015) assertion that despite the challenges and competition for resources commonly found in post secondary institutions, servant leadership is best suited to meet

the university's overall goals in a positive manner, and the current resource-scarce reality of SFU, cementing the constructs of psychological safety and servant leadership competency into the university culture may alleviate future pain points when it comes to personnel.

Conclusion

There appears to be a connection between servant leadership competencies and psychological safety. Aspects of servant leadership competencies – such as caring for an individual's growth and prioritizing one on one relationships with their direct reports seem to easily align with building an environment of psychological safety; as research continues to examine leadership traits and competencies and interactions within the team environment, it is possible that it is not the only leadership style that will demonstrate success. Further research will hopefully not only result in a clearer relationship between the two but discover other situations that supports its growth. When SFU first publicized their People Plan framework, the term psychological safety was not used; rather, the summary of its aims referred to mental health, well being and psychological health. It was not until SFU posted an update in the Summer of 2024 that the term psychological safety is applied. It confirms SFU's interest in the construct, and its future prevalence in SFU's culture. For the individuals who participated in my study, however, evidently employees seek validation and appreciate leaders who demonstrate honesty, humility and can build trust with their direct reports. They have similar hopes that their teammates are supportive and understanding. Indeed, these employees know what they want.

References

- Abbas, A., Saud, M., Suhariadi, F., Usman, I., & Ekowati, D. (2020). Positive leadership psychology: Authentic and servant leadership in higher education in Pakistan. *Current Psychology*, 41, pp. 5859-5871
- Akanji, B., Mordi, C., Ituma, A., Ajibade Adisa, T., & Ajonbadi, H., (2020). The influence of organisational culture on leadership style in higher education institutions. *Emerald Insights*, Vol 49 No. 3
- Barnes, A. C. (2015). Servant leadership for higher education. *Journal of College and Character*, *16*(2), pp. 131–133
- Barry, D. (2017). Do not use averages with likert scale. https://bookdown.org/Rmadillo/likert/summary.html
- Barry, H. (2023). The value of pilot testing. https://endurancelearning.com/blog/the-value-of-a-pilot/
- BrunelASK, 2016. Reliability test: Compute cronbach's alpha using SPSS. https://www.youtube.com/watch?v=Odlhhtg-3LE
- BrunelASK, 2016. Reliability test: Interpret cronbach's alpha output in SPSS. https://www.youtube.com/watch?v=pVfByfoQ1IU
- Creswell, J. W., & Creswell, J.D. (2018). Research design: Qualitative, quantitative and mixed methods approaches (5th edition). Thousand Oaks, CA: Sage publications.
- Coutifaris, C. G. V., & Grant, A. M. (2022). Taking your team behind the curtain: The effects of leader feedback-sharing on team psychological safety. *Organization Science* 33(4), pp. 1574-1598
- DeCarlo, M., Cummings, C., Agnelli, K., & Laitsch, D. (2022). Graduate research methods in education (leadership): A project-based approach (version 2.12.14.17-19.22). BC Campus. https://pressbooks.bccampus.ca/dlaitsch/
- Edmondson (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44(2) pp. 350-383
- Edmondson, A. (2019). The fearless organization. John Wiley & Sons, Inc.
- Emerson, R. W. (2015). Convenience sampling, random sampling, and snowball sampling: How does sampling affect the validity of research? *Journal of Visual Impairment & Blindness*, 109:2, pp. 164-168

- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, *30*(1), pp. 111–132
- EZ SPSS Tutorials (2024). How to reverse score items in spss. https://ezspss.com/how-to-reverse-score-items-in-spss/#:~:text=We%20need%20to%20use%20reverse,from%20points%20on%20a%20scale.
- Frost, J (2024). Cronbach's alpha: Definition, calculations & example. https://statisticsbyjim.com/basics/cronbachs-alpha/
- Frost, J. (2024). Failing to reject the null hypothesis. https://statisticsbyjim.com/hypothesis-testing/failing-reject-null-hypothesis/
- Gideon, L (2012). Introduction. In L. Gideon (Ed.) Handbook of survey methodology for the social sciences (pp. 23-35). Springer
- Greenleaf, R.K. (1970). The servant as leader. Robert K. Greenleaf Publishing Center.
- Harder, B. (2010). Using SPSS and PASW/correlation.

 <a href="https://en.wikibooks.org/wiki/Using_SPSS_and_PASW/Correlation#:~:text=The%20asterisks%20at%20the%20end%20of%20the%20correlation,the%20correlation%20coefficient%2C%20where%20the%20p-value%20is%20provided
- Henninger, A & Sung, H-E. (2012). Mail survey in social research. In L. Gideon (Ed.) Handbook of survey methodology for the social sciences (pp. 297-311). Springer
- Hirak, R., Peng, A. C., Carmeli, A., & Schaubroek, J. M., (2012) Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The Leadership Quarterly*, 23 pp. 107-117
- larossi, Gluseppe (2006). Power of survey design: a user's guide for managing surveys, interpreting results, and influencing respondents. World Bank Publications
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, pp. 692-724
- Liden, R.C., Wayne, S. J., Meuser, J.D., Hu, J., Wu, J. & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, Volume 26, Issue 2, pp. 254-269
- Lechner, A. & Mortlock, J.T. (2021). How to create psychological safety in virtual teams. *Organizational Dynamics*, 51, pp.1-9
- Macovei, C. M., & Martinescu-Bădălan, F. (2022). Managing different generations in the workplace. *International Conference KBO*, 28(2), 191–196. https://doi.org/10.2478/kbo-2022-0071

- Mayfield, M. & Mayfield, J. (2021). Sound and safe: The role of leader motivating language and follower self-leadership in feelings of psychological safety. *Administrative Sciences*, 11, 51, pp. 1-30
- Miles B., M., Huberman, A., M., & Saldaña, J. (2019). Qualitative data analysis: A methods sourcebook, pp.273-313. Sage Publications
- Oldendick, R.W. (2012). Survey research ethics. In L. Gideon (Ed.) Handbook of Survey Methodology for the Social Sciences (pp. 23-35). Springer
- Prund, C. (2021). It is time to realize generations matter on the labour market.

 Interesting facts about generations in the workplace. *Revista Economică*, 73:1
- QuestionPro (2024). Correlation matrix: What is it, how it works with examples https://www.questionpro.com/blog/correlation-matrix/#:~:text=A%20correlation%20matrix%20is%20a%20square%20matrix%20showing%20the%20correlation,in%20multivariate%20analysis%20and%20statistics.
- QuestionPro (2024). Snowball Sampling: Definition, Method, Pros & Cons. https://www.questionpro.com/blog/snowball-sampling/
- Rego, A., Melo, A.I., Bluhm, D.J., Pina e Cunha, M., & Reis Junior, D. (2019). Leader-expressed humility predicting team psychological safety: a personality dynamic lens. *Journal of Business Ethics*, 174, pp. 669-686
- Saldaña (2013). Coding Manual for Qualitative Researchers, pp 2-40. Sage Publications
- Salkind, N. (2013). Statistics For People Who (Think They) Hate Statistics. SAGE Publications
- Schein, E. H., & Bennis Schein, W.G., (1965). Personal and organizational change through Group Methods: The laboratory approach. John Wiley & Sons, Inc.
- SFUFA (2024). SFUFA Collective Agreement 2022-2025. https://www.sfufa.ca/wp-content/uploads/2024/04/SFUFA-New-Agreement-2022-25-FINAL.pdf
- SFU (2024). 2023-2024 People plan annual report_june 2024. https://www.sfu.ca/content/dam/sfu/vp-people-equity-inclusion/2023-24%20People%20Plan%20Annual%20Report_June%202024.pdf
- SFU (2024). Communications toolkit. https://www.sfu.ca/communicators-toolkit/brand/facts-figures.html
- SFU (2023). SFU facts and figures. https://www.sfu.ca/communicators-toolkit/brand/facts-figures.html

- SFU (2023). *The people plan*. https://www.sfu.ca/vp-people-equity-inclusion/about-the-vppei/people-plan.html
- Statistics Solutions (2024). Correlation (pearson, kendall, spearman). https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/correlation-pearson-kendall-spearman/
- Stoop, I. & Harrison, E. (2012). Classifications of surveys. In L. Gideon (Ed.) Handbook of Survey Methodology for the Social Sciences (pp. 7-21). Springer
- Sullivan, G.M. & Artino, A.R. Jr (2013). Analyzing and interpreting data from likert-type scales. *Journal of Graduate Medical Education*, pp. 541-542
- Tracy, S.J. (2010). Qualitative quality: Eight 'big-tent' criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), pp.837-851
- University of Regina (2024). Ethical guidelines for snowball sampling. https://www.uregina.ca/research/assets/Ethical-Guidelines-for-Snowball-Sampling.docx
- Van Dierendonck, D., Stam, D., Boersma, P., de Windt, N., & Alkema, J. (2014). Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *The Leadership* Quarterly, 25(3), 544–562
- Wang, Y.M., Ahmad, W., Arshad, M, Yin, H.L. Ahmed, B. & Ali, Z. (2021). Impact of coordination, psychological safety and job security on employees' performance: The moderating role of coercive pressure. *Sustainability*, 13, 3175, pp. 1-19
- Wheeler, D. W. (2012). Servant leadership for higher education: principles and practices (1st ed.). Jossey-Bass

Appendix A. Survey Monkey Consent Form

Study Name: Do Servant Leadership Competencies Interact With A Workplace

Environment of Psychological Safety?

Student Lead: Susan Fong, Simon Fraser University, Canada

Principal Investigator: Dr. Daniel Laitsch, Simon Fraser University, Canada

Study number # 30002124

Purpose of the Study: The overarching purpose of this study is to identify if servant leadership competences interact with a workplace environment of psychological safety by collecting, analyzing, and interpreting SFU staff's perspectives and experiences.

Survey Description: This survey is intended for people who have experience working in a team. If you decide to participate in this research, it is estimated that it will take you 10 minutes to complete this online survey of close-ended and open-ended questions. The open-ended questions require you to share short examples from your observations of a team. All your answers in the survey will be anonymous. The survey is administered using an external platform.

Participation: This survey is open for two weeks. Your participation in the study is completely voluntary. If for any reason you decide to withdraw from the study, you may do so at any time without an explanation or repercussions by exiting the survey without submitting your answers. You will not be able to withdraw upon submitting the survey. At that time, your answers will become part of the dataset and will be analyzed and disseminated in aggregate form. By consenting to participate in this study, you do not waive any rights to legal recourse in the event of research-related harm.

Risks: There are no perceived risks, harms, or discomforts associated with your participation in this study. However, should you find that a question makes you feel uncomfortable, you may choose not to answer it or withdraw from the survey.

Benefits: There are no direct benefits associated with this study.

Dissemination of results: Data collected for this research study will not be made publicly available. The final results will be disseminated in aggregate format to the community of scholars and practitioners. The data will be used to write a report for my M.Ed. program and my findings shared during a public presentation at SFU in July, and possibly staff at SFU. These are requirements of my program.

Anonymity: Your survey answers will be anonymous. Please do NOT type your name or other personal information, the name of institutions, colleagues, etc. into any box on the survey. Only the Student Lead and Principal Investigator will have access to the data collected through this survey. Data will be analyzed and reported in aggregate format. Any of your quotes used in our reporting will be carefully considered to maintain anonymity. The raw, reviewed, and coded data, along with all documents relevant to this study will be uploaded to SFU secure servers that have IT support for a maximum of 5 years. The Student Lead does not foresee any risks or discomfort from your participating in this study.

Use of SurveyMonkey: This online survey is hosted by SurveyMonkey, which is US owned. Any data you provide may be transmitted and stored in countries outside of Canada, as well as in Canada. It is important to remember that privacy laws vary in

different countries and may not be the same as in Canada. This survey does not ask for personal identifiers or any information that may be used to identify you. The online survey company servers record the incoming IP address of the computer you used to access the survey, but no connection is made between your data and your computer's IP address. If you choose to participate in the survey, you understand that your responses to the survey questions will be stored and potentially accessed in the US. The privacy policy for the web survey provider and be found at https://www.surveymonkey.com/mp/legal/privacy-policy/

Questions about the research? This online consent form is meant to provide you with a summary of the research study and what your participation will entail. You may keep a copy for your reference. If you have additional questions about the research study in general, the survey, or about your role in this study, please feel free to contact Susan Fong at xxxxxx. If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, please contact the Director, SFU Office of Research Ethics.

- 1. Moving forward...
 - a. I would like to participate
 - b. I decline participation

Appendix B. Survey Monkey Questions

2. Keep a certain leader and/or team from your time at SFU in mind as you answer all these questions. It does not have to be a current leader and/or team. Without identifying factors, why did you pick this leader and/or team experience to use?

SECTION 1 – LIKERT SCALE (1 = strongly agree, 3 = neutral, 5 = strongly disagree)

- 3. On this team, it was easy to voice my opinions
- 4. If made a mistake, my leader and team would never let me forget it and it affected their opinion of me
- 5. People on my team were usually comfortable discussing issues and felt comfortable disagreeing with each other
- 6. People on my team were encouraged to share their views about what didn't work and share information about what did work
- 7. People on my team were comfortable checking in with each other to see if they had questions about the right way to do something
- 8. It was safe to take a risk on my team
- 9. I had to be very cautious of sharing how I really felt in case I would upset someone
- 10. No one on this team would deliberately act in a way that undermined my efforts
- 11. My leader and my teammates valued my ideas
- 12. My leader could tell if something work-related was bothering me
- 13. My leader made my career development a priority
- 14. I sought help from my leader if I had a personal problem
- 15. My leader gave me the freedom to handle difficult situations in the way that I felt was best
- 16. My leader compromised his/her/their ethical principles in order to achieve success
- 17. I experienced negative judgement from members of my team
- 18. I was comfortable enough to disagree with a teammate's viewpoint
- 19. It was important to me that my leader understood me as a person

SECTION 2 - OPEN ENDED QUESTIONS

20. Tell me about a time in the last year when you chose to handle a situation on your own and decided to not ask your supervisor for guidance.

What was the result?

How did your leader react?

How did your leader's reaction make you feel?

Do you think you'll try to handle future situations on your own?

21. Has your leader ever discussed his/her/their poor decisions with the team? What was that decision?

How did he/she/they tell the team?

how did the team react?

22. Please describe what an "interpersonal risk" in the workplace means to you.

SECTION 3 – DEMOGRAPHICS

23. Which range does your birth year fall into?

1946 - 1964

1965 - 1980

1981 - 2000

Born after 2001

24. How long have you been working on this team?

Less than 1 year

1-2 years

3-5 years

6-10 years

More than 10 years