

PHYSIOLOGICAL AND PSYCHOLOGICAL PERFORMANCE CONSIDERATIONS OF
FEMALE ELITE WARFIGHTERS (FEW) IN UNITED STATES MILITARY SPECIAL
OPERATIONS: A QUALITATIVE STUDY

by

Bailey Weis

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

The purpose of this qualitative study was to better understand the physical and psychological characteristics of the female elite warfighters (FEW) that have completed a special operations selection or elite combat course in the United States Armed Forces. The theory guiding this study was Kathy Charmaz's constructivist grounded theory (CGT) to gain deeper insight on the female pioneers who are completing special operations selections or elite combat courses by exploring the physical and psychological nature of their experience. The CGT framework for this study highlighted the participants' background, physical insights, and mental resilience as indicators of their success while enabling each of their voices to be heard. The FEW sample for this study consisted of eleven participants who were among the first women to complete military special operations selections or elite military courses. This study prioritized recruiting a new sample of women who have completed MARSOC A&S, USMC Basic Reconnaissance Course, Advanced Tactical Operations Course, Combat Dive School, Asymmetric Warfare Group, Joint Special Operations Command Special Missions Unit, and incorporated remaining openings with Army Ranger School graduates as they have been the primary focus when researching the FEW in recent studies. Data was collected through a demographic survey, Seidman's three-interview series, and Yin's case study and cross-case examination. The data collected was then analyzed utilizing Charmaz and Saldaña's analysis methods to continuously code and identify themes. The results of this study indicated significant findings involving endurance-based athletics, insight into recruitment strategies, and the significance of individualized physical programming for biological women.

Keywords: female elite warfighters, special operations, Marine Corps Special Operations, performance optimization, female integration

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Dedication

I dedicate this work to the Almighty God and trust that He has guided every word on these pages. Thank you Lord Jesus, without you, I would not be here. To you be the glory.

I would also like to dedicate this to Grayson Powell, my little brother. I have and will always love you. I thank God for the blessed time that I had with someone as special as you. Every day passed is one day closer to seeing you again.

He has made everything beautiful in its time. He has also set eternity in the human heart; yet no one can fathom what God has done from beginning to end.

Ecclesiastes 3:11

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List of Abbreviations

Air Force Special Operations Command (AFSOC)

Army Special Forces Assessment and Selection (SFAS)

Army Special Operations Forces (ARSOF)

Assessment and Selection (A&S)

Basic Tactical Operations Course (BTOC)

Advanced Tactical Operations Course (ATOC)

Combat Dive School (CDS)

Constructionist Grounded Theory (CGT)

Critical Skills Operator (CSO)

Cultural Support Teams (CST)

Department of Defense (DoD)

Direct Action (DA)

Female Elite Warfighters (FEW)

Female Engagement Teams (FET)

Foreign Internal Defense (FID)

Grounded Theory (GT)

Human Performance Optimization (HPO)

Individual Training Course (ITC)

Infantry Officer Course (IOC)

Infantry Training Battalion (ITB)

Basic Reconnaissance Course (BRC)

Joint Special Operations Command (JSOC)

Military Occupation Specialty (MOS)

Ranger Assessment and Selection Program (RASP)

Special Operation Forces (SOF)

Special Operations Command (SOCOM)

Special Operations Officer (SOO)

Special Reconnaissance (SR)

Total Force Fitness (TTF)

United States Army Special Operations Command (USASOC)

United States Marine Corps (USMC)

United States Marine Corps Special Operations (MARSOC)

United States Navy Sea, Air and Land Teams (SEAL)

United States Special Operations Command (USSOCOM)

CHAPTER ONE: INTRODUCTION

Overview

The presence of women in the United States Marine Corps has added tremendous value to the armed forces from their perspectives and decision-making skills, communication and analytical skills, to their resiliency and determination (Dyches et al., 2023). As time progresses, the age-old stereotypes limiting female tactical performance capabilities by comparing to their male counterparts, are proving to be incorrect and outdated when measuring the effectiveness of women in combat roles and, specifically, Marine Corps special operations. In addition to physiology and strength, other human capabilities such as mental endurance resilience are critical assets that determine elite warfighter effectiveness and operational success, illustrating that women are not only capable of serving in combat roles, but that they are a necessity (Loukou, 2020).

While there are many variables that factor into the considerations of why women are currently marginalized, forming less than 10% of military special operations (SOF News, 2023), this study will examine the physiological and psychological characteristics of the first female elite warfighters (FEW) to complete special operations selections or elite combat courses to improve integration of women into Marine Corps special operations (MARSOC). The goal of this dissertation will be to strategically analyze these exclusive and unique warfighters who have not only completed an elite and physically demanding selection or course, but are also pioneers, being among the first women to do so (Tharion et al., 2022). Understanding a sample of this small group of tactical athletes has the potential to reveal new strategies and opportunities to enable transformation to a stronger and leaner female warfighter capable of reaching elite physical standards required in MARSOC. This research will also aid in gaining

more evidence for future research and evaluation of a relatively new population with limited data to continue to address the complexity of successful incorporation of women in MARSOC in a human performance capacity.

Background

Since 1994, the U.S Secretary of Defense had prohibited women from the opportunity to serve in any combat roles, however, in 2013, the Direct Ground Combat Definition and Assignment Rule was rescinded and all branches of service were required to have fully implemented the change by 2016, allowing women to pursue all combat military occupational specialties (MOSs) (Collins-Dogrul et al., 2019). Though policies have been modified, opposition to allowing women in special operations is still high and influenced by several primary beliefs, specifically the perception that women cannot perform the necessary physical tasks (Szayna et al., 2017). While women may have some biological disadvantages such as smaller bone size (Seeman, 2001) and lower muscle mass, most noticeably on upper-body tasks (Epstein et al., 2015), the physiological limits and performance of military women has yet to be accurately determined. As time progresses, more recent and ongoing research is depicting a greater physiological capacity and resilience than assumed previously (Dyches et al., 2023). The women who are passing the elite physical standards in these selections and courses will not only provide evidence to dissolve the argument of physical weakness (McClung et al., 2022), but encourage more research of the physiological (Vikmoen et al., 2023) and psychological (Tharion et al., 2022) advantages they bring to the MARSOC community that differ from their male counterparts.

Cultural and Social Context

In the male-dominated military, women, making up 17.3% of the military population (U.S. Department of Defense, 2022) have been constantly spotlighted for weakness, incompetence, and underperformance (Szayna et al., 2017). These long-held perceptions are primarily based on sex comparisons and a long list of untested physical assumptions that have held tactical women back for decades (Friedl, 2021; Dyches et al., 2023). Although combat is transitioning, there are active stigmas in the culture of the military that negatively view the integration of women into combat and special operation roles although there is no direct evidence that combat effectiveness is negatively influenced by women (Epstein, Yanovich, & Moran, 2013). While more women are opting into these combat roles, there is still a significant opposition to the integration of women specifically in MARSOC (Brownson, 2014). Most conveyed concerns by special operations forces (SOF) personnel included uncertainty of women's ability to perform the physical job requirements, lowering of SOF performance standards, perceptions of women's competence, and the belief that the unit cohesion and integrity will suffer if women are included (Szayna et al., 2017).

The United States Marine Corps (USMC) is a male-dominated organization that has been long ingrained into specific mindsets and traditions that do not always include or welcome women (Brownson, 2014). Men are regarded as the ideal warfighter which has resulted in varying advantages and, consequently, disadvantages for women (MacKenzie, 2015) that hinders military effectiveness because rather than optimizing performance for all personnel, women looking to join special operations are expected to function as "honorary men" (Collins-Dogrul et al., 2019). To be clear, two assumptions of this research are one, the physical standard should not be lowered. Two, my experience successfully completing MARSOC A&S

and that of several other women provide evidence that women can meet the elite physical requirements for MARSOC without lowering any standards or quality of performance.

Physical and Psychological Context

There are several deterrents currently preventing a higher percentage of women joining the MARSOC Raider community, specifically from physiological and psychological aspects. Biological differences in anthropometrics and body composition (Farina et al., 2022) between men and women has been misrepresented to label women as incapable of the required physical performance (Devries, 2016) due to gaps in research and military recognition (Tepe et al., 2018). Because combat roles have only been open to women in the recent decade, physiological performance and threshold has yet to be appropriately determined as emerging evidence continues to depict that women are physically and psychologically capable of performing in special operations (Dyches et al., 2023). Inherent differences in the biological male and biological female physique may require a multi-interventional training strategy for women in order to achieve the same physical standards (Epstein et al., 2015) by implementing sex-specific physical preparation programs and nutrition regimens to optimize performance potential (Devries, 2016).

By analyzing significant commonalities of the physiological and psychological characteristics of the women who have successfully completed elite military selections or courses, more information can be collected to better understand these athletes and improve the performance and integration of future generations. While these pioneering women who have been successful in completing a special operations selection or elite military course simultaneously possess physical characteristics such as lower body fat percentage (%BF), higher bone mass and density, larger body size, and high strength and aerobic ability (McClung

et al., 2022), they also tend to have similar cognitive traits and background. Previously studied Army Ranger School graduates were found to have higher grit and resilience scores than previously tested male soldiers in Army Special Operations Forces (ARSOF) scoring a mean GRIT-S score of 3.97 ± 0.51 (Eskreis-Winkler et al., 2014) where the women reported a score of 4.13 ± 0.42 (Tharion et al., 2022). Additionally, these female participants also were collegiate graduates and prior high school and college athletes (McClung et al., 2022).

Previously accepted misconceptions such as the physical strength trainability of women due to the male-oriented “one-size-fits-all” training programs, are now being revised as emerging evidence is concluding that specificity of training including sex-specific pathways can produce equivalent performance results (Friedl, 2021). Like any elite athlete, these physical milestones and performance capabilities require time and both women and men benefit from a well-established level of overall performance (Cuddy et al., 2011). This research will allow a better understanding of these pioneering tactical women to discover characteristics and commonalities leading to their physical success that will not only provide evidence of their physical capabilities, but also collect information beneficial in exploring more opportunities to improve the integration of women in MARSOC.

Situation to Self

As the researcher, I bring a unique perspective as I am one of the first females to graduate from Infantry Training Battalion (ITB) prior to the lift of the combat ban and the first woman to complete the MARSOC assessment and selection (A&S). I experienced first-hand the reality as a woman looking to pioneer into these new territories. Prior to the military, I was a Division I collegiate athlete and professional athlete. Through this experience, in addition to my husband being an operator in special operations, I have had the opportunity for a deeper

understanding of this community and broadened my connections throughout in order to develop a thorough research study.

Utilizing my background and female participants involved in special operations or elite military courses, I can approach this research with epistemological philosophical assumptions and taking a constructivist perspective in order to address the current lack of data. Through this approach, I will have the ability to not only closely work with the participants through interactive interviews but also utilize my personal knowledge and experiences to identify key elements that may be preventing a more successful understanding and optimize integration strategies of this particular population in MARSOC.

Problem Statement

With the lift of the combat ban in 2013, the United States now has the opportunity to add necessary value to their elite forces (Loukou, 2020), however, the hesitation to integrate women is a significant hindrance to military effectiveness (Szayna et al., 2017). The United States Marine Corps did not begin integration until 2016, the actual deadline allotted by the Pentagon for this change (Moore, 2020). Only two Marines have completed MARSOC A&S but were ultimately not selected to continue the pipeline to MARSOC Individual Training Course (ITC) to become a MARSOC Raider (Snow, 2018). One Marine is presently serving as the first and only female Reconnaissance Marine (Athey, 2019).

The problem surrounding the integration of women into MARSOC and other SOF units is highly complex and stems from opposition to allowing women into SOF specialties due to perceived physical capabilities and competence (Szayna et al., 2017). Due to the lack of research and acknowledgement of this new population (Givens et al., 2019; Tepe et al., 2018), the knowledge regarding their physical and cognitive capabilities and limits is currently scarce

and unable to be adequately defined (Dyches et al., 2023). Through analysis of physical commonalities and psychological traits of women who have currently passed difficult military courses, a better understanding of physical preparation and possible alternatives to training programming (Epstein et al., 2015) can occur resulting in better strategies to enable these FEW to reach the same high physical standards in special operations in a smarter and more effective way (Dyches et al., 2023).

Purpose Statement

The purpose of this qualitative study is to understand the unique physical and psychological attributes of the FEW that have completed a special operations selection or elite combat course in the United States Armed Forces. The theory guiding this study is constructivist grounded theory (CGT) proposed by Kathy Charmaz (2014) and originally developed by Barney Glaser and Anselm Strauss as data and evidence will be gathered from participants to better understand these individuals through their background, physical insights, physical preparation, cognitive self awareness, and recommendations they provide based on their experiences. In this theory, the construction of the data will be collected through observations, interviews, and the perceptions of the participants (Metelski et al., 2021). This theoretical approach will allow flexibility through inductive analysis of data gathered from the FEW to better understand a new and undefined population and identify commonalities. This research will focus on the physiological and psychological characteristics and commonalities of women who have successfully completed special operations selections or elite military courses.

Significance of the Study

This study will build upon female tactical warrior research to further analyze and define the FEW who are among the first women to complete a special operations selection or elite military combat course. The potential results of this research may be utilized to understand the FEW based on their background, physical insights and preparation, experiences, and recommendations to ultimately improve the integration of women into MARSOC and other SOF organizations. This study will contribute to data in the following classifications.

Theoretical Significance

The theoretical significance of this research is to further define the FEW and contribute to recent studies by collecting more data to understand and characterize the first women who have completed military special operations selections or elite military combat courses (McClung et al., 2022; Tharion et al., 2022). This study will utilize CGT proposed by Kathy Charmaz (2014) because the population is new and unknown. As new ideas or knowledge unfold, further collection strategies may be necessary to gain a more comprehensive view. The CGT approach will allow the data this study collects to be sorted and constructed in a flexible process to not only identify gaps, identify relationships, and gain insight into the unknown (Charmaz, 2014), but to also combine with similar research completed previously or in the future.

Empirical Significance

This empirical significance of this research study can potentially yield data to improve integration of women into MARSOC and other SOF environments by strategically using the knowledge gained to implement approaches conducive to these tactical athletes' success. To best complement Charmaz's CGT (2014), interviews will be obtained from a sample of the

women who have completed these specified selections and courses. Interviews are anticipated to be conducted based on Irving Seidman's three part interview (Seidman, 2019) to better make sense of the participants' experiences and will enhance Charmaz's CGT (2014) by enabling me to go back to the field continuously. An additional source for data will be derived from case studies and cross-case analysis utilizing Robert Yin's *Case Study Research* (2018) and his epistemological assumptions to shed empirical light on the theoretical concepts (2018, p.38). Conducting case studies of the FEW in varying branches of the military and varying special operations selections (MARSOC A&S; Army Special Forces) or elite military courses (BRC; USMC IOC; Ranger School; RASP) enable data to be captured from multiple sources (Yin, 2018) as well as providing more data from a small and exclusive population (U.S. Department of Defense, 2022).

Practical Significance

The evidence that women are physically performing and completing these selections and other elite courses (McClung et al., 2022) are indicative that they are physically capable of operating in these roles (Loukou, 2020). In addition to physical capabilities, emerging evidence from recent studies have shown that these FEW are also cognitively capable as a sample of female Ranger School graduates scored higher on the Duckworth GRIT-S score (Tharion et al., 2022), a test widely utilized in the special operations community to measure grit and resiliency (Farina et al., 2019; Eskreis-Winkler et al., 2014), in comparison to the male SOF personnel.

This research will continue to help form a physical characterization of the FEW to better understand this tactical athlete based on their background, physical attributes, physical preparation, self-awareness, and recommendations. This knowledge can result in varying improvements to integrating women into MARSOC such as incorporating adequate physical

programming (Friedl, 2021), enabling targeted recruitment for female candidates (Szayna et al., 2017), and by dismantling stereotypes that they are inferior soldiers (Collins-Dogrul et al., 2019).

Research Questions

With the combat ban being lifted in the last decade (2013), female military performance and physiology has not been defined or fully understood (Devries et al., 2016) due to significant gaps in research and participants. This study will gather more data on the FEW to better understand these women and provide evidence to help define their physiological attributes, characteristics, and commonalities. The questions below are the leading this study:

Central Research Question

What perceived factors or characteristics have enabled the female elite warfighters (FEW) to successfully complete a military special operations selection or elite military course?

Further research and evaluation is necessary on this topic in order to best address the limitations surrounding the successful incorporation of women in military special operations in a physical capacity. One of the goals of this qualitative study is to gather several forms of data in various ways (Creswell, 2018, p.43) through multiple interviews, case studies, and field notes to learn as much as possible, gain more data, and to enable future research. This question will be the driving motivation for the design of this qualitative study and look to yield multiple sources of data to analyze and define the unique characteristics of the FEW. Interviews and case studies will be utilized for the individual participants. The methods that are anticipated for use in this study will help to analytically generalize a fairly new and unknown population so it is important

to not that the results, while valuable in the process of understanding this topic, will be “generalizable to theoretical propositions and not to populations” (Yin, 2018, p. 10).

Sub-Question One

Are there any commonalities in FEW's backgrounds, physical attributes, insights, or self-awareness that affected the physical success of their selection or course completion? This question will serve to support the foundation of the study and is similar to the central research question, however, the difference between the two is at what point of the study will these questions be asked. While the central question will be primarily used to understand unique traits of the individual to form a case study, sub-question one will be used to compare the participants' commonalities in cross-case examination for deeper understanding. Recent research studies have found evidence of similar characteristics of the FEW in physical attributes, education, resiliency, and backgrounds (McClung et al., 2022; Tharion et al., 2022) and this study will continue to obtain more data.

Sub-Question Two

Are there any perceived recommendations by the FEW that could advise the physical preparation for future generations of women looking to attend MARSOC A&S? Sub-question two will take the evidence and results of the prior questions in congruence with recommendations from the FEW based on the CGT utilized to compare the different perceptions of each participant (Charmaz, 2014). Essentially, this will be an alternative CGT approach by gathering data from the participants' perceived experience in addition to the examination of their backgrounds and physical or cognitive attributes. This question relies on the constructivist philosophy that there is no single reality (Charmaz, 2006) and while the individual

recommendations may be subjective, these perceptions are imperative to understanding and better defining the FEW.

Sub-Question Three

How can the knowledge gained from characterization of the FEW help to improve the integration of women into MARSOC? This final sub-question will allow action to follow the examination and results of the previous questions and encourage movement following the completion of this research study. This question could yield results beneficial to further understanding the FEW or preparation strategies for future female generations integrating into special operations. Potential results could suggest specific physical preparation tactics (Friedl, 2021), sex-specific physical exercises (Dyches et al., 2023), or alternative methods to improving integration such as targeted recruitment (Szayna et al., 2017; Myers, 2022) of women matching similar characterizations.

Summary

The purpose of this qualitative study is to gain a deeper understanding of the FEW in regard to physical insights, physical preparation, and self-awareness to potentially implement more effective strategies for integrating women into MARSOC and other SOF organizations. By better understanding this population, the data gathered will help in gaining a more comprehensive view of the FEW through their backgrounds, unique physical attributes, and experiences and any potential commonalities of characteristics they might share that has led to their success.

The integration of women into MARSOC as well as other SOF units still faces intense opposition do to perceived physical and cognitive capabilities (Szayna et al., 2017), but by increasing data and knowledge of this new population (Tepe et al., 2018) researchers can more

adequately define these female warriors. While this problem is complex and likely to take decades to fully address similar to other female integration into military units (McClung et al., 2022), this research is necessary for finding effective solutions.

The ongoing analysis and characterization of the FEW, especially in addition to similar studies, demonstrates that these trailblazers can physically (McClung et al, 2022) and mentally perform (Tharion et al., 2022) in elite military selections and courses, but that they possess valuable qualities to contribute to mission success and military effectiveness (Loukou, 2020). This study will join other emerging research to ideally produce more tangible solutions that will not force women to become “honorary men” (Friedl, 2021), but optimize their potential in ways that are conducive to their biological and physiological needs and transform the preparation and integration process for future female generations.

CHAPTER TWO: LITERATURE REVIEW

Overview

With the Department of Defense (DoD) combat ban being lifted only recently (2013) and integration in the Marine Corps slowly being implemented (2016), there is limited research and data on the female elite warfighters (FEW) resulting in an inability to adequately define female physiological limits and performance (Dyches et al., 2023). The following chapter provides the theoretical framework and a methodical review of relevant literature to examine the FEW and their physiological characteristics that may have influenced their success. The theoretical framework of this study will utilize constructivist grounded theory (CGT) to better understand the pioneering FEW, specifically *what* they did and *how* they were successful (Charmaz, 2008). CGT will not only emphasize the understanding of empirical phenomena from the FEW's experiences (Charmaz, 2014), but also provide theoretical implications where no adequate theory has yet emerged for these contemporary tactical athletes (Charmaz, 2017).

While CGT provides an optimal approach for learning about a new population, it is also important to note that the FEW only began in the last decade (U.S. Department of Defense, 2022), so prior to 2013, data for this population does not exist. Within the ten years of FEW emergence, there is a lack of current research, as less than 10% of women have completed any special operations selection (SOF News, 2023). This literature review will utilize research studies identified for elite military combat training schools such as MARSOC A&S, USMC Basic Reconnaissance Course (BRC), USMC Infantry Officer Course (IOC), U.S. Army Ranger School (RS), and U.S. Army Special Forces Assessment and Selection (SFAS). While these courses/schools are rigorous for both male and female candidates most research has collected

data on male candidates due to combat roles only recently being opened to women (Tharion et al., 2022). Given the lack of research studies focused on the FEW, it is important to embrace the holistic view of the elite combat training process including the selection/course requirements, the physical, physiological, and psychological demands, the environment for women, and the FEW.

Given the need for a holistic view, the literature review in this chapter will first examine what is known about the elite physical standards required in MARSOC along with the significance of tactical performance optimization through individualized programming. The review will then assess the opposition, concerns, and benefits of female integration into MARSOC and other SOF units. From there, current research and evidence will provide the latest characterization findings to define the FEW based on physical attributes, psychological attributes, and background. This review will then justify the necessity of research to collect more data for understanding the FEW and the chapter will conclude with a summary.

Theoretical Framework

Constructivist Grounded Theory (CGT) is a research method proposed by Kathy Charmaz (Charmaz, 2000a) and is an extended version of the original Grounded Theory (GT) developed by Barney Glaser and Anselm Strauss (1967). While CGT utilizes similar inductive, emergent, comparative and open-ended approaches as GT (Charmaz, 2014), it differs from the original by constructing theories from emerging data instead of formulating hypotheses or pre-existing theories prior to data collection (Connor et al., 2018). Charmaz's CGT method emphasizes a flexible approach when gathering rich-detailed and full-data to understand how people comprehend their circumstances (2014). This method also complements other qualitative

analysis approaches by using CGT as a tool rather than a regulation, prioritizing the phenomenon rather than the methods themselves (Charmaz, 2014). This approach allows for a more effective way to investigate complex research topics (Kaya, 2023) specifically for new or scarcely researched populations, such as the FEW. CGT encourages findings to be used by following research and does not claim authoritative truth or proof (Breckenridge et al., 2012) motivating action and new ideas (Charmaz, 2014).

CGT will be used as the method of research as opposed to GT because CGT optimizes potential findings for researchers who also serve as active participants, which is the case with this research as I am also a member of the FEW. Charmaz emphasizes the importance of acknowledging subjectivity and the researcher's involvement in constructing and interpreting data, distinguishing her approach from conventional social constructionist methods in the 1980s and 1990s (2014). CGT is distinctive from GT by the role of the researcher. Glaser (2012) explains that the researcher should aim to minimize the impact of their preconceptions and remain distant to focus on the participant's voice rather than the researcher's interpretation (2012). In CGT, the researcher identifies their preconceptions (Charmaz, 2017) because they play an active role in the research process and in constructing the final research outcome along with the participants (O'Connor et al., 2018).

CGT Methodology

The process of constructing a grounded theory begins with the research question, recruitment and sampling of study participants, collection of rich data, initial coding, focused coding and categorizing, theory building, and write up/dissemination (Charmaz, 2017). While listed in a linear timeline, the process in reality is not linear as some sequences are continuous (Tie et al., 2019) and may require deeper investigation as new ideas or insight occur (Ramalho

et al., 2015). The advantage of this qualitative research approach is that new evidence or ideas can be constantly added or changed, respectively, as data is gathered further increasing flexibility (Charmaz, 2014). Charmaz emphasizes that methods are tools and do not generate good research and analysis, alone in themselves (2014). Working best as flexible guidelines, CGT methodology allows the researcher the ability to direct their study while also allowing creativity to flow (Charmaz, 2017). The research question(s) dictates the data collection methods and shapes the direction of approach while *how* data is collected dictates *which* phenomena will be seen and *what* sense the researcher will make of it (Charmaz, 2014). The type of data collection used may potentially alter the research question, but will allow for alternative significant discoveries on the research topic (Kaya, 2023). While these methodological tools are significant, a “keen eye, open mind, discerning ear, and steady hand” are most important (Charmaz & Mitchell, 1996). Because the quality of a research study begins with data, the quality of data, in congruence with the depth and scope, greatly affects credibility (Charmaz, 2014).

CGT prioritizes the studied phenomenon based on “how – and sometimes why – participants construct meanings and actions in specific situations” (Charmaz, 2014, p. 239). While the interpreted data collected from the participants is theorized, CGT recognizes that emerging theories are based on multiple realities, relying on the researcher’s (re)constructions of empirical observations (Charmaz, 2014; Khanal, 2018). While impossible to eliminate all biases (Strauss & Corbin, 1998; Charmaz, 2014), CGT makes allowance for subjectivities, constant reconstruction, and embraces the researcher’s interpretive view as the foundation of the research study.

CGT Epistemology

The epistemology of Charmaz's CGT methodology ensures that the participant's voice is heard (2014) while acknowledging the interrelationship that exists between the researcher and participant (Mills et al., 2006). CGT explains the nature in which humans generate knowledge from their ideas and personal experiences (Duffy, 2006). In contrast to objectivist grounded theory, CGT advocates that realities are "social constructions of the mind and that there exist as many such constructions as there are individuals" (Guba & Lincoln, 1989). CGT claims that data and theories of a research study are not discovered, but constructed by the researcher based on the interactive process with the participants (Charmaz, 2006).

CGT is a popular method of approach in social sciences such as psychology, education, and nursing (Mills et al., 2006) because it represents culture, context, personal experiences, and application of knowledge (Mohajan & Mohajan, 2022). The subjective and interpretivist epistemology of CGT is well-suited for the FEW based on the anticipated individual perspectives, unique military culture, and exclusivity of the participants. Mimicking the outlook that CGT establishes on how learners learn and teachers teach (Duffy, 2006), the purpose of this study is to demonstrate how the FEW reached their individual success and how this can be iterated by future generations of women.

CGT and the FEW

CGT will be used to explore personal experiences and perspectives from a sample of these pioneering women which will provide an *interpretive portrayal* of the FEW and not an exact depiction (Charmaz, 2014, 1995b, 2000a; Guba & Lincoln, 1994; Schwandt, 1994). CGT is a methodological tool that is appropriate and consistent with the contemporary nature of this

interpretive research topic and will enable me to collect and analyze rich data to compare a sample of women in the FEW. With such an exclusive group being studied, it is imperative to not only be open to varying forms of data collection, but to also strive for substantial and high quality data that is sufficient for depicting empirical results (Charmaz, 2017).

While data collection methods may alter as the study develops, interviews, case studies, and cross case examinations will be most suitable for exploring the FEW and their successes (Carmichael & Cunningham, 2017). In conjunction with CGT, this direct access to the ethnography “gives priority to the phenomenon rather than the setting itself” (Charmaz, 2014, p.38) and should allow me to gain trust from the participants. Ideally, the trust gained from these women will allow the ability to reach out to participants on multiple occasions to compare data systematically, with emerging categories, and discover correlations between concepts and categories (Charmaz, 2014).

Similar qualitative studies have utilized CGT methods to characterize the FEW through interviews, case studies, questionnaires, and other complementary qualitative analysis. More often than not, these studies have employed more than one method enabling the researcher(s) to gather rich data (Charmaz, 2014) and snowball data with interrelated research. Charmaz (2010) proposes that CGT strives for longer and more in-depth interviews that leave room for extended questions along with the opportunity for the participant to contribute topics in the interview. The novelty surrounding the FEW requires initial research to not only seek out emergent concepts (Charmaz, 2006), but also seek out differing samples of the FEW to extract comprehensive data for a more complete view.

Because of CGT’s reflexive approach to data collection and analysis, the method enables the researcher to not only utilize a magnitude of qualitative tools, but also encourages the

researcher to construct original theories based on emergent research (Charmaz, 2014). Emergent theory allows for initial understanding of new perspectives and experiences as data collection and knowledge unfold. This freedom encourages the results from the study to potentially construct an emergent theory based on personal and professional interpretations revealed from the CGT methodology process. Similar to related research, specifically those focused on the FEW, I look to collect rich data for better understanding of the FEW with multiple data collection methods and a unique sample of the FEW distinct from any other study.

Related Literature

This section on related literature provides a holistic overview of the FEW and their dynamic within SOF units, specifically MARSOC. There are two primary courses required to pass to become a MARSOC Raider which are MARSOC A&S and MARSOC Individual Training Course (ITC), a 9-month course designed to produce SOOs and CSOs capable of operating SOF missions (Marine Raiders, 2023). This study will focus on MARSOC A&S for brevity and a more specific research topic; correlating the experiences of the FEW, related literature, and physical and physiological requirements to that of MARSOC A&S. Additionally, the FEW is composed of women who have completed various physically demanding elite military combat selections or courses such as MARSOC A&S, USMC BRC, USMC Infantry IOC, Army RS, and Army SFAS. While these courses have variations in regard to training, requirements, and outcomes, the physical and mental rigourness demanded, pass rate, stressors and assessment components are relatively interchangeable for the purpose of this study (McClung et al., 2022).

The following segment will first provide an overview of the requirements of MARSOC along with correlating research from similar SOF and combat studies. This portion will consider

the physical, physiological, and psychological demands of personnel as well as predictors of success within these communities. The next point of discussion will address performance optimization and the impact of individualizing human performance programming (Friedl, 2021) for both the male and female tactical athlete. This will be followed by an overview of female integration into MARSOC and SOF units where oppositions and concerns (Szayna et al., 2017; Tepe et al., 2018) will be met with the benefits and necessity of the inclusion (Loukou, 2020; Steder & Rones, 2019). The final topic will discuss the characterization of the FEW based on physical and psychological attributes (McClung et al., 2022; Dyches et al., 2023) as well as background to explore commonalities (Tharion, 2022) of current research and themes that will shape the direction of this study in hopes to gain more understanding and insight to this unique outlier. The literature review will then be concluded with a summary of the findings, practical implications, and insight for future research.

Physical and Physiological Requirements of MARSOC (SOF units)

Special operations (SOF) are military missions conducted by “specifically designated, organized, selected, trained, and equipped forces using unconventional techniques and modes of employment” (NATO, 2013) that are performed by highly trained, physically and mentally elite professionals. The United States Special Operations Forces (USSOCOM) operates in all branches of service: MARSOC (USMC), USASOC (Army), AFSOC (Air Force), NSWC (Navy), and Joint Special Operations Command or JSOC containing a mixture of all branches of service (Trevithick, 2017; SOCOM, 2013). Service members aspiring to join must attend an assessment and selection process for the specified command and “demonstrate physical fitness and operational competence” (Farina et al., 2019) throughout a course of events requiring elite

muscle strength and endurance, advanced aerobic capabilities (Farina et al., 2019) and strong mental resilience (Eskries-Winkler et al., 2014).

While each branch and command specialize in specific mission sets, MARSOC Raiders specialize in direct action (DA), special reconnaissance (SR), foreign internal defense (FID), unconventional warfare, and counterterrorism (Harkins, 2015). To become a MARSOC Raider, there are several requirements prior to attending MARSOC A&S such as first and foremost, being a United States Marine, unlike some branches allowing civilians to enlist with a guarantee to attend their respected selection (Angeltveit, 2016).

For the two operational roles in MARSOC, Special Operations Officer (SOO, commissioned officers) and Critical Skills Operator (CSO, enlisted), there are additional requirements to apply to attend MARSOC A&S including physical, mental, career and administrative prerequisites (Marine Raiders, 2023). Upon meeting these requirements, candidates attending A&S will then be evaluated based on a series of physical events and mental testing both psychological and knowledge-based (Marine Raiders, 2023). In two phases lasting approximately 8 weeks, MARSOC A&S is designed to push candidates to their physical, mental, and emotional thresholds (Harkins, 2015) while simultaneously evaluating their ability to continue to perform under intense stress (Smith et al., 2020).

Although physical and mental testing in other courses and selections vary based on the specific branch and their requirements, selections are similar in looking to filter the highest quality individuals for operating roles (Angeltveit, 2016) and do so by inducing high-stress situations while still expecting elite job performance. While A&S is open to a large pool of individuals meeting the required prerequisites, there are anthropometrics and body composition characteristics indicative of a higher success possibility. Specifically in the Marine Corps and

Army, recent studies observing MARSOC and SFAS candidates have found multiple correlation factors that are statistically significant when predicting successful individual selection (Cuddy et al., 2011; Farina et al., 2019; Farina et al., 2022; Royer Thomas, & Winters, 2018).

Predictors of Success

The process of recruiting, evaluating, and selecting SOF operators is an extensive and difficult process. The demanding evaluation of MARSOC A&S leading to MARSOC Individual Training Course (ITC) requires peak physical performance and is a grueling course intended to identify individuals that exhibit the necessary physical and mental characteristics needed in SOF missions (Royer et al., 2021). Physical, physiological, and psychological characteristics are common areas of study for exploring performance among special operations personnel due to the high physical and mental demands in high stress environments. Statistically significant results are beneficial for multiple reasons including recruitment, performance optimization and enhancement, and retention (Farina et al., 2022). Understanding these findings allows future research to examine varying physiological and psychological thresholds to determine performance deficiencies, capabilities, and possible implementation of specific physical programming for more effective personnel (Royer, Thomas, & Winters, 2018).

Farina's (2019) study involving 800 SFAS candidates indicated that physical performance is the most predictive element of successful completion, followed by demographics and psychological aspects. Although the study was conducted on SFAS candidates, MARSOC A&S and SFAS possess very similar screening features, events, and selection factors (SOCOM, 2013) including rucking, land navigation, and other physical events. During this study, physical performance was most indicative of candidates completing the course; however, anthropometrics and body composition (Ross et al., 2021) were also

significant predictors discovering that candidates successful were taller, possessed greater body mass, and lower body fat percentage (Farina et al., 2022). Aside from height, these predictive factors can be modified, suggesting that focused performance programming can lead to improved selection rate (Farina et al., 2022).

While physical performance is the most indicative aspect of success at MARSOC A&S, psychological traits are also predictive of success as well (Farina et al., 2019); Smith et al., 2020). The Duckworth Short Grit Scale (GRIT-S) (Duckworth & Quinn, 2009) is an eight item assessment measuring grit that is widely used in psychological assessment of SOF candidates and personnel (Eskreis-Winkler et al., 2014). Grit is defined by Eskreis-Winkler et al (2014) as a facet of conscientiousness that signifies extreme stamina when striving for a particular interest, working diligently toward a higher, long-term goal. According to the study, participants who possessed a mean GRIT-S score of 3.97 ± 0.51 were not only grittier, but more likely to succeed (Eskreis-Winkler et al., 2014; Tharion et al., 2022). Specifically in MARSOC, SOF, and other rigorous combat courses, grit has denoted predicted course success for successful outcomes (Duckworth et al., 2007; Bartone et al., 2008; Beal, 2010).

Grit and resiliency are both determining factors when handling stress, which affects everything in life from job performance, mental ability, and physical and mental health (Smith et al., 2020; Schneiderman et al., 2005). The ability to positively handle stress has been found to lead to improved psychological and physiological performance (Park & Helgeson, 2006; Duncko et al., 2007; Smith et al., 2020) as well as improved mental and physical performance during arduous tasks (Jones et al., 2009). Utilizing Navy SEAL (Sea, Air, and Land) Basic Underwater Demolition/SEAL (BUD/S) candidates, Smith et al (2022) finds that candidates' ability to handle stress and the mindset in which they do so is correlated to the likelihood of

their success. Particularly, the stress-is-enhancing mindset was found to predict a greater persistence throughout training and events (Smith et al., 2022).

Performance Optimization

With physical and psychological performance impacting the success of completion among MARSOC A&S and other SOF selections, these indicating measures are not only modifiable (Farina et al., 2022) but predominantly trainable and can improve with progressive performance programming (Cuddy et al., 2011; Nindl et al., 2016; Royer, et al., 2018). Although optimized training is a new concept within the military, there is progress being made to optimize performance capabilities of the warfighter in physical, mental, and nutritional ways (Dyches, 2023). In 2006, the Department of Defense (DoD) began utilizing the conceptual frameworks of Human Performance Optimization (HPO) and Total Force Fitness (TFF) to improve the overall performance of military personnel (Romero et al., 2021). Physical performance programming is being adopted both within and outside of the military through programs such as the Army's Holistic Health and Fitness (H2F) (Dyches, 2023) as well as privately owned performance companies that support tactical athletes in preparing for various elite military courses.

While implementation of holistic health and performance programming are slowly being implemented, these programs are geared towards the average military personnel and not elite tactical athletes pursuing or involved in special operations (Nindl et al., 2016; Friedl, 2021). As modern warfare and the military evolve, conventional military training fails to address deficiencies in physical capabilities necessary to optimize the performance of today's warfighter (Nindl et al., 2016). The International Congress on Soldiers' Physical Performance (ICSPP) held in 2017, utilizing a Likert scale, identified perceived priorities in relation to

military personnel's health as well as physical performance (Lovaleker et al., 2018). The survey concluded that ICSPP respondents compiled of physicians, service members, scientists, and researchers (40.6% military, 58.9% civilian) identified physical training programs, both strength and endurance, were among the top five priorities requiring the need for further research and additional focus (Lovaleker et al., 2018). Through one study, 164 male CSOs were observed to determine the impact of physical, physiological, and dietary impacts on tactical performance (Royer et al., 2018). The results not only suggested a need for future research to investigate physiological thresholds required for more effective performance, but that these results could improve the MARSOC A&S process by implementing more specific training (Royer et al., 2018).

General Specialization of Human Performance Programming

There are numerous benefits to specialization of physical programming to improve performance, specifically in regard to special operations. Specified progressive training programs help to develop overall physical performance more effectively while decreasing attrition and reducing the risk of injury (Cuddy et al., 2011; Epstein et al., 2015; O'Leary et al., 2023). Retention and performance quality increase (Farina et al., 2019) and this understanding enables more effective recruitment of potentially successful candidates (Cuddy et al., 2011). Specialized performance programming prior to attending selection can also lead to more competitive and established candidates (Cuddy et al., 2011), allowing a more realistic progression resulting in more developed and effective operators. Ideally, focus on the tactical athlete will encourage the military to strategically prioritize, plan, optimize, and implement effective physical training programs which is specifically important as women enter combat roles (Nindl et al., 2016).

Specific Benefits for Women of Specialization of Human Performance Programming

Although HPO has been integrated into the military with benefits to both men and women (Romero et al., 2021), research and understanding of female physiology in the military is significantly lacking in comparison to males (Friedl, 2021). Due to this gap in knowledge (Friedl, 2021) women in the military have been assessed, evaluated, conditioned, and trained differently than their male counterparts (McSally, 2007). For example, men and women have adhered to different standards in physical fitness tests (PFTs) and combat fitness tests (CFTs), leading to the reinforcement of male biases towards women and their capabilities (Szayna et al., 2019). As new evidence emerges regarding the physical trainability of women (Friedl, 2021; Vikmoen et al., 2023), adjustments are being made to physical performance testing such as gender-neutral physical assessments (Foulis et al., 2017) and full integration of male and female personnel and recruits with the Marine Corps being the last branch to do so.

Similar to recent concepts such as HPO and TTF being incorporated, focus on incorporating female personnel into more research should also be prioritized (Friedl, 2021). Dr. Karl Friedl has conducted groundbreaking research for female military performance and not only debunked female readiness stereotypes, but has continued to produce evidence of elite physical capabilities (McClung et al., 2022). Stereotypes such as inferior physical strength (Collins-Dogrul et al., 2019) and incompetence (Szayna et al., 2019) are eradicated as emergent evidence illustrates the physical (Dyches et al., 2023; McClung et al., 2022) and mental (Tharion et al., 2022) capabilities of women meeting the most elite standards in the military when given the opportunity. He has discovered solutions that do not “force women into a long-standing mold” (Friedl, 2021) where they are expected to perform as “honorary men”

(Collins-Dogrul et al., 2019), but to optimize their performance with specific and directed training (Friedl, 2021; McClung et al., 2022).

It is not only in military performance where female physiology is not fully known, but specific programming for health and physical optimization is also not fully understood (Devries et al., 2016). Longitudinal research is needed to identify performance of both men and women with adequate sampling to assess for sex differences where most research has been conducted through independent studies involving only male participants (Tepe, 2018). Many gaps that are in present research regarding the physiology of female personnel are caused by the gaps originating from the military itself and the lack of representation or even lack of acknowledgement of women that were performing and succeeding in similar roles (Tepe, 2018; Segal et al., 2015). Due to most research studies utilizing only male participants (Tepe, 2018), men have been viewed as the ideal soldier (MacKenzie, 2015) and physical performance practices and training has been designed with men as the focus (Dyches et al., 2023). Women currently lack female focused physical programming (Devries et al., 2016) as any military physical readiness adjustments to training are best suited for men (Dyches et al., 2023).

Overview of Female Integration into MARSOC (SOF)

Prior to the discussion of female integration into special operations, it is important to note that this study does not endorse the lowering of elite physical requirements and standards of MARSOC and other SOF organizations. Women have demonstrated that they can physically and mentally perform at the level required (McClung et al., 2022; Tharion et al., 2022; Dyches et al., 2023); while not all, or most, women can physically perform at these standards (McClung et al., 2022), neither can most men (Farina et al., 2022). Like all military special operation selections, MARSOC A&S is a grueling course that has had an extremely small number of

women attempt (five) and only two of which have successfully completed (Snow, 2018; Moore, 2020), although neither woman was selected to continue to MARSOC Individual Training Course (ITC). With an increasing representation of women in the military (Dyches et al., 2023), the life of the combat ban has encouraged women into taking on combat roles and pursuing special operations (Tharion et al., 2022). Women have completed SOF selections and elite military courses such as Ranger School, BRC, SFAS, IOC, and others (McClung et al., 2022; Dyches et al., 2023; Loukou, 2020), but are still met with significant opposition and concerns (Szayna et al., 2017). This section will discuss these concerns and ingrained opposition to the integration of women into special operations as well as the necessity and benefits by joining these organizations.

Opposition and Concerns

There are several diverse obstacles currently preventing a higher percentage of women integrating in the MARSOC community from physical training and physiological priorities (Epstein et al., 2015; Lovaleker et al., 2018), to present military culture and male-dominated biases (Brownson, 2014; Szayna et al., 2017). Further research and evaluation is necessary to best address and discover alternative ways to optimize our country's most elite warfighting forces through strategic integration with pace and progress being monitored (Szayna et al., 2017).

In a study conducted by Szayna et al (2017), results indicated strong opposition to opening SOF positions to women through a survey and focus groups utilizing male SOF personnel. The study found that over 80% of male unit members did not believe that women had the physical capabilities or competence to perform as SOF operators, resulting in SOF standards being lowered (Szayna et al., 2017). An Air Force Academy study revealed that 20%

of the participants held the belief that women are held to a lower standard (Do et al., 2013) while an additional study interviewing Marines found that the perceived capabilities of female Marines were influenced by gender biases and stereotypes (Archer, 2012). This perspective of women and standards has led to deeply rooted opposition as well as concerns regarding disintegration of mission effectiveness (Szayna et al., 2017). Additionally, Szayna also found that 40% of survey respondents believed that women could be supportive when conducting specific unconventional missions such as communication and sensitive operations, but ultimately did not support integration as SOF operators.

Most recent studies have indicated that the physical performance of women is the primary concern when integrating women into special operations (Szayna et al., 2017; Do et al., 2013), however these preconceptions can be addressed through implementation of gender-neutral standards (Szayna et al., 2017; Foulis et al., 2017) and utilizing training programs designed to optimize the performance of female candidates to meet these standards (Brady & Keller, 2023). While the disproportion of women becoming operators may be influenced by biology and concern over physical capabilities, it is generated and sustained through culture (Deutsch, 2007) stemming from biases and impacting the strength of our national defense by excluding women (Loukou, 2020).

Benefits & Necessity

Although there is a significant need for further research regarding women and military performance, there is evidence in recent studies that show that not only are women capable of serving in combat roles, but that there exists a need for them to serve in these positions (Loukou, 2020). The presence of women enables additional decision-making perspectives, alternative communication tactics, different analytical skills, and other valuable attributes

(Dyches et al., 2023). Most recently in the Global War on Terrorism, there was an international realization for the necessity of women in sensitive operations (McCullough, 2013). All-female teams were formed such as Team Lioness, USMC Female Engagement Teams (FETs), and Army Cultural Support Teams (CSTs) as well as teams from other countries such as the creation of Norway's Jegertroppen (Harris, 2013; Loukou, 2020). While each of these teams made valuable contributions through improved interactions with the Afghan population (McCullough, 2013), teams were temporary for specific missions, aside from the Jegertroppen, and were dismantled following completion (Loukou, 2020). The Jegertroppen is a tremendous example of women breaking numerous social and cultural beliefs regarding women performing in special operations. This internationally recognized team is physically held to the same standards as the Norwegian male special operation units (Loukou, 2020) and trained in arctic survival, counterterrorism, urban warfare, hand-to-hand combat, and patrolling while carrying a 60 pound ruck (Steder & Rones, 2019).

There are significant advantages added to special operations when women are involved such as sex-specific differences in physiology which enable diverse performance capabilities especially in unconventional warfare (Steder & Rones, 2019). With recent studies only just beginning to unearth female physiological abilities in the military, research is now proving that long-standing myths and stereotypes regarding female performance are well overdue (Friedl, 2021; Dyches et al., 2023). For example, utilizing a modified Delphi process, Dyches et al (2023) found that "women are energetically more efficient than men" giving women an advantage in military tasks such as survivability and mental function during periods of hunger or limited nutritional intake called the "estrogen advantage" (Devries et al., 2016; Tiller et al., 2021). Women have not only proven their ability to physically meet the rigorous standards of

special operations (Steder & Roness, 2019; McClung et al., 2022), but they also offer valuable contributions and advantages to mission effectiveness that cannot be delivered by their male counterparts (Loukou, 2020; Dyches et al., 2023).

Physical and Psychological Characterization of the FEW

Even with knowledge gaps and perceived disadvantages that women may face due to male-focused research (Devries et al., 2016), women have been successful at SOF selections and elite military courses (McClung et al., 2022; Dyches et al., 2023; Loukou, 2020). Further knowledge and evaluation is needed in order to best address the limitations surrounding the successful incorporation of women in military special operations in a physical capacity (Friedl, 2021). Continued research of this new population will lead to understanding and the ability to characterize why and how these women have been successful (Charmaz, 2014), potentially benefiting future generations.

Most recent findings have shown that diverse athletic and physical backgrounds of these women have largely impacted their success and physical ability (McClung et al., 2022) as the elite physical standards necessary in these communities require months and even years of preparation (Kraemer & Nindl et al., 2001). The knowledge acquired from studying the FEW can possibly help to strategize training regimes and programs to enable a greater percentage of women into MARSOC and other SOF units (Devries et al., 2016). While it is entirely possible and proven that prepared women can perform in these capacities, there are significant physical and physiological characteristics (McClung et al., 2022) for the women that have been successful in elite military courses and selections (Tharion et al., 2022).

Physical and Psychological Attributes

Recent studies on women who have completed rigorous military courses show that these women possessed high aerobic and anaerobic capacity, low body fat percentage, larger body size, greater circumferences in several key physique sites, and greater bone mass and density (McClung et al., 2022). With this information, it is important to continue to research the steps taken in order to achieve these results and optimize preparation strategies for women in future generations without forcing women to adapt to male-oriented performance programming (Friedl, 2021). Most recent studies have focused on a sample of the FEW, the first women to complete elite US military training (McClung et al., 2022). While there have been revolutionary data collected, these studies are limited through their sample utilizing the same twelve participants, eleven Army Ranger School graduates and one Marine IOC graduate (McClung et al., 2022; Tharion et al., 2022). Physically, these women were larger, stronger, and leaner when compared to the average Army female soldier and were most closely comparable to elite powerlifters (McClung et al., 2022). These new studies illustrate the opportunity to test the thresholds of elite female physiology in both strength and resilience as explored by Taylor et al (2021) with U.K. servicewomen dubbed the Ice Maidens. These women endured grueling preparation for a 61 day trek 1,700 miles in Antarctica carrying sledges weighing 80kg (Taylor, Gifford, & Cobb, 2021) demonstrating physical and mental tenacity through environmental extremes. The Ice Maidens along with the FEW and the Jegertroppen are all successful examples of the physiological capabilities of women in elite military conditions (Dyches et al., 2023).

Alternatively to the recent quantitative study regarding physical capabilities and performance, Tharion et al., (2022) utilized several qualitative methods such as intensive

interviews, questionnaires, and focus groups (Charmaz, 2014) to assess psychological, personal, and sociological conditions the FEW experienced in relation to their grit and hardiness. While previously established that male soldiers with high GRIT-S scores (3.97 ± 0.51) were more likely to complete ARSOF selection course (Eskreis-Winkler et al., 2014), Tharion's results reported that the sample of the FEW scored significantly higher (4.13 ± 0.42) than the men.

Personal Background and Commonalities

Out of this particular sample, most participants competed in sports while in college; “eight (62%) women played a varsity sport, three (23%) women participated in sports on their own to include competitions, and three (23%) women did not participate in any form of organized sport while in college” (McClung et al., 2022) while every participant competed in an upper body strength demanding sport during high school (McClung et al., 2022; Tharion et al., 2022). In this sample of the FEW, all were college graduates although one participant was enlisted and all others commissioned officers (Tharion et al., 2022); a significant point when compared to their male counterparts predominantly being enlisted (Farina et al., 2019). Educationally, all women in the sample had an undergraduate degree, with three pursuing a graduate degree, four possessing graduate degrees, one enrolled in medical school (Tharion et al., 2022). These recent studies have been beginning to close the gap concerning the population and understanding of the FEW. One of the goals of this study is to collect and add new data with a new sample of the FEW and continue to learn more that will help to support other studies, understanding this population, and optimizing results for future generations looking to join special operations.

Summary

There is limited research and data on the FEW because this exclusive population only began to exist in the last decade (U.S. Department of Defense, 2022). The purpose of this paper is to gather data to better understand the FEW with the intention to more adequately define military female physiological limits and performance. Utilizing CGT will not only emphasize the understanding of the FEW's experiences (Charmaz, 2014), but will specifically explore *what* they accomplished and *how* they accomplished it (Charmaz, 2008).

While there have been groundbreaking recent studies conducted to characterize the FEW (McClung et al., 2022; Tharion et al., 2022), there are limitations such as the study conveying only one small sample (12 participants). Additionally, these studies primarily focus on the FEW that served in the Army and graduated from Ranger School (92%) with only one participant graduating from USMC IOC. The data collected from this study will not only provide a new sample of the FEW to examine and explore alternative experiences, but also potentially reveal any consistencies or patterns within the population and determine emergent theories for future research.

This study aims to recognize characteristics and commonalities of these women to determine any positive influences to potentially impact the integration of women into MARSOC or other SOF units. Through identifying the unique physical attributes and physical preparation of the FEW successful in their endeavors, evidence and data collected can enable a better understanding of the military female physiology that has been ignored for too long (Dyches et al., 2023). This understanding can lead to performance enhancement and optimization through adequate physical programming (Nindl et al., 2016) as well as targeted recruitment (Szayna et

al., 2017; Farina et al., 2022) of women sharing similar characteristics possessed by the FEW. This study will look to provide more data for future research to continue to define the FEW through physical and psychological characteristics that will lead to better understanding of their success and potentially direct the implementation of specific physical programming and improved female integration into military special operations.

CHAPTER THREE: METHODS

Overview

The purpose of this study was to understand the unique physical and psychological attributes of the female elite warfighters (FEW) that have completed a United States military special operations selection or elite combat course. Multiple qualitative approaches were utilized, primarily interviews, surveys, and cross-case examination, to gather rich data guided by Constructivist Grounded Theory (CGT) and interpreted through the participants' perspectives (Charmaz, 2014; Seidman, 2019; Fink, 2017; Creswell & Poth, 2018; Yin, 2018). Evidence was gathered from a sample of the FEW to understand their success through their background, physical insights, physical preparation, self-awareness, and recommendations they provide based on their experiences. This approach allowed flexibility through inductive analysis of data gathered from the FEW to better understand this exclusive population and identify characteristics and commonalities between them.

Research Design

This study utilized CGT and therefore, had the flexibility to employ multiple methods for data collection including interviews, surveys, and case studies to explore and better understand the how and why the FEW were successful in their pioneering endeavors. This qualitative study used theoretical frameworks (CGT) to identify a problem in human society (Creswell & Poth, 2018), that being the lack of knowledge, data, and understanding surrounding the FEW who have completed a special operations selection or elite combat course. This is significant when the problem or research topic is often not well understood and must use words, thoughts, experiences, and interpretation to gather consequential data (Brédart et al., 2014; Ravitch & Carl, 2020).

CGT enabled deeper insight on this exclusive group of participants and their unique experiences and encouraged “emergent development and iterative processes” (p.25) permitting ongoing interpretation as rich data was continuously collected (Charmaz, 2014). The researcher interpreted the phenomena along with the participants so it was important to reach an agreed upon construction (Charmaz, 2008) based on understanding their perspectives (Denzin & Lincoln, 2005). CGT was used to address the meaning the FEW attributed to the empirical phenomena from their experiences (Charmaz, 2014; Creswell & Poth, 2018) and provided theoretical implications where no adequate theory has yet emerged for these contemporary tactical athletes (Charmaz, 2017). CGT qualitative design allowed the use of a survey, interviews, and case studies tools that were utilized to gather more information on an underrepresented population.

In conjunction with CGT, case study design was used for data analysis and holistically making sense of the data and results (Yin, 2018). This decision to utilize a case study design and cross-case examination was appropriate for this study based on the research questions and the CGT notion that the research questions should shape the methods chosen for use (Charmaz, 2014). Incorporating a case study design was appropriate for this research topic because a goal of this dissertation was to understand and explain this contemporary group through research questions requiring in-depth descriptions of the phenomena (Yin, 2018). Classic case studies typically focus on an individual for one case (Bromley, 1986; Parsons, 2012); with the FEW and their independent yet related experiences, this would entail a holistic multiple-case study (Yin, 2018). Similar to Peter Szanton’s (1981) example of a multiple-case replication design, this research started with 11 case studies that were each a replication to provide evidence of the phenomenon – completing a special operations selection or elite combat course. From each

replicated case study, an individual case report was created, leading to cross-case analysis and comparisons (Yin, 2018) to explore any commonalities or emergent theories (Charmaz, 2014).

Data collection methods such as a survey and Seidman's (2019) three-interview series process enabled a thorough case study design by preparing each participant's case with sufficient access to rich data (Charmaz, 2014) and worked to illuminate the research questions (Yin, 2018) and potential emerging theories for this small population of women who have attended a special operations selection or elite combat course. This dissertation focused on a sample of the FEW who have each completed varying, yet closely related selections or courses, each demanding similar physical and mental requirements. These circumstances are best correlated with a replication holistic multiple-case design for several reasons.

First, the outcome was already known for each case directing the evaluation to ask *how* and *why* these participants were successful (Yin, 2018). Second, the sample FEW all have the same outcome or result in their experience within the scope of this research. While an embedded multiple-case design is possible, the holistic design was chosen to best examine the characteristics of success between each unique case (Eckstein, 1975; Lijphart, 1975). This qualitative research method was appropriate for this dissertation because the research questions seek to explore and "understand complex social phenomena" (Yin, 2018, p. 5) through gathering rich data via intensive interviewing (Charmaz, 2014; Seidman, 2019) and analyzing evidence with cross-case examination and qualitative procedures such as coding, theoretical sampling, and themes as outlined in Charmaz's (2014) CGT method.

This research focused on an exclusive and exemplary small group and their completion of a special operations selection or elite military course. The choice of a qualitative study was appropriate for this dissertation because understanding the contemporary FEW and the

characteristics leading to their success showed a “distinctive need for case studies” (Yin, 2018, p. 5) and a direct need for interviews (Charmaz, 2014). This research design was chosen based on the purpose of the research, the research questions, and the unique circumstances of the participants and the phenomena.

Research Questions

Central Research Question

What perceived factors or characteristics have enabled the female elite warfighters (FEW) to successfully complete a military special operations selection or elite military course?

Sub-Question One

Are there any commonalities in FEW's backgrounds, physical attributes, insights, or self-awareness that affected the physical success of their selection or course completion?

Sub-Question Two

Are there any perceived recommendations by the FEW that could advise the physical preparation for future generations of women looking to attend MARSOC A&S?

Sub-Question Three

How can the knowledge gained from characterization of the FEW help to improve the integration of women into MARSOC?

Setting

To incorporate the most diverse perspectives and contextual information (Creswell & Poth, 2018), the participants were not located at one site, but rather all over the United States

and potentially overseas due to the nature of the U.S. military. Participants varied in their location based on their present military status as active, reserve, or veteran and had the potential to be stationed on any possible U.S. military base, be deployed internationally, or at their civilian residence. CGT required all participants to have experienced the same phenomenon (Charmaz, 2014; Creswell & Poth, 2018), therefore, this sample of the FEW had all completed a military special operations selection or elite military course.

While in-person face-to-face interviewing might be considered the gold standard in qualitative research (McCoyd, 2006), recent studies have concluded that the difference of superiority is only marginal (Krouwel et al., 2019). When choosing a setting for this study, generalizability, convenience, comfort, timing, and budget were all considered factors (Creswell & Poth, 2018; Knigge & Cope, 2006; Vollstedt & Rezat, 2019). The FEW is an exclusively small group presently represented by less than 200 women (Moore, 2023; Athey, 2019). The three-interview series encouraged three separate interviews with each participant and while alterations occurred, the ideal spacing was three days to one week (Seidman, 2019). Due to this protocol, virtual calling was utilized and was justified due to time and budget (Krouwel et al., 2019).

Participants

For this research, a sample of the FEW was used and derived from purposeful and snowball sampling (Yin, 2018). These individuals were selected to contribute to the purpose and understanding of this study and research questions (Creswell & Poth, 2018). Theoretical sampling, a data collection method in CGT, was facilitated with the analysis process iteratively to determine additional data that needs to be collected and if an emergent theory or model takes shape (Charmaz, 2014). While the first participants were selected through purposive sampling

(Charmaz, 2014), the remaining were accomplished through snowball sampling from researcher connections within the FEW or in the military (Ravitch & Carl, 2020).

The sample size was 11 of the female elite warfighters (FEW) who were among the first women to complete military special operations selections or elite military courses. Charmaz (2014) explains that the individuals who represent the purpose of the study are those that provide the most detailed and significant data. While any member of the FEW would fall into this category, priority was placed on participants who were not in a previous FEW research study, and those that have combat experience. Recent studies conducted by McClung et al. (2022) and Tharion et al. (2022) utilized eleven Army Ranger School graduates and one USMC IOC graduate. This study prioritized recruiting a new sample of women who have completed MARSOC A&S, USMC Basic Reconnaissance Course (BRC), CST, Basic Tactical Operations Course (BTOC), Advanced Tactical Operations Course (ATOC), Combat Dive School, Multi-Mission Parachute Course (MMTC), Asymmetric Warfare Group (AWG), Joint Special Operations Command Special Missions Unit (JSOC SMU), and incorporated remaining openings with Army Ranger School graduates as they have been the primary focus when researching the FEW in recent studies. The criteria for the FEW sample participants for this study was:

- The participant was at least 18 years old.
- The participant was born as a biological female.
- The participant identifies as a female.
- The participant has served/is serving in the United States Armed Forces.
- The participant has completed a military special operations assessment and selection (i.e. MARSOC A&S, SFAS, RASP, BUD/S, JSOC SMU, CST etc.)

- OR the participant has completed an elite military combat course (i.e. Ranger School, BRC, BTOC, ATOC, RS, MMTC, CDS, AWG etc.)
- The participant was willing to talk about their experiences.

Procedures

Following IRB approval, participants were recruited to volunteer for the study in three ways. First, participants were recruited via personal connections with the researcher. Second, researcher connections to military colleagues that could connect with potential participants was employed. Third, snowball sampling (Creswell & Poth, 2018) was used to contact any other potential FEW participants when necessary. While contacting these individuals was highly feasible, there were some problems of availability as some FEW members were actively deployed or unable to participate.

Following the dissertation committee's reviews and IRB approval, pilot testing for both the survey and interviews took place and utilized the same devices, recording methods, and respective procedures for each data collection method to establish trustworthiness (Charmaz, 2014; Fink, 2017).

Once the participants volunteered, the informed consent form was shared with them and included information about the purpose and details of the study and their ability to withdraw at any time. Once verbal and written consent was received from the participants, the three-interview series (Seidman, 2019) interviews were scheduled at times most convenient for the participants. Surveys were conducted electronically through Google forms and were completed prior to the scheduled interviews.

Interviews were conducted via virtual call, remotely, with Microsoft Teams and digitally voice recorded to transcribe. Transcriptions were then coded as emergent themes were realized and then grouped and analyzed via created categories. Memo-writing, notes, and theoretical sampling were also utilized tools that advanced the evaluation of data processes. To best conduct the in-depth interviews, an interview guide was utilized cautiously to avoid “manipulating the participants to respond to it” (Seidman, 2019, p. 94). To best explore the participants’ experiences, open-ended questions combined with engaged listening and advancing with purpose, ultimately directed the interview (Seidman, 2019; Charmaz, 2014).

The Researcher's Role

As the researcher and human instrument (Creswell & Poth, 2018) for this study, I was in a unique position also being a member of the FEW. After graduating college, I enlisted into the Marine Corps in 2013, just as the combat ban for women was rescinded, however, the USMC was the last branch to begin integrating women into combat roles. I volunteered to attend USMC Infantry Training Battalion (ITB), which is the basic combat school for combat MOS’s, and participated in a study evaluating the physical performance of women in a combat course. In 2014, I was among the first women to graduate from ITB, but was not allowed to continue in the combat position because the Marine Corps had not implemented opening these roles to women at this time and would not do so until 2016. In 2018, after returning from deployment, I decided to attend MARSOC A&S. Upon doing so, I was the first woman to complete MARSOC A&S and experienced first-hand the reality of pioneering into these newly opened territories. I was ultimately not selected to continue on to the individual training course (ITC) after the selection concluded, but my passion for learning how to optimize special operations with the inclusion of women has remained constant.

In addition to my experience, my husband also served in military special operations. With these two primary factors, I had the opportunity for a more intimate understanding of this community and have deepened my connections throughout varying organizations, thus, developing a thorough research plan. Being personally involved with the topic of this research, I remained diligent in Seidman's (2019) suggestion of only sharing my experiences occasionally. I created a trusting rapport with each interviewee and did not overuse sharing my own experiences and aimed to avoid distorting an interview or distracting the participants by limiting my own interaction (Seidman, 2019).

In conjunction with CGT, this direct access to the ethnography, the experiences of the FEW "gives priority to the phenomenon rather than the setting itself" (Charmaz, 2014, p. 38) and should instill a trust between the interviewer/researcher and the participants. This allowed the ability to reach out to participants on multiple occasions to compare data systematically, with emerging categories, and discover correlations between concepts and categories (Charmaz, 2014). Utilizing this qualitative approach, I had the ability to not only closely work with the participants but also understand the experiences of other FEW members by illuminating characteristics like physical attributes, physical preparation, background, and self-awareness that led to discovering commonalities that can potentially help with the integration of future generations.

Data Collection

In CGT, Charmaz (2014) explains that the research questions for a study are what dictate the direction of approach when selecting data collection methods. *How* data is collected will define *which* reality of phenomena was portrayed and *what* meaning the researcher will make (Charmaz, 2014). CGT encourages multiple qualitative data collection methods, however, the

methods chosen do have consequences (Charmaz, 2008, 2014). While the tools used in the study may alter a research question, they will also allow for significant and alternative revelations on the research topic (Kaya, 2023). Charmaz and Mitchell (1996) encourage researchers to keep a “keen eye, open mind, discerning ear, and steady hand” to ensure quality data and quality research to strengthen credibility (Charmaz, 2014; Seidman, 2019).

Inspection of data collection methods and tools while iteratively analyzing emerging data helps to strengthen categorizing, coding, and credibility (Charmaz, 2008). The following practices are suggested by Charmaz (2014) when evaluating collected data for a CGT led study: a) sufficient background data; b) detailed descriptions of participants’ views and actions; c) reveal changes over time; d) multiple views of participants’ range of actions; e) comparisons between data (2014, p.33). Data for this study was collected through a descriptive survey to assess psychological and personal characteristics with questions that were relatively basic and will not need follow-up clarification such as education, military status, and physical demographics.

Following the survey, the three-interview series (Seidman, 2019) was then conducted for each participant to ensure that rich data (Charmaz, 2014) was collected. While CGT offers flexibility to this qualitative research, the research questions indicated the ideal methodological tools to direct the course of the study (Charmaz, 2014). To best research the FEW, several sequential data collection approaches (Glaser, 1998; Charmaz, 2007) were used to gain a holistic understanding of each participant’s experience and perspective.

Survey

Following the guidance of CGT, the first method used was a survey to gather

psychological and personal characteristics as well as background information. The survey collected demographics and descriptive characteristics such as current military status, military rank at time of experience, officer or enlisted, education level, age, and athletic participation. This information was descriptive, easily compared with other participants, and gained data without taking additional time during the interviews. While the survey and interview information was somewhat interwoven, the outcome gained enough data for theoretical saturation (Charmaz, 2014; Glaser & Strauss, 1967).

The survey was completed through a Google questionnaire form prior to the interviews. Because survey was generated by the researcher and original to this research, a pilot test was conducted to ensure that the survey was functional and provided the information needed (Fink, 2017). To best duplicate the environment, a pilot test took place utilizing Google forms, with a military audience to best indicate if the form was understood regarding language, clarity, and duration (Fink, 2017). The pilot test ensured trustworthiness of the study through the aspects credibility, dependability, transferability, and confirmability of the survey. The three to four individuals participating in the pilot test had a military background and understood the military-based questions. The pilot test also ensured that the survey produced the type of relevant data required for the study.

Interviews

After the completion of the demographic and psychological survey, three interviews, following Seidman's (2019) three-interview series protocol, were scheduled at each participant's convenience. Each interview took place on Microsoft Teams and was recorded and transcribed through Microsoft Teams for accuracy. The intensive interviewing was gently guided, one-sided conversations that explored the participants' experiences (Charmaz, 2014) for

in-depth phenomenological understanding (Seidman, 2019). This study examined the physical and psychological experiences of the FEW and therefore, most adequately fell into Seidman's phenomenological theme three description as "Lived Experience as the Foundation of Phenomena" (2019, p.17).

These interviews were designed to explore the lived experience (Schutz, 1967; Van Manen, 1990) of the FEW and through the participants' reflection on the events, reconstructed the elements and enabled the "phenomena to take on meaning for the participant and the interviewer" (Schutz, 1967, p. 21). This study transformed and enriched the lived experiences of the FEW into a "textual expression of essence" (Van Manen, 1990, p.36) and made meaning of the experience (Seidman, 2019). This type of phenomenological approach to interviewing provided logic for the structure, technique, and the approach to analyzing, interpretation and offered guidance to the interviewer during the interview process (Seidman, 2019). The phenomenological theory emphasized the meaning of the FEW's experiences "in the context of their lives" (Seidman, 2019, p.20) and was distinguished through conducting three separate interviews with the participants (Seidman, 2019).

This three-interview series provided the context necessary to explore the meaning (Patton, 1989; Schuman, 1982) and allowed both interviewer and interviewee to reflect and interpret (Seidman, 2019). The first interview was focused on the participant's background and was designed to ask *how* questions (Seidman, 2019) to allow the participant to reconstruct and narrate past events (Gergen, 2001) leading to the phenomena, being a member of the FEW community. Seidman (2019) describes interview two as "The Details of the Experience" (2019, p. 21) explaining that its purpose is to focus on the factual details of the participants' experience involving the research topic.

The last interview reflected on the meaning of the participants' experience. Seidman defines *meaning* as not one of reward or satisfaction, but rather the “intellectual and emotional connections between the participants' work and life” (2019, p. 22). While each of the three interviews involves making meaning, the third interview focused on understanding this process and putting language to the experience (Vygotsky, 1987). This three step interview process essentially acts as a beginning, middle, and end and reconstructs the details of the participants' experience based on the selected events from their past that they chose to share and impart meaning to them (Seidman, 2019)

Interview One: Focused Life History

Questions

1. Please introduce yourself to me.
2. I made the decision to serve in the military and would like to hear about how you made the decision to serve?
3. In your own words please describe what prepared you for the military. ***May want some prompts*** (both physical and mental) Need prompts– “I've heard you describe... how did you prepare (alternative)”
4. Military service is unique and can be challenging. Can you give me an example of a type of challenge that you've experienced?
5. I heard you mention [above challenge], can you describe how you dealt with that challenge(s)?
6. Those are all the questions I have, is there anything you would like to add?

Interview Two: The Details of Experience

Questions

7. I am interested in learning more about what made you decide to attend this selection/course?
8. Can you tell me how you physically and mentally prepared for this selection/course?
 - a. Did you utilize any resources for your preparation?

9. Everyone has physical advantages and disadvantages when physically performing. Can you describe your strengths and weaknesses while preparing for this selection/course?
10. You completed one of the most mentally and physically demanding selections/courses in the military that the majority of candidates do not finish. Can you give me an example of a challenge(s) you personally experienced during selection/course?
11. As you mentioned [above], can you describe how you dealt with that challenge(s)?
12. Those are all the questions I have, is there anything you would like to add?

Interview Three: Reflection on Meaning

Questions

13. I am interested to learn how this experience has affected your life or decisions today?
14. Having lived through the experience and completing the course/selection, what is the biggest challenge you perceive for women looking to join special operations?
15. Reflecting on your experience, what advice would you give to future women interested in attending this course/selection?
16. Having seen both failure and success throughout the selection/course, what do you think makes a candidate successful?
17. If you could go back in time, is there anything that you would change about your physical preparation or physical performance during the selection/course?
18. Those are all the questions I have, is there anything you would like to add?

Questions one through six were designed to ask *how* questions pertaining to the participants' life history to give context to the phenomena (Seidman, 2019). Question one was a knowledge request (Patton, 2015) that allowed for the participant to share who they were with an open-ended question (Seidman, 2019; Charmaz, 2014). Questions two and three established the history of the participant and their motives for joining the military while also directing the interview to remain within the scope of the research study. While straightforward and not-threatening, these questions not only built rapport with the participant (Patton, 2015), but also left room for probing questions dependent on the participants' answers.

Questions four and five developed an understanding of the participants' transformation into the military discussing challenges they faced. Recent studies indicate that the FEW are

highly resilient and gritty individuals (Tharion et al., 2022; Dyches et al., 2023); it was noteworthy to understand at what segments in their timeline they faced any friction and to what extent. Question five inquired about how a participant dealt with a particular adversity, possibly a reflection that the participant had yet to discuss. The purpose of questions four and five was to establish a range of the participants' cognitive self-awareness and grit (Tharion et al., 2022) as well as develop a better understanding of the participant.

The last question of each of the three interviews (six, twelve, and eighteen) allowed the participant the ability to add any additional information, experiences, or clarification that the participant deemed necessary. This allowed for trust and rapport to develop between the interviewer and interviewee (Charmaz, 2014; Creswell & Poth, 2018) and provided the participant the opportunity to give deeper insight (Patton, 2002) and reach theoretical saturation (Charmaz, 2014).

Questions seven through twelve belonged to the second of the three interviews and focused on the details of the actual experience (Seidman, 2019). For questions seven through nine, the purpose was to ask the participant about a specific problem related to the preparation of attending the selection or course; not a common approach in recent studies that have specifically analyzed the participant after the selection or course with limited to no context to how these women prepared (McClung et al., 2022; Tharion et al., 2022; Dyches et al., 2023).

These questions served to gain data on if the participant faced any barriers, how they dealt with them, and a narrative of the process. Gaining this information advanced the context of the participants' decisions and thought process leading to better understanding of the FEW (Dyches et al., 2023). The purpose of questions ten and eleven asked the same context as

questions seven through nine, however, the situation changed from preparation to during the actual selection or course.

The third and final interview's purpose was to reflect on the meaning of the experience and how the participant made *meaning* (Seidman, 2019). While meaning was addressed in each interview, the third interview required the participants to look "at how the factors in their lives interacted to bring them to their present situation" (Seidman, 2019, p. 22). Questions fourteen through nineteen required the participant to personally reflect on their own military career and potential advice they would offer to other women looking to attempt a similar route.

The purpose of questions fourteen through eighteen consisted of varied probing questions that not only asked for the participants' insight on the dynamic of the experience in regard to future generations, but also any advice that these successful FEW might offer to others looking to embark on a similar path while simultaneously reflecting on their experience and the meaning they give to it (Charmaz, 2014).

Data Analysis

Data Analysis is characterized as the most complex segment of qualitative research (Thorne, 2000) and is most transparent and clearly communicated when conducted systematically (Malterud, 2001; Sandelowski, 1995). Throughout CGT, data collection and analysis phases are not a linear process where some sequences are iterative (Tie, Birks, & Francis, 2019) requiring in-depth investigation as new insight and ideas develop (Ramalho et al., 2015). An advantage of using a CGT approach was that emerging evidence was continuously being added, altered, or changed as data collection increased (Charmaz, 2014).

While methods of data analysis do not generate good research in themselves, when used as flexible guidelines, the researcher has the ability to systematically direct their study while

enabling creativity (Charmaz, 2017). Following CGT, this research began data analysis as soon as data started being collected with the survey, followed by the three interview series to ensure accuracy (Birks & Mills, 2015; Charmaz, 2014; Creswell & Poth, 2018). Utilizing a constant comparative method, analysis began with initial coding, then focused coding and categorizing, then led to theoretical saturation and theoretical coding/sampling (Charmaz, 2014; Creswell & Poth, 2018). Memo-writing took place throughout the entirety of the process until the final step of writing up/dissemination was completed (Charmaz, 2014).

Coding

While a central concept in both CGT and GT, coding is defined and utilized differently in the two methods. Glaser describes these methods as a more concrete process beginning with selective coding and transforming into theoretical coding (2002). CGT separates coding into three distinct processes of open, axial, and selective that allow data to be categorized from identified trends, themes, and correlations (Carmichael & Cunningham, 2017). Coding is a heuristic solving technique (Saldaña, 2021) and interactive process that captures the researcher's portrayal of the empirical reality (Charmaz, 2014), allowing us to make sense of the data.

The purpose of initial coding was to create and grow interaction between the researcher and the data; this began the process of developing emergent ideas and possible theories (Charmaz, 2014). This phase allowed the researcher to identify commonalities between codes from collected data. Other forms of coding was used as the research question took shape and data collection accrued. In vivo coding, a process suggested by Charmaz (2014), codes data based on the participants' language or phrases actually spoken. This technique served well in this study's emphasis on three-interview series tactics (Seidman, 2019) and the fact that these

women all served in the military, an organization where language and military jargon is significant to understanding the culture.

After initial coding was completed, focused coding was the next step in the CGT analysis process where the most frequent and significant codes derived from initial coding are utilized in collected data (Charmaz, 2014). Because this process is constantly compared, focused coding simultaneously took place with initial coding (Charmaz, 2014; Vollstedt & Rezat, 2019), although use was after the second interview occurred.

Memo Writing

In CGT, memo writing initiates discovery by allowing the researcher to explore thoughts on the categories created from coding (Chametzky, 2016). The “memo bank” (Clarke, 2005) acquired from continuous analytical journaling, helps to guide the researcher (Prior, 2011) and examine both the researcher and participants’ actions (Charmaz, 2014). This step, while limited in methodological tools, enabled the researcher to capture, identify, and compare whatever ideas emerged and preserved evidence retrieved from the data (Charmaz, 2017). This research used memo-writing to monitor and mitigate any preconceptions when shaping the direction of the data (Vollstedt & Rezat, 2019).

Theoretical Sampling and Sorting

Like coding and memo writing, theoretical sampling and sorting is a continual process, possibly even spontaneous (Holstein & Gubrium, 1995), and involves collecting any data necessary to fill and refine the gaps within the research study (Glaser & Strauss, 1967). Theoretical sampling gives context to data to construct theories and concepts and helps direct the researcher to decide what additional data to collect (Conlon et al., 2020). This process

continues until *theoretical saturation* occurs and additional data no longer contributes or elaborates on the developed categories (Charmaz, 2014; Glaser & Strauss, 1967).

Re-Constructing Theory

During this phase of the research process, CGT prioritizes the studied phenomenon based on “how – and sometimes why – participants construct meanings and actions in specific situations” (Charmaz, 2014, p. 239). While the interpreted data collected from the participants was theorized, CGT recognizes that emerging theories are based on multiple realities, relying on the researcher’s (re)constructions of empirical observations (Charmaz, 2014; Khanal, 2018). CGT suggests that beginner researchers refrain from completing a formal literature review ahead of data collection (Charmaz, 2010) to avoid manipulating the analysis and generating biases (Sim, Huang, & Hill, 2012), however, completing the literature review first for this particular study was a required element prior to moving forward.

While impossible to eliminate all biases (Strauss & Corbin, 1998; Charmaz, 2014), CGT makes allowance for subjectivities, constant reconstruction, and embraces the researcher’s interpretive view as the foundation of the research study. During this final step, summarization and analysis of each participant was transformed into a case. Following this, cross-case examination occurred to better determine any potential theory building abilities and continuation of data analysis. My personal experience and perspective was also a case after following the same practices and processes as the other participants. This not only allowed for thorough examination of the FEW, but also illuminated my role as the researcher and member of the FEW as well.

Trustworthiness

For qualitative research to be of quality, it was important that the research be conducted in a methodical approach to achieve meaningful and useful results (Attride-Stirling, 2001) and trustworthiness. The trustworthiness of qualitative research is measured by credibility, dependability, transferability, and confirmability and is one way that researchers can illustrate the worthiness of their findings and that the results deserve attention (Lincoln & Guba, 1985). These four criteria in qualitative research are essential to the study and parallel the quantitative research assessment criteria of validity and reliability (Creswell & Poth, 2018; Lincoln & Guba, 1985) and rely on methodological arguments and techniques (Green, 2000).

With this study, it was imperative to be aware of all biases that I brought as the researcher and member of the FEW and consider alternatives. To do this, triangulation was utilized between 10+ cases offering varied perspectives, sources of data (theory triangulation), and methods (methodological triangulation) (Yin, 2018). Participants were offered the opportunity to add or correct their statements after completing their interviews as well as to verify the perception of their experience. Given the size of the FEW population, at this time of research, an audit did not make sense. A discussion for each of the four qualitative criteria is listed below.

Credibility

Credibility of a study is determined when readers can recognize the experience when they are confronted with it (Guba & Lincoln, 1989). Credibility is the connection or understanding between the respondents' views and the researcher's representation (Tobin & Begley, 2004). Techniques such as prolonged engagement, persistent observation, data

collection triangulation (theory triangulation), and peer debriefing (dissertation committee) addressed and increased credibility (Lincoln & Guba, 1985). Participants in this study had prolonged engagement with the research by completing the survey and participating in the three interviews and the opportunity to review transcripts if desired. This prolonged engagement increased the likelihood that their experiences were articulated and expressed through their lens (Creswell & Poth, 2018) with full transparency to the purpose and structure of the research study.

Dependability and Confirmability

Similar to reliability, dependability and confirmability in qualitative research are determined by consistency. Dependability was achieved through ensuring that the research process was clearly documented, traceable, and logical (Tobin & Begley, 2004). A transparent research process enables readers to better examine and judge the dependability of the research and indicates that the results could be repeated (Lincoln & Guba, 1985). Tobin and Begley (2004) state that confirmability is established through the strength of the researchers' interpretations and results, both of which are determined by the data.

Confirmability is achieved when credibility, transferability, and dependability are all established (Guba & Lincoln, 1989) in addition to strengthening via triangulation (Yin, 2018). Additionally, supporting theoretical, methodological, and analytical choices during the study allows others to understand decisions and the research process (Koch, 1994). While auditing is a tool to accomplish dependability and confirmability, this attribute does not make sense in the present research for this small population, but will as more women attend these selections and courses in the future.

Transferability

The final criteria of trustworthiness, transferability is described by Tobin and Begley (2004) as the generalizability of inquiry concerning only case-to-case transfer. This study created the conditions for transferability (Lincoln & Guba, 1985) and possesses the ability to be transferable to other branches of the United States military as more women progress into these opportunities. While this study focused on the Marine Corps, Army and Coast Guard, future research that involves the Navy or Air Force may find this study transferable in addition to international special operation perspectives or special operations groups (SOG) in law enforcement.

Ethical Considerations

IRB approval was the first way to ensure that no ethical violations were performed during this study. While there was a low probability of this occurring due to the fact that the participants volunteered and the data collected were their perceptions, there were barriers established to ensure that no harm was done. As previously mentioned, participants not only had the transparency of the purpose of the study, but also the ability to verify their interviews and add or correct any information following the interaction. Being a member of the FEW myself, I had personal concern for their experience and chose this research topic as a way to honor it. Data that was collected was not stored on an unprotected public site, but on a device that only I, the researcher, had access to. Details and identities were altered in order to ensure the participant's identity was protected.

Summary

The FEW is an exclusive group of women that have completed a US military special operations selection or elite combat course that has less than 150 members (SOF News, 2023;

Moore, 2023). A qualitative research design was selected for this dissertation and focused on increasing the understanding of how women completing a special operations selection or elite combat course describe that experience with an emphasis on the physical and psychological nature of the experience. Because this population is so small, qualitative methods such as a survey, intensive interviewing, and cross-case examination of case studies allowed for an understanding of how and what made the FEW successful. Commonalities derived from collected data helped to not only understand the current FEW, but to improve integration tactics for future female generations looking to serve in special operation forces (SOF).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this qualitative study was to explore the experiences of FEW and gain a deeper understanding of their success regarding factors such as physical training, mental resilience, gender dynamics, and adaptation to military demands. This chapter presents the findings of this study with a narrative case overview of each participant followed by a detailed exploration of the themes and subthemes that emerged during the study. It then presents an overview of the model developed from these insights enabling cross-case examination. The chapter concludes with a discussion of the research questions that shaped this study. Additionally, this chapter concludes with a detailed response to each research question presented in chapters one and three.

Participants

The participants for this study consisted of eleven of the female elite warfighters (FEW) who were among the first women to complete military special operations selections or elite military courses. While any member of the FEW would fall into this category, priority was placed on participants who were not in a previous FEW research study, and those who had combat experience. The reason for this was to include a new sample of the FEW that had not been previously researched. While most recent studies conducted by McClung et al. (2022) and Tharion et al. (2022) utilized eleven Army Ranger School graduates and one USMC Infantry Officer Course (IOC) graduate, this study prioritized recruiting a new sample of women from other branches and other selections or courses. Some participants completed multiple selections or courses as well and do not fall under one specific category. The specific selections and

courses, aside from Ranger School, have been omitted to ensure confidentiality due to the limited number of women who have completed those selections or courses at this time.

Table 1.0 FEW Survey Results

Participant Demographics

Pseudonym	Branch	Degree	Military Status	Athlete Age 12-18	Athlete Age 19+	College Athlete	Rank at Event
Kara	USCG	Masters	Active	Y	Y	Y	O-3
Fiona	USMC	Masters	Veteran	Y	Y	Y	O-1
Brooke	USMC	Doctorate	Veteran	Y	Y	Y	E-5
Grace	USMC	Associates	Veteran	Y	Y	N	E-2
Casey	Army	Bachelors	Active	Y	N	N	O-1
Dana	Army	Doctorate	Veteran	Y	N	N	O-3
Erin	Army	Associates	Retired	Y	Y	N	E-7
Jordan	Army	Masters	Retired	Y	Y	Y	O-2
Mia	Army	Masters	Active	Y	Y	Y	O-2
Isla	Army	Bachelors	Active	Y	Y	Y	O-3
Natalie	Army	Doctorate	Veteran	Y	Y	N	O-2

Results

This section presents the results and detailed themes and subthemes derived from both the survey and interviews. The survey collected demographics and descriptive characteristics shown in Table 1, that emphasized the themes and subthemes discovered throughout the interviews. While the survey and interview information overlapped in some areas such as athletic participation and long-term physical conditioning, the outcome provided theoretical

saturation (Charmaz, 2014). Themes and subthemes were determined by Charmaz's (2014) Constructivist Grounded Theory (CGT) approach for qualitative data analysis by utilizing Seidman's (2019) three-interview series for the interview process. Themes were further identified through Yin's *Case Study Research* (2018) by creating a case summary for each participant and then cross-case examination to shed empirical light on the theoretical concepts (2018, p. 38) and thus creating meaning of the participants' experiences (Saldaña, 2021).

Survey Results

The survey results provided descriptive data unique to each of the FEW and focused on specific aspects such as athletic participation, military background, and education. These results not only reveal emerging patterns among participant attributes, but also provide a foundation for a comprehensive understanding of the themes and subthemes discovered in the FEW's interviews.

Athletic Participation

Every one of the FEW participants in this study were involved in youth athletic participation (age 12-18) while nine of the eleven participants continued their athletic careers into adulthood (age 19+). Additionally, six of the eleven participants continued into a collegiate career with additional accolades such as world championships, national championships, and professional athletic careers. This trend among the FEW underscores the significance of not only early athletic activity, but also the importance of commitment to physical excellence that is crucial for the demands in special operations. This result was also supported by the interviews with each participant and the reflection on their family.

Endurance Athletes

Participation in endurance sports or activities was a predominant factor in the responses of the FEW regarding their athletic backgrounds. Not only was every participant involved in athletics at a young age, but every participant was also involved in at least one endurance-based activity such as soccer, swimming, and cross-country or distance running. There is a notable relationship between the success rate of these women and the type of training and conditioning that they practiced over a long period of time. This long-term preparation each of the FEW in this study participated in enabled the cardiovascular endurance that is demanded in special operations for running, rucking, as well as swimming required in long-term missions and physically demanding tasks.

Additionally, six of the candidates also participated in upper-body focused activities such as volleyball, basketball, and softball illustrating that these activities may have been supportive in their success with upper body requirements such as pull ups, push ups, and lifting heavy objects. What is also significant about the survey results is that only two of the women participated in strength-focused activities such as weightlifting. While all participants began incorporating strength training and weightlifting into their routine prior to attending a selection or course, it did not seem to be a necessity for their success to be practiced over a long duration of time beginning in their youth.

Education and Self-Awareness

While education levels varied between the FEW ranging from associate's degrees to doctorates, nine of the eleven candidates surpassed the level of education required by their individual rank. Their educational pursuits and achievements not only indicate the intrinsic desire to succeed, but also the resiliency and dedication to complete the task. Additionally, when

asked in the survey for what each participant utilized for preparing for their selection or course, most participants responded that they prepared by developing their own training program, or by modifying a program designed for men. This self-driven preparation coupled with their educational achievements highlights the participants in this study and their high level of self-awareness and personal responsibility in reaching peak physical and mental levels.

Survey Conclusion

The survey highlights the importance of several factors that provide insight into this group of the FEW's success in varying special operations selections and demanding military combat courses. For the participants in this study, the commonality of consistent physical activity beginning at a young age, specifically in endurance sports, illustrates physical and mental development that is necessary for the high demands of performing in special operations. The results in the survey also demonstrate the significance of physical preparation for female candidates and the necessity for long-term physical development. These insights provide support for individualized training and support that can enable a more fluid and successful integration of women into special operations.

Interview Series Results

This section provides the results of Seidman's three-interview series (Seidman, 2019) utilized in this qualitative study. Both themes and subthemes were derived through implementing data saturation (Charmaz, 2014) designed to explore the lived experience (Schutz, 1967; Van Manen, 1990) of the FEW. Additionally, the reflections from the participants on the events allow the "phenomena to take on meaning for the participant and the interviewer" (Schutz, 1967, p. 21) and gain a holistic understanding of each of the FEW's

experiences and perspectives. The four themes revealed in this study are *physical training and readiness, mental resilience and adaptation, military environment and challenges, and long-term impacts and reflections.*

Physical Training and Readiness

The primary theme revealed through the interviews with each of the eleven participants was the significance of physical training and readiness. Similar to the results of the survey, the emphasis of developing a strong foundation in physical training and development led to elite levels of physical performance and discipline. Because most of the FEW participants in this study had competed in high level competition such as collegiate athletics (6), world and national championships (2), and professional athletics (2), there was an overall understanding of the level of physical dedication required to prepare for these selections and courses. Even those that had not competed at the higher athletic levels carried a sense of understanding and appreciation for the physical demands as Dana expressed, “My preparation was rigorous. I made sure to exceed the physical standards set during training to ensure I was always ahead.”

Physical Preparation and Awareness

An overarching common occurrence for all participants was the subtheme of *physical preparation and awareness*. This sub theme became apparent in the second interview when participants were asked about how they prepared for their selection or course. What they described was a matter-of-fact awareness that the preparation would take a significant amount of time and sacrifice to be physically prepared. While all participants had extensive experience in endurance-focused training, many of the FEW such as Fiona, Brooke, and Grace understood the need to shift their preparation to strength and conditioning to surpass the demands of their

selections. Both Grace and Brooke found themselves taking additional time to prepare to develop the required strength necessary as Grace explained, “it probably took a year of training, rucking, and weight training to get myself prepared since I was already pretty much in really good endurance shape.” Similarly, Brooke stated:

“I could surpass any run, ruck, or distance requirement, but needed to focus on my upper body strength for pull ups as well as prepare for the muscle-loss that would be inevitable throughout the demands of the selection.”

In addition to the participants understanding the time required to prepare themselves for selection, they also had a deep understanding of their own physical strengths and weaknesses.

The participants’ deep knowledge of their physical development can be attributed to their extensive athletic backgrounds, especially their strengths and weaknesses. Kara cites the confidence she had attending selection by explaining, “I was named the most physically fit female cadet . . . I thought, yeah I can do that, that’s what I wanna do.” Likewise, others such as Erin and Isla understood the necessity of addressing weaknesses and capitalizing on strengths. Isla responds, “I focused mostly on my upper body because I was naturally weaker than the men I was training with. I knew if I could meet the standards for upper body events, I could make it through.” Like Isla, most participants emphasized the area focus of the upper body and in doing so, were able to meet the requirement standards.

Strategic Adaptation

The next subtheme, strategic adaptation, was a common aspect of each of the FEW participants during their interviews. Many of the FEW in this study, like Dana, prepared with the expectation that they needed to surpass standards and expectations. Dana explained:

“I made sure to exceed the physical standards set for us during training to ensure I was always ahead. This included daily runs, strength training, and tactical exercises designed to simulate actual field conditions.”

Similar to Dana’s approach, Casey also prepared for the [selection/course] by ensuring that her preparation training was more difficult than what she expected to face. Casey stated:

“Early in my training, I recognized the importance of not just meeting, but exceeding every physical standard. I tailored my workouts to be more rigorous than the baseline requirements, incorporating cross-training elements to enhance both strength and endurance.”

Each of the FEW often referred to the necessary adaptation required during their training to not only meet the male-standards of the military, but also the elite qualities of the specific requirements of the selections and courses they attended. These adjustments included changes to their training intensity, training focus, as well as unique challenges such as heavy gear and extended duration of many events.

Some of the interviewed FEW also adapted previous training to meet the specific military demands they were facing in their chosen selection or course. Working with the physical foundation that all participants had developed throughout their lives, self-awareness and ability to strategically adapt through personalized programming illustrated another commonality among the FEW. Fiona explained that she adjusted her prior training to focus on the demands she would be required to complete specific to the selection she was attending. She explains, “I was already doing two-a-days anyway and I flipped my training to be very specific to the selection events. I was training to max out the male standard, not the female, even before

the [selection/course]” The physical awareness and preparation were both commonalities of all the FEW participants in this study.

Personalized Programming

The final subtheme attached to the theme of physical training and readiness is *personalized programming*. During the study, participants were asked if they had any preparation resources available to them to prepare for their selection or course. None of the eleven participants had any resources or programs specifically designed to prepare biological women for special operations selection or elite combat courses. Of the eleven participants, eight created their own personalized programs and the remaining three extensively modified male-oriented programs that were already in existence. For example, Jordan explained:

“I remember feeling somewhat disadvantaged because there weren't many role models or training programs designed with women in mind. Much of our training regimen was based on standards and techniques developed primarily for men.”

Like Jordan, many of the other FEW in this study experienced a similar feeling and had to find ways to adapt their training. During Mia’s preparation she stated that “there was a lack of guidance on how women could best prepare for the physical demands of special operations.” She continues to express that she felt she was “expected to meet standards without support or modifications” that enabled biological women to succeed.

Because no physical programming specific to women looking to prepare for special operations was available to the FEW in this study, many were left to create their own or modify programs designed for men. Isla elaborates by sharing that she “had to adapt workouts intended

for men, which didn't always align with our physiological differences." There is a commonality among the FEW in this study that illustrates their success by highlighting their intrinsic motivation and personal responsibility when reaching these elite physical conditions. Brooke explains, "I built myself a ten month program where I trained three times a day, six days a week, while also fulfilling my typically 10-12hr military job. Sleep was often sacrificed." Like Brooke, most FEW participants not only created their own programming, but also developed strategies to address weaknesses, capitalize strengths, and maintain their regular full-time responsibilities simultaneously. For example, Fiona summarized:

"I ended up designing my own training regimen because the existing programs didn't account for the physical differences or the specific challenges women might face. I focused on building strength in areas typically problematic for women, like upper body and core."

Mental Resilience and Adaptation

The FEW often speak about the necessity of developing *mental resilience and adaptation*, not only just by being in the military, but also for their preparation and participation in special operations selections and elite combat courses. While physical preparation is imperative, the mental aspect of performing in high-stress environments is just as important, if not more. For example, Grace explained:

"Mental toughness isn't just about pushing through pain or discomfort; it's about making smart decisions under pressure. During [selection/course] training, I learned the importance of maintaining mental clarity to execute complex tasks effectively."

Factors such as their intrinsic motivation to pursue and persevere through difficult challenges such as advanced athletics, education, and elite military goals illustrate their strong mental framework.

The FEW's approaches to training and adversity underscore the necessity of their ability to not only handle the rigors of the military challenges they faced, but also the ability to adapt as a woman and minority in their sometimes hostile environments. Like many of the FEW, Mia explains, "I learned to adapt mentally by facing challenges head-on and not making decisions based on fear of failure." This is a common realization and decision among the FEW to not only understand the challenges they faced, but to decide to address them despite the magnitude, duration, or even injustice of the task at hand. Isla understood this factor and utilized it to her advantage. She explained:

"I knew I could meet the physical standards at [selection/course], but I was still going to be seen as a woman. I knew my greatest strength was my brain and my ability to problem solve and lead. That is how I showed my value and set myself apart."

This primary theme of mental resilience was developed through the subthemes of *psychological endurance, mental adaptation and strategies, and coping with adversity*. Each of these encompass the commonalities of the FEW and contribute to the meaning of the phenomenon.

Psychological Endurance

The subtheme of psychological endurance prominently emerged throughout each of the FEW's interviews in one aspect or another, specifically when the participants were in their second and third interviews. A common trend for each of the FEW was that there was a constant need for them to have to continue to prove their abilities and value while in the military despite

any previous performance and accomplishments they had already attained. Like many, Fiona stated, “I developed a mental resilience from constantly having to prove myself capable in a challenging training environment.” Expanding on the pressures faced when pursuing these selections and courses, Casey addresses the mindset that “this is a marathon, not a sprint” and failure is often unavoidable. Mia, who specifically expresses the necessity mental resilience, stated:

“Staying mentally tough in environments where failure is not just likely, but expected, taught me to keep pushing. Every setback in training was a setup for a comeback, and that mental stamina has been crucial.”

In addition to the constant need for the participants to prove their abilities and value they also described the importance of psychological endurance. These approaches developed into long-term strategies for many of the FEW in this study. For example, Jordan explained:

“Building psychological endurance comes from facing and overcoming fears, not by avoiding them. Each challenge I've faced has helped strengthen my mental resilience, which is as important as physical resilience.”

Psychological endurance also emerged in the FEW's ability to adjust to long-term requirements and understanding how the physical toll became a mental toll as well. Grace explains, “The hardest part was learning to take a step back and learning how to rest and recover so that I could come back even stronger.” The awareness that endurance did not only translate physically was common in most of the FEW as Casey stated, “Staying strong mentally means being prepared for anything, always.”

Mental Adaptation and Strategies

Another common occurrence under the *mental resilience and adaptation* theme is *mental adaptation and strategies*. This subtheme addresses the extensive approaches and strategies utilized by the FEW to not only find success in their endeavors, but as Dana explains, to “find personal strategies to cope and maintain mental health.” Dana continues to express the physical and mental demands for those performing in special operations that require “composure and decision-making abilities under extreme stress” with no margin for error. While this is a standard for all special operators, the additional aspect of sex often entered the FEW’s perspectives throughout their interviews. Adaptation and strategic approaches were essential in shaping the FEW’s experiences without crippling their motivation to pursue their goals. Jordan shared her strategy of approach and stated:

“Being often told ‘no’ because of my gender, I didn’t take it as a final answer. I looked for loopholes and opportunities to prove that I could perform as well as my male counterparts. I found creative solutions to pursue my career goals in the military.”

Natalie reiterates similar sentiments and explains that, “despite the systemic barriers, I used every rejection as a stepping stone to push harder and smarter.” When expressing their adaptation strategies, the FEW commonly conclude that it took years to form strategies that finally led to successful and healthy thinking. Many, like Kara, struggled and found that their “mental health was deteriorating.” They initially sought help or began using different avenues of approach to retain positive mental health while also strengthening their psychological endurance over time.

Military Environment and Challenges

The third theme that emerged throughout the interviews was the *military environment and challenges* as it relates to the experiences of the FEW within the scope of this study. This section describes the various physical, mental, and cultural challenges encountered by the FEW in the military and is broken down into the two subthemes of *male-focused environment* and *performance expectations*. An important factor to consider when discussing this theme is the timeline of the combat ban being lifted. Out of the eleven participants, seven of them joined the military prior to this event. Even during the integration of women into combat roles Jordan recalled:

“There was a lot that was still closed off to females and a lot of the stuff that I wanted to do was closed off to females, so I was trying to find ways around where I could still do stuff that I wanted to do.”

This meant that the majority of the FEW in this study were the ‘first’ to pioneer environments that were not only male-oriented, but not always welcoming to females.

There are numerous difficulties faced by military service members such as Casey explaining that “being away from family” as well as “maintaining close relationships over distance and time”, some of the FEW had distinct challenges specific to their gender affecting their goals. Specifically, Erin indicated her greatest challenge and stated, “The biggest one is just discrimination against women . . . and I could probably give you endless accounts of stuff.” What is different about this study however, is that the FEW went into elite environments and managed to perform even while facing various challenges of the military and the male-oriented culture. Brooke goes on to state, “I experienced things that weren’t necessarily ‘fair’, but that’s

life. I wanted to go to [selection/course] so I didn't focus on the external things I couldn't control."

Male-Focused Environment

With the military being predominantly male, it is not a surprise that the institution requires adaptation and navigational strategies for women to function, specifically when navigating the gender dynamics in special operations and combat. The FEW frequently faced various challenges including both physical and mental aspects that ranged from subtle biases to discrimination. While each of the FEW had varying experiences, some like Kara, felt blindsided joining an environment that had never before had females. She stated, "I walked in blind to a level of misogyny I had never experienced. There were no tools to help me navigate it. And no one's talking about it." Additionally, Fiona had a similar perspective as she explained, "The cultural barriers at [selection/course] were significant. It felt like a 'boy's club' that was hard to penetrate as a female."

What is important to note within the interviews with the FEW is that while the majority of the participants shared their experiences in a male-dominated environment, they continued to persevere. One example of this is shared by Mia as she explained, "Navigating the expectations and sometimes discrimination within the special operations units was continually challenging." Similarly, Erin expressed:

"Dealing with discrimination was repeatedly tough. I've been told that women don't belong here and that I need to make them a sandwich. Over the years I've just built a resilience where I just tell people I don't care, and tell them to pound sand when they question my place in the military."

Additional factors that were subtly noted in some of the interviews were other aspects such as military gear designed for male physiques, female healthcare not readily available for women, and additional tasks required in order to be on a level playing field as male counterparts. While this is not a focal point of the FEW in their interviews it is important to note these underlying factors.

Performance Expectations

The final subtheme under military environment and challenges is *performance expectations*. Every FEW participant supported the elite standards required in special operations selections and combat courses and was adamantly against lowering any physical standard. The FEW's interviews were littered with examples of constant skepticism regarding their physical capabilities, sometimes even after they had performed at the elite standard. Isla noted, "I had worked extremely hard to graduate and met every male standard. I was constantly told the standard must have been lowered for me to pass." Ironically, Brooke experienced a similar situation but found the roles to be reversed. She stated:

"There were set times for specific events that you had to finish by in order to move forward. I noticed on [event] I had completed under the time, several male candidates completed after the time allotted had passed. They still moved on."

Similarly, other FEW participants, like Casey, found that even when they met or surpassed the physical and mental standards, they felt that their "capabilities were overlooked due to gender, despite qualifications and efforts."

Not only did the FEW face rigorous physical challenges and psychological stressors like all candidates attending special operations selections and elite combat courses, but Mia included, “the expectations were high, and sometimes it felt like they were even higher for me as a woman. I had to be smarter, faster, and stronger just to be seen as equal.” Jordan shared a very similar perspective:

“In the special operations community, there’s a sense that you have to prove yourself over and over. As a woman, it wasn’t enough to pass the tests; I felt like I had to excel beyond the men to gain the same respect.”

Erin provides additional insight into the same experience as she explained, “I was often the only woman and felt like I had to prove myself doubly hard showing that I could do the job just as well, if not better.” It was a common occurrence for the FEW to constantly be required to prove their competence and capabilities in ways their male counterparts didn’t always have to as Natalie responded, “I was still just a woman.”

Long-term Impacts and Reflections

The final theme in this study emerged in the third and final interview with the FEW participants as *long-term impacts and reflections*. In the third interview, questions were focused on the intellectual and emotional connections between the FEW’s work and life in regards to the experiences discussed in the first two interviews. This theme is derived from the subthemes of *physical and mental health*, *influence on career*, and *influence on personal life*. While the three-interview series enabled the context to explore each of the participants’ meaning, the final interview allowed both the interviewer and the participant to reflect and interpret on the phenomenon as well as the previous discussions and topics in the prior interviews. Most of the

FEW, like Mia, realized, “I value the lessons learned and recognize how they shaped my personal and professional life.” All of the FEW revealed long-term impacts and reflections on their health, career, and personal lives, sharing how their experiences shaped who they have become today.

Physical and Mental Health

The FEW in this study shared many long-term implications for both their physical and mental health. This included the importance of physical recovery and injury prevention as Mia described, “recovery matters and sometimes you don’t know it matters until you hit like 31-32... I should have stretched more and done yoga or something to recover and heal.” While the general military environment can be physically harsh, the high-stress environments of special operations and elite combat courses are even more physically and mentally demanding. Similarly, Jordan revealed:

“I think you learn to live with a certain level of constant stress in special operations; it’s not just physical but also mental. Over time, it takes a toll that you might not even notice until you’re out of that environment.”

For some of the FEW, like Kara, the mental toll she endured, specifically as a woman in an environment, has affected her health immensely. Being part of a unit that has been unsuccessful in their female integration efforts, Kara now has developed “very serious concerns about [her] mental health and how that is going to impact [her] child.” Others like Erin were subjected to both mental and physical health impacts as well as family dynamics as she shared, “I would have loved to have more kids, but after I came back from Afghanistan the last time, my menstrual cycle stopped and I’ve never got it again.”

Influence on Career

The subtheme of *influence on career* was also a strong topic of reflection for the FEW as each participant shared how their professional lives, both in and out of the military, were shaped by their experiences. Five out of the eleven participants who chose to leave the military to pursue other opportunities did so based on their military experiences. Both Natalie and Dana were unable to reach certain goals or obtain specific positions as Natalie explained as a woman “I was treated as such and I was not promoted, which is irrelevant to me, but that was the thing you know.” Similarly Dana shared that her “career decisions have been heavily influenced by early experiences and the roles I was forced into” when describing her inability to serve in combat roles prior to the combat ban being lifted. Brooke also stated:

“The decision to leave was bittersweet and wasn’t necessarily what I wanted. I wanted to retire in the military, but unfortunately it turned into a matter of self-preservation. I had to find other opportunities that could actually see value in what I have to offer and challenges that could lead to health growth.”

Others, like Mia, who have created a career out of their service in the military have also found that “the skills and experiences I gained in the military have opened doors for me in other areas of life, not just professionally but also in how I approach challenges and opportunities personally.” Jordan also described the value of her experiences and unique challenges and shared:

“Serving in the military was both a blessing and a challenge for my career. It gave me a strong foundation and incredible experiences, but transitioning to a civilian career was tough due to the very different work culture.”

While the FEW each recalled both positive and negative aspects of their service, the overall philosophy of every participant illustrated the wisdom and benefits that they each had the opportunity to gain. Kara effectively summarizes the overarching mindset when she explains that “the leadership skills and critical thinking I developed in the military have been invaluable in my career. Despite the challenges, the experiences have made me a sought-after candidate” specifically for roles that require skills that are developed, earned, and some that can’t be taught.

Influence on Personal Life

The final subtheme in this section is *influence on personal life*. Similar to the *influence on career* subtheme, this continuous occurrence within the FEW interviews illustrates the impacts of the participants’ experiences, but on their personal lives, relationships, and personal development. Several of the FEW specifically noted the effects on their personal relationships with friends and family. Casey explained that “the friendships and connections I’ve made in the military will last a lifetime, despite the distances.” Likewise, Grace describes not only the effects on her relationships, but the effects on herself:

“Being in the military shaped who I am. It made me tougher but also more aware of my emotional state. I’ve learned to value deeper connections and be more present in my personal interactions.”

For some, like Mia, personal and family goals had to be put aside while serving and now priorities are beginning to shift. After devoting many years to her service, Mia shared that “I just got married. I wanna have children so instead of maybe staying on kind of the same track, I’m looking at prioritizing building a family.” Additionally, many of the FEW found great

benefits learned from their experiences in the military. Not only were their experiences impactful on personal relationships, but also began to shape the FEW's personal behaviors as well. Mia describes her "confidence to take on leadership positions" while Jordan expressed her "security-conscious mindset" and "always assessing [her] environment." Additionally, Fiona constructively outlines:

"The discipline and structure I learned in the military have greatly influenced how I manage my personal life, from financial planning to how I raise my children. It's about discipline and structure, which has helped me create a stable home environment."

Research Questions and Responses

The eleven participants in this study provided many physiological and psychological commonalities within both the survey and three-series interviews to better understand the FEW. This section answers the central research question as well as three sub-questions to better understand these unique individuals through their background, physical insights, cognitive self awareness, and any recommendations that can be provided based on their experiences.

Central Research Question

What perceived factors or characteristics have enabled the FEW to successfully complete a military special operations selection or elite military course? While the sample of the FEW in the study each had unique experiences regarding a special operations selection or elite combat course, there were two primary factors that were common when analyzing their success. Participants were all significantly physically and mentally prepared prior to attending their selection or course through a rigorous training schedule, a specialized training program, and a high level of mental resilience to follow through.

These factors allowed them to not only have the physical ability to meet the stringent special operations standards, but to also ensure their mental success in high-stress environments and scenarios requiring quick decision making skills and remain effective under extreme pressure. While a high sense of self-awareness supported the participants' ability to capitalize on strengths and address and improve weaknesses, all had significant physical conditioning from their participation in youth athletics. The commonality of all of the FEW in this sample shared was that they each possessed significant experience in endurance activities. For example, Grace recalled:

“I was already a really good runner and swimmer my whole life. Anything that had to do with endurance I was already pretty dialed in on. It was more like the things that (sic) I'd focus on were weight training, strength training and obviously tactical things like rucking and hiking.”

Similarly, others specialized their training to address weaknesses that needed to be addressed in order to satisfy the selection or course standards. This typically centered around a common understanding of the biological difference between men and women regarding their upper body. In this example, Fiona explained:

“For me, training-wise, I just really focused on increasing my pull up number a lot. Obviously having developed a base after doing a bunch, I just started having to add weight to myself to get up even more past twenty.”

In addition to the dedication for their physical success and performance, these participants' experiences also support the necessity for mental resilience and discipline. Without

this, the demands of not only the selection or course would be compromised, but also their preparation which required significant sacrifice. For example, Brooke describes:

“I didn’t have a life outside of work and training for about ten months. I trained about six hours a day, worked between ten and twelve, sometimes more, and then went to sleep. If hours got sacrificed, it was sleep. Not sustainable, but what I did to be ready.”

In a similar example, Jordan articulates the importance of discipline in order to reach the demands in special operations. She stated:

“In the military, especially preparing for special operations, discipline in your training routine can make or break your success. You have to be consistent, you have to be hard on yourself, because ultimately, that discipline is what prepares you for the unpredictability of the field.”

Sub-Question One

Are there any commonalities in FEW’s backgrounds, physical attributes, insights, or self-awareness that affected the physical success of their selection or course completion? When further examining the details surrounding the commonalities of the FEW, the most significant factors were prevalent throughout the study, but specifically in the survey. The primary similarities centered around the FEW’s backgrounds in physical activities and athletics. Not only were all participants involved in some form of athletics from the age of twelve to eighteen, but nine of the eleven continued in athletics after the age of nineteen, with six of the eleven becoming collegiate athletes. The importance of this commonality is shared in the reflections of the FEW during their interviews. In this example, Jordan shared:

“As a young athlete, I learned the importance of routine and physical conditioning. These habits seamlessly transferred to my military training, where physical strength and mental toughness are paramount.”

While the data in the survey illustrated the importance of early physical conditioning, the interviews supported this factor and also suggested a sense of mental conditioning simultaneously. For example, Mia explained:

“Growing up, I engaged in various sports, which instilled a sense of discipline and physical fitness from a young age. This background made the rigorous physical demands of the [selection/course] more manageable and taught me valuable leadership skills.”

Just like Mia, Brooke also understood the correlation between her athletic background and her experience. She revealed:

“I think my athletic background not only gave me the knowledge on how to physically prepare, but I also understood the level of sacrifice and work that it would take in order to make it happen because of my previous athletic goals and adversities. I didn’t expect it to be easy.”

Reflecting on the various aspects of an athletic background and the physical and mental conditioning that accompanies those demands, there is also a level of self-awareness that was prevalent in this sample of the FEW that transcended the discussions in the interviews. It was apparent that because of the FEW’s backgrounds in athletics, this also provided them with an understanding of their abilities as well as a realistic approach. For example, Fiona stated:

“Participating in sports throughout high school, especially in competitive environments, prepared me for the physical challenges of military training. It wasn't just about physical fitness but also about developing resilience and the ability to work as part of a team.”

Sub-Question Two

Are there any perceived recommendations by the participants that could advise the physical preparation for future generations of women looking to attend a military special operations selection? The answer to this question was revealed specifically in the third and final interview when participants were asked about advice or recommendations they would give to women pursuing special operations opportunities. While many of the FEW's responses were specific, they centered around training early and frequently, preparing holistically for a variety of challenges, and being mentally prepared. Because of the extreme demands in special operations, it is imperative that candidates, especially women, understand the requirements of the body. This is predominantly due to the fact that the general military typically has a male and female standard for events. Special operations not only requires one elite standard, but it is typically higher than even the male standard in the general military. An example of one recommendation from Grace was:

“For those looking to join special operations, I'd say start conditioning your body early. Focus on building strength and endurance through a varied workout regime that challenges every part of your body.”

Much of the advice to future generations was centered around all-encompassing training that includes various aspects. Mia advised:

“My advice would be to make your training as holistic as possible. It's not just about physical strength but also agility, endurance, and mental toughness. Mix high-intensity workouts with longer endurance sessions and never underestimate the power of mental preparation.”

The recommendations by the FEW provide a multifaceted approach to prepare for attending a special operations selection or elite combat course. Not only were focal points such as utilizing a rigorous training regime frequent, but the participants also highlighted the importance of recovery and mental resilience. As Fiona advised similar points as the other participants, she concluded that, "future candidates should focus on exceeding the standards, not just meeting them.”

Sub-Question Three

How can the knowledge gained from characterization of the participants help to improve the integration of women into military special operations? The knowledge gathered from the interviews with the FEW can offer significant improvement to the integration of women into special operations. Understanding the background, physical attributes, and psychological characteristics of these women both prior to the military as well as during their selection or course experience is a valuable necessity needed to enhance the success of future generations of female operators as well as the effectiveness of military special operations as a whole. The four themes discussed in this chapter: *physical training and readiness, mental resilience and adaptation, military environment and challenges, and long-term impacts and reflections* each provide specific integration strategies that can immediately improve the current process, or lack thereof. Because this entire sample of the FEW participated in athletics the majority of their

lives, six of them partaking in collegiate level athletics, it is clear that developing a recruitment strategy in highschool or college for viable female candidates could provide significant results. Additionally, by studying the women who have succeeded in special operations, the military can develop a specific profile that can target women that not only have the physical capability, but also the mental traits of discipline, resilience, and grit.

Another implementation to improve integration is to develop tailored training programs designed for biological women to prepare for special operations selections. This study as well as others provides proof that women are physically capable of meeting the rigorous standards required in special operations, however, each of the FEW in this sample either created their own training program or modified an existing one to focus on the areas they specifically needed as women such as weight training and developing upper body strength. By incorporating a more personalized training program for biological women, this would improve the success rate of women integrating into special operations.

The final improvement for integration of women into special operations stems from the current military culture and how the male-dominated branches view women, specifically when joining the special operations community. While this factor is significant specifically regarding the discrimination that the FEW in this study have faced, it is predominantly out of their control. The present culture of the military will need to adjust in order to allow these women to perform without discrimination and biases as their male counterparts are able to currently do. Mia agreed:

“I think the special operations community needs to really wake up and take a hard look at whether they want to integrate women with all male teams or if there is a specific mission purpose built for females.”

If integration is the goal, then there needs to be changes actively made to make the unification successful. If integration is not the goal, then there needs to be serious consideration for the women that provide value, such as the FEW, and how their abilities can be utilized to strengthen warfighting capabilities and enhance overall readiness, even if that is a separate unit.

Summary

This chapter presented the results of this qualitative study and provided a comprehensive analysis of the experiences of a sample of FEW who have successfully completed a special operations selection or elite combat course. The survey results provided demographic data as well as an introduction into the participants' athletic backgrounds prior to joining the military. The three-interview series (Seidman, 2019) then enabled a deeper exploration of the themes, subthemes, and responses to the research questions and further examined the lived experiences of the FEW. The themes of *physical training and readiness, mental resilience and adaptation, military environment and challenges, and long-term impacts and reflections* emerged during the study as the eleven participants shared and made meaning of their experiences (Seidman, 2019). Through case analysis and cross-case examination enabled by Charmaz's CGT, there were many commonalities discovered between the participants that significantly impacted their success during their experiences.

One significant finding was that each of the 11 participants were active in athletics at an early age, while over half went on to play collegiately, with two even participating in higher

competition. Even more specifically, each participant was involved in endurance activities such as soccer, cross-country, and swimming. Another significant finding was that each of the FEW in this study either created their own physical preparation program or modified an existing one to fit their biological needs such as specific areas like upper body strength. These two findings were common in all 11 of the participants and are further related because these factors are completely within the control of the FEW themselves. The final significant finding highlighted in this study is found primarily in the *military environment and challenges* themes where discrimination and gender biases greatly affect the career and personal lives of the FEW in this study. While this is a significant topic within the experiences of the FEW, there is very little, if any, control that the participants have on the changes that can be made here.

This chapter concludes by addressing the central research question as well as the three sub-questions for this qualitative study. The responses to these questions not only illustrate the meaning found in each of the participants' experience, but also explore the insights from the FEW to implement new strategies to improve the integration of women into military special operations.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this qualitative study was to gain a deeper understanding of the unique physical and psychological characteristics of the FEW that have completed a special operations selection or elite combat course in the United States military. This chapter summarizes and interprets the study findings and research question responses based on the themes described in Chapter Four. This chapter will also discuss the theoretical, empirical, and practical implications of the study, an examination of limitations and delimitations of the research, and conclude with recommendations for future research.

Summary of Findings

This section provides a summary of the findings in this study by answering each research question with a synopsis of the discoveries in Chapter Four. The four emergent themes of Chapter Four comprehensively answer the central research question as well as the three subquestions and provide distinct answers that contribute to a greater understanding of the FEW and their experiences. Beginning with the central research question, what perceived factors or characteristics have enabled the FEW to successfully complete a military special operations selection or elite military course? The sample of the FEW participating in this study elaborate in the survey and interview how their success was primarily defined by their physical training and their mental resilience throughout their lives and during their preparation prior to the selection or course they attended.

The first subquestion in this study narrows the overarching research question into a smaller category by designing the interview protocol to encourage participants to describe the

specific attributes or factors involved in their success. This question asks: Are there any commonalities in FEW's backgrounds, physical attributes, insights, or self-awareness that affected the physical success of their selection or course completion? The data results, specifically in the survey, showed a significant effect of athletic participation beginning at a young age, as all participants in this study were physically active between the ages of twelve to eighteen. These results of the survey and interviews illustrate how, for this group of participants, the importance of continuous physical conditioning, specifically endurance activities, while simultaneously developing mental resilience as a residual from physical stress.

The second research subquestion is: Are there any perceived recommendations by the participants that could advise the physical preparation for future generations of women looking to attend a military special operations selection? Specific recommendations from the FEW to future generations of women centered around training early, possibly years, and frequently to meet the rigorous physical demands and elite standards required in special operations. These recommendations were provided when participants reflected on their personal experiences, specifically in the third interview.

Additionally, this interview also provided the response to the third and final subquestion. This subquestion asks: How can the knowledge gained from characterization of the participants help to improve the integration of women into military special operations? Like subquestion two, the answer to this question was developed during the reflection of the participants' experiences. In summary, integration for women into military special operations can improve through actions such as incorporating individualized training programs, implementing strategic recruitment strategies for female athletes, and deliberately altering the military culture to overcome gender biases.

Discussion

This section discusses the relationship of the Chapter Four findings to the theoretical literature that was reviewed in Chapter Two of this study. The answers to the central research question and the three research subquestions were extensively categorized into four overarching themes that developed within this study. The primary themes that emerged were *physical training and readiness, mental resilience and adaptation, military environment and challenges, and long-term impacts and reflections*. This section will illustrate the importance of the theoretical connection to the findings and themes that emerged in Chapter Four. This discussion will also illustrate the benefit of utilizing Charmaz's CGT (2014) framework and methodological application, specifically through means of survey and Seidman's three-interview series (2019). The findings of this study not only support results in previous research of the FEW, but also provide novel contributions to an understudied field.

Theoretical Literature

The current lack of research for a scarce population such as the FEW, requires a flexible approach to gather saturated and rich-detailed data to comprehensively analyze such an exclusive group of warfighters. The CGT framework provided a holistic qualitative approach that allowed this study to prioritize the phenomenon of the participants (Charmaz, 2014) while never restraining ideas by claiming authoritative proof (Breckenridge et al., 2012). Like previous research regarding the FEW, this study provides a deeper understanding of the physiological and psychological characteristics (Tharion et al., 2022) of a scarcely researched population. The methodological approach of CGT, including the role of the researcher, provided the means to better understand a sample of the FEW. Due to the lack of current research on the

FEW, the use of CGT was crucial to the study's ability to collect emerging data without limiting the exploration of the sample FEW in this study. The goal was to specifically understand *what* they did and *how* they were successful (Charmaz, 2008).

CGT Methodology and Predictors of Success

The chosen methodology for this study centered around the data collecting tools of a survey and interviews, specifically Seidman's three-interview series (2019). While the survey provided demographic context for the participants in this study, the three-interview series provided meaning to the participants' experiences and lives and allowed for continuous interpretation and reflection (Seidman, 2019). Charmaz's CGT methodology ensured that throughout the three interviews, each of the FEW in this study had their voice heard (2014). Through Seidman's three-interview series, the process essentially enabled the structure for a beginning, middle, and end (Seidman, 2019) that not only provided direction for the study, but allowed both the participant and researcher to impart meaning to the experiences of selected events.

Interview One

This first interview provided the context of each of the participants' backgrounds and the events leading to the phenomena of the selection or course. Throughout the study, this first interview enabled deeper understanding of the survey results, specifically in regard to the themes of *physical training and readiness* and *mental resilience and adaptation*. Both the survey and initial interview illustrated the importance of developing a strong foundation in physical training from an early age and how this physical conditioning became paramount in the success of the FEW in this study and previous research. Like the findings of this study, Farina et

al. (2019) supported the necessity of advanced aerobic capabilities, endurance, and elite muscle strength to perform in special operations. Additionally, strong mental resilience proves to be just as important in this environment as the physical aspects (Eskries-Winkler et al., 2014). The results of this study, specifically from conversations in the first interview, indicated that extended experience in athletics was common among all eleven participants in this study. This study also aligned to the backgrounds of another sample FEW participating in two other recent studies illustrating the capabilities of women with extensive endurance-based athletic backgrounds (Dyches et al., 2023; Tharion et al., 2022). While strength training eventually became a primary focus for the FEW in this study, all 11 participants had substantial experience as endurance athletes such as soccer, cross-country, and swimming. The first interview of this study provided considerable insight into how the backgrounds of these women impacted their performance at the selection or course they attended.

Interview Two

Like the first interview, the second interview is paramount to understanding the experiences of the participants. Seidman (2019) titles this interview as “The Details of the Experience” (2019, p. 21) and states that its purpose is to focus on the facts of the participants’ experience at the selection or course. Like interview one, this interview continued to provide context to the two themes of *physical training and readiness* and *mental resilience and adaptation* but continued by including the third theme of *military environment and challenges*. One specific finding was the lack of resources and physical programming designed for biological women looking to prepare for special operations. Cuddy et al. (2011) noted in their research that specialized performance programming prior to attending selection can not only lead to a higher quality of candidates, but also to more effective operators. The discussions with

the sample FEW in this study not only support this theory, but also demonstrate the necessity of personalized programming, as all of the participants either created their own preparation program or modified an existing one focused on the male physiology. Much of the apprehension regarding the integration of women into special operations stems from the lack of understanding of female physiology in the military as currently the prominent research only includes male candidates (Friedl, 2021; Vikmoen et al., 2023). Like the findings of this study, prior research has continued to provide evidence of the elite physical capabilities of women and debunking the female physical readiness stereotypes (McClung et al., 2022; Dyches et al., 2023, Friedl, 2021) that saturate the culture of the military.

Congruent with the importance of physical factors regarding the standards of special operations, mental resilience requires just as much, if not more, consideration. In the 2022 study involving another sample of the FEW, Tharion et al. noted the significance of grit and the impact the psychological trait made on the success of the FEW in the study. While Tharion et al. utilized the Duckworth Short Grit Scale (GRIT-S) (Duckworth & Quinn, 2009), the results showed that the women in this sample not only possessed a high score, but scored significantly higher than the male operators. While this study does not utilize the GRIT-S assessment, the discussions and distinct voices of the FEW in the current study provide distinct examples of mental resilience and elite psychological endurance enabling the participants to perform at the high standards set for special operations.

The second interview also introduced the third theme of the *military environment and challenges* specifically when addressing the challenges for discrimination towards women and continued gender-biases within military culture. Most, if not all, current research regarding the FEW address obstacles such as outdated stereotypes due to present military culture and

male-dominated biases (Brownson, 2014; Szayna et al., 2017). Similar to previous studies, this one also highlights the experiences and examples of discrimination the participants of this study faced during their military careers at a personal level to illustrate the challenges these female pioneers endure, unlike their male counterparts. This sample of the FEW supports the findings of other similar studies as well, demonstrating that some women can physically and mentally perform at the level required in special operations (McClung et al., 2022; Tharion et al., 2022; Dyches et al., 2023).

Interview Three

The third and final interview focused on understanding and reflecting on the meaning of the participants' experience involving all themes including *long-term impacts and reflections*. Because of the limited research and limited data on the FEW population, Seidman's three-interview series provided intellectual and emotional connections between the participants (2019) and ensured that their voices were heard. While it was difficult to utilize this qualitative tool to gather data, it is necessary to better understand the FEW and illustrate the need for additional research (Freidl, 2021) prior to developing theories or structured integration strategies. This approach allowed the participant and the interviewer the opportunity to reflect and interpret the phenomenon as thoroughly as possible with a sample of such a small population. Until time has passed to include more women in the FEW classification, it is necessary to try to deeply understand the individual women who make up this population. The CGT qualitative approach was a meticulous way to collect data, however, because the data collection method is nonlinear and adaptive, the process is capable of incorporating new ideas, insights, and theories and the research progresses.

Implications

This section will address the theoretical, empirical, and practical implications of the study to provide context between the findings in Chapter Four and the broader impact regarding the FEW as well as future research. Because the FEW only came into existence after the lift of the combat ban in 2013, nearly one decade, this qualitative research is crucial to not only understanding the unique population, but also providing insight into broader academic and societal contexts for future generations.

Theoretical Implications

The CGT framework guiding this study led to theoretical implications that not only confirmed previous research on the FEW's physical and psychological capabilities to perform in special operations, but also reinforced the necessity of additional research to understand the small population further. This study also confirmed the considerable research gaps regarding women in special operation environments that illustrate the need to continue studying the FEW prior to having the ability to provide thoughtful integration strategies for future generations. Through the use of the CGT approach, deeper understanding of the individuals who currently make up the FEW is a substantial method to learn about the exclusive group until more women are added to the population. The CGT approach does not claim authoritative truth or proof (Breckenridge et al., 2012) which is ideal for a novel research field such as the FEW sample in this study. This approach enables flexibility for new theories and ideas (Charmaz, 2014) without hindering future research as new data develops.

The FEW has only emerged within the last ten years with less than 10% of women having completed any special operations selection (SOF News, 2023), however, there are

several commonalities specific to the sample of the FEW in this study. Based on the findings in Chapter Four, all the participants in this study were involved in endurance sports or activities such as soccer, cross-country, or swimming. While the participants in this study are just a sample of the FEW, this is a significant similarity between the women that indicates a potential reason for their success. In addition to endurance participation, there was also the commonality of the FEW in this study not having access to a physical preparation program to train for their selection or course. The majority of the participants either created their own preparation training program or modified an existing program that was designed for biological men. The findings in this study supported previous research and the evidence that female physiology in the military is significantly lacking research and understanding in comparison to males (Friedl, 2021). This finding leans towards the idea that if physical preparation programs designed for the biological female were available, women may have a more successful outcome when attending special operation selections.

The final theoretical implication significant to the FEW in this study is the notion that they had to not only meet the requirements of the selection or course, but that they needed to exceed the standards in order to gain the same level of respect as their male counterparts. The present culture of the military currently possesses gender-biases that women are incapable of performing in special operations (Szayna et al., 2017) and held to a lower standard (Do et al., 2013). While the evidence significantly opposing these stereotypical beliefs is obvious, the discrimination has become deeply rooted within the male-dominated culture of the military. The FEW in this study met the rigorous standards of the selection or course they completed, however, most felt they were continuously regarded as “just a woman” and if they succeeded, then the only explanation by others was that the standards were lowered for them. As research

of this new field continues, further knowledge and ideas will continue to develop and enable more refined strategies to not only gain a more comprehensive view of this understudied population, but to begin implementing solutions to female integration.

Empirical Implications

Given that the population of the FEW is so small, additional research is required for robust empirical implications to be developed. Additional data is required on the FEW in a border context and this could be accomplished by conducting additional survey research of women in fields that require high physical standards similar to the requirements of those in military special operations. This can include varying forms of law enforcement, government agencies, and their special operations units such as Hostage Rescue Team (HRT), various special weapons and tactics (SWAT) teams, smokejumpers, and international female special operations teams such as the Norwegian Jegergruppen. With the incorporation of these similar populations and overlay for women in closely related fields, additional data can be collected and compared until a larger population of the FEW exists. While survey questions utilized in this study may need to be refined for other fields, comparisons and commonalities may be discovered to aid in more successful integration strategies for women into military special operations and other high-risk occupations. Additionally, other commonalities specific to the FEW in this study, such as endurance participation and educational achievements, can be compared to other women in similar fields to see if they continue to exist.

Practical Implications

While this new population of the FEW continues to grow, there are practical implications that can be considered regarding military training and recruiting strategies. Each of

the eleven participants in this study had limited resources, if any, regarding their physical preparation for the selection or course they attended. This commonality indicates that if a physical preparation program designed for biological women existed, there may be a higher success rate of women completing special operations selections. Understanding the physiological differences between men and women such as upper body strength, muscle development, and conditioning capabilities could lead to more effective operators via optimized performance training. While countless studies have been conducted on men in special operations regarding physical impacts and tactical performance (Lovaleker et al., 2018; Royer et al., 2018), the study for women in a similar capacity is morbidly lacking (Friedl, 2021). Not only did the FEW in this study complete the selection or course they attended, but they either developed their own physical preparation plan or modified an existing one designed for men, giving them a disadvantage before even attending the event. The implementation of individualized programming not only would improve the performance of women looking to join special operations, but also the men (Nindl et al., 2016; Friedl, 2021).

Recruitment is another empirical implication that can potentially advance the quality of female integration into special operations as well. All 11 participants in this study were highschool athletes. Of the eleven, six of the participants went on to compete collegiately. This finding indicates that it would be beneficial for recruiters for special operations to find success in recruiting women athletes out of high school and college. While this study indicates that endurance athletes may be most successful in meeting special operations standards, it does not indicate that all endurance athletes will be successful and further research is necessary in this field to verify additional physical characteristics. This idea coupled with the implementation of individualized performance programming would likely yield more successful female candidates.

Further research on the FEW can result in improvements to integrating women into MARSOC and other SOF units by incorporating adequate physical programming (Friedl, 2021) and enabling targeted recruitment for female candidates (Szayna et al., 2017).

Delimitations and Limitations

There were delimitations that were intentionally implemented to narrow the scope of the study. The FEW is a very small group of women that is currently under research, partially due to the fact that the population only came into existence within the last decade. Prior research has utilized samples of the FEW predominantly made up of Army Ranger School graduates since they currently have the most number of women who have graduated. For this reason, this study prioritized other branches, special operations selections, and elite combat courses or schools. This study not only provided an entirely new sample of eleven, but included three military branches and eight new selections, courses, or schools in addition to Army Ranger School. With the limited number of women that make up the FEW population, the selections, courses, and schools varied, however were similar in the physical and psychological requirements.

One noteworthy limitation in this field of research is the sheer number of women that make up the FEW population. Based on the scope of this study, less than 200 women (SOF News, 2023) can be considered to fall into this category. While this study addresses the physical and psychological requirements for MARSOC as a cornerstone, the scope of the study includes other selections, courses, and schools with similar standards and requirements for additional data because of the limited number of possible FEW participants.

Recommendations for Future Research

Considering the findings, implications, limitations, and delimitations of this study, recommendations for future research would involve replications of this study to explore experiences of new samples of the FEW. As the FEW population grows, additional research strategies and approaches can be implemented such as looking at specific branches and specific special operation selections. Until this number increases, it may be beneficial to include an overlay for women in related fields with similar physical and psychological requirements such as specialized law enforcement, smokejumpers, or foreign military special operations. By utilizing a similar approach to this study, not only are the participants' physical capabilities validated, but the researcher also enables the participants' voices to be heard providing a deeper level of understanding.

Another recommendation for future research involves the commonality of FEW in this study and the fact that each participant had to create or modify a training program to prepare for their selection or course. Looking into the exact training program and regime that each of these women followed to reach success would be pertinent information that could potentially provide training support for future generations of women preparing for special operations. This training would also be tailored to the training needs of biological women, such as focus on upper body performance as well as muscle growth and development to reach the elite male standards. Additionally, the fact that all the participants in this study created or modified their own training program illustrates the self-efficacy that each of these pioneers possessed. Incorporating this trait into the survey may also yield insight beneficial to better understanding this population.

A final recommendation for future research is to further explore the phenomenon through the participants' experiences while considering the military culture and biases faced by the FEW in this study. It is important to be conscientious of the actual intention of female integration into special operations and if it is being taken seriously and what obstacles are preventing its success. As the FEW population increases and theories develop, a deeper theoretical foundation forms leading to more practical implications and more refined female integration strategies such as personalized physical programming and recruitment approaches.

Summary

Through the utilization of CGT as the theoretical framework to direct this study, this methodology ensured that the FEW participants' voices were heard (Charmaz, 2014) providing an interpretive portrayal of the sample FEW and not an exact depiction of the entire FEW population. CGT enabled the qualitative tools of a survey and Seidman's three-interview series (2019) to explore the participants' experiences and gain a deeper understanding of the individual. Through case studies and cross-case examination, commonalities were discovered among the sample FEW in this study and notable discoveries were found that will contribute to future research on this new population.

The analysis of the findings in this study revealed four specific themes of *physical training and readiness, mental resilience and adaptation, military environment and challenges, and long-term impacts and reflections*. After further examination of the four primary themes, several significant takeaways were uncovered. One takeaway that was common for all of the participants in this study was their endurance-based athletic background. An additional takeaway and commonality for this sample of the FEW was the lack of preparation program

designed specifically for biological women looking to physically prepare for special operations selection or elite combat courses. The participants either created their own preparation program or modified an existing one designed for men indicating that a personalized preparation program specific to women could be beneficial to future female generations.

The goal of the study was to gain a deeper understanding of the FEW in regard to their physical and psychological characteristics that allowed these participants to be among the first women to complete some of the most elite and physically demanding selections and courses in the military. As this population grows and research continues, greater understanding of this group of pioneers will follow and provide new strategies and opportunities for more effective female integration into special operations.

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APPENDIX A: IRB Approval**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

December 20, 2023

Bailey Weis
Keith Randazzo

Re: IRB Exemption - IRB-FY23-24-820 Physiological and Psychological Performance Considerations of Female Elite Warfighters (FEW) in United States Military Special Operations: A Qualitative Study

Dear Bailey Weis, Keith Randazzo,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

APPENDIX B: CONSENT FORM FOR PARTICIPANTS

Title of the Project: Physiological and Psychological Performance Considerations of Female Elite Warfighters (FEW) in United States Military Special Operations: A Qualitative Study

Principal Investigator: Bailey Weis, PhD Candidate, School of Health Sciences, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must:

- Be at least 18 years old.
- Been born as a biological female.
- Identify as a female.
- Have served/been serving in the United States Armed Forces.
- Have completed a military special operations assessment and selection (i.e. MARSOC A&S, SFAS, RASP, BUD/S, JSOC SMU, CST etc.)
- OR have completed an elite military combat course (i.e. Ranger School, BRC, BTOC, ATOC, RS, MMTC, CDS, AWG etc.)
- Be willing to talk about your experiences.

Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to better understand physical and psychological characteristics that have enabled female elite warfighters (FEW) to successfully complete a military special operations selection or elite military course.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in an online survey that will take approximately 15-20 minutes to complete.
2. Participate in an online/virtual, audio/video recorded interview that will take no more than 45 minutes.
3. Participate in a second online/virtual, audio/video recorded interview that will take no more than 45 minutes.
4. Participate in a third and final online/virtual, audio/video recorded interview that will take no more than 45 minutes.

5. Participants will have the opportunity to review developed themes from the interviews to check for accuracy and confirm agreement. This should take no more than 1 hour.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include gaining data and knowledge on female elite warfighters (FEW) to potentially implement more effective strategies for integrating future generations of women into US military special operations. Potential results could suggest specific physical preparation tactics, sex-specific performance optimization, or alternative methods to improving integration such as targeted recruitment of women matching similar characterizations of the FEW. This study will also gather more data for future research on a scarcely researched topic that has no data prior to 2013.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses to the online survey will be anonymous. Participant responses to the interviews will be confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data collected from you may be used in future research studies and/or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.
- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted.
- Recordings will be stored on a password locked computer for three years and then deleted. The researcher will have access to these recordings.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Bailey Weis. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [blank]. You may also contact the researcher's faculty sponsor, Dr. Keith Randazzo, at [blank]

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher[s], **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is [blank]

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record/video-record me as part of my participation in this study.

Yes

No

APPENDIX C: SURVEY QUESTIONS FOR PARTICIPANTS

Hello, my name is Bailey Weis and I am a USMC veteran and a PhD Exercise and Sports Science candidate at Liberty University.

I am conducting a study on the physiological and psychological characteristics of Female Elite Warfighters (FEW) who have completed a US military special operations selection or elite combat course and I would like to learn about your experiences having done so.

Please complete this 15-20 minute survey. Your responses are anonymous and you can skip any questions you are not comfortable with. Thank you for your participation.

Multiple-Choice

Questions 1 through 4 are multiple choice questions. Please select one answer for the following multiple choice questions.

1. What branch of military service did you serve in at the time of attending the special operations selection or elite combat course?
 - a. Army
 - b. Marine Corps
 - c. Navy
 - d. Air Force

2. What special operations selection or elite military combat course did you complete?
 - a. Army SFAS
 - b. Army Ranger School
 - c. MARSOC A&S
 - d. USMC BRC
 - e. USMC IOC

- f. BUD/S
 - g. Other
3. What is your education level?
- a. High School Diploma/GED
 - b. Associate Degree
 - c. Undergraduate/Bachelor's
 - d. Graduate/Master's
 - e. Doctorate
 - f. Other
4. What was your age at time of selection/course?
- a. 18-21
 - b. 22-25
 - c. 26-29
 - d. 30-34
 - e. Other
5. What is your military status?
- a. Active
 - b. Veteran
 - c. Reserve
 - d. Retired
-

Open-Ended/Short Answer

Questions 6 through 13 are open-ended questions requiring a short answer or response.

6. What year did you join the military?
7. What year did you attend the selection/course?
8. What was your military rank at time of selection/course?
9. Did you participate in sports/competitions from age 12 to 18? If yes, please list them.
10. Did you participate in sports/competitions from age 19 to present? If yes, please list them.
11. What is the highest level of competition you experienced in athletics?
12. Please list any additional sports/competitions if not covered in previous questions.
13. Please describe any resources you utilized when preparing for selection/course.

APPENDIX D: INTERVIEW QUESTIONS FOR PARTICIPANTS

Interview One: Focused Life History

Questions

1. Please introduce yourself to me.
2. I made the decision to serve in the military and would like to hear about how you made the decision to serve?
3. In your own words please describe what prepared you for the military. ***May want some prompts*** (both physical and mental) Need prompts– “I’ve heard you describe... how did you prepare (alternative)”
4. Military service is unique and can be challenging. Can you give me an example of a type of challenge that you’ve experienced?
5. I heard you mention [above challenge], can you describe how you dealt with that challenge(s)?
6. Those are all the questions I have, is there anything you would like to add?

Interview Two: The Details of Experience

Questions

7. I am interested in learning more about what made you decide to attend this selection/course?
8. Can you tell me how you physically and mentally prepared for this selection/course?
 - a. Did you utilize any resources for your preparation?
9. Everyone has physical advantages and disadvantages when physically performing. Can you describe your strengths and weaknesses while preparing for this selection/course?

10. You completed one of the most mentally and physically demanding selections/courses in the military that the majority of candidates do not finish. Can you give me an example of a challenge(s) you personally experienced during selection/course?
11. As you mentioned [above], can you describe how you dealt with that challenge(s)?
12. Those are all the questions I have, is there anything you would like to add?

Interview Three: Reflection on Meaning

Questions

13. I am interested to learn how this experience has affected your life or decisions today?
14. Having lived through the experience and completing the course/selection, what is the biggest challenge you perceive for women looking to join special operations?
15. Reflecting on your experience, what advice would you give to future women interested in attending this course/selection?
16. Having seen both failure and success throughout the selection/course, what do you think makes a candidate successful?
17. If you could go back in time, is there anything that you would change about your physical preparation or physical performance during the selection/course?
18. Those are all the questions I have, is there anything you would like to add?