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The Relationship between Sexual Abuse and Body Image of Members of the United States Military

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THE RELATIONSHIP BETWEEN SEXUAL ABUSE AND BODY IMAGE OF MEMBERS OF THE UNITED STATES MILITARY

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CONTENTS

LIST OF TABLES

THE RELATIONSHIP BETWEEN SEXUAL ABUSE AND BODY IMAGE OF MEMBERS OF THE UNITED STATES MILITARY

Chelsea A. Taylor August 2017 50 Pages

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The purpose of this study was to evaluate the effects of sexual abuse on body image of United States military service members and veterans. Participants completed an online questionnaire (n = 63) that measured their demographics, military status, sexual abuse experiences, combat experiences, relationships during deployment, and body image. Average scores on body image measures from participants who experienced sexual abuse (n = 10) were compared with average scores on body image measures from participants who did not experience sexual abuse (n = 49). Results indicate that there was not a significant difference in body image between service members who have and who have not experienced sexual abuse; however, results approached statistical significance for analyses evaluating whether service members lower in rank were at an increased risk for experiencing more sexual abuse than service members of higher rank. Implications include intervention that focuses on overall military body perception and treatment of alternative effects of sexual abuse. This research contributes to the literature as one of the first studies to assess the relationship between body image and sexual abuse in service members of the U.S. military.

Chapter 1

Introduction

United States service members are faced with stressful work conditions (e.g., deployment, permanent change of station, injury, separation from family, or combat; Bray, Camlin, Fairbank Dunteman, & Wheeless, 2001; Larson, Wooten, Adams, & Merrick, 2012) and strenuous work demands (e.g., maintaining a specific body fat percentage, body weight expectations, and physical fitness requirements; Bartlett & Mitchell, 2015), which may increase their risk to develop pathologies (i.e., posttraumatic stress disorder [PTSD] and eating disorders; Antczak, & Brininger, 2008; Booth et al., 2012). Of all of these difficult challenges faced by service members (e.g., hostile enemy actions, combat exposure), sexual assault and harassment is a preventable occupational hazard, as well as a growing concern among public health fields (Barth et al., 2016). Barth and colleagues (2016) define sexual harassment as "repeated, unsolicited verbal or physical contact of a sexual nature which is threatening in character" (p. 77), whereas the United States military defines sexual assault as "intentional sexual contact, characterized by use of force, physical threat or abuse of authority, or when the victim does not or cannot consent" (Congressional Digest, 2013, p. 1). In a study by Barth and colleagues (2016), 41 percent of female service members and four percent of male service members reported experiencing military sexual trauma (MST); it was noted that, although the four percent can be interpreted as a small population of males sexually abused, it indicates a population of more than 60,000 male service members.

Previous research suggests that those who endure sexual abuse may view their bodies negatively, visually interpret their bodies as depressing or disgusting, and avoid

looking at them regularly (Kremer, Orbach, & Rosenbloom, 2013). Individuals who experience sexual abuse show a decrease in their body ownership (i.e., a sense of "mineness" related to their bodies) because the abuse decreased their sense of possession over their body (Kremer, et al., 2013). The relationship between body image and visual processing and perception in individuals who have experienced sexual abuse has been researched in the past (Kremer et al., 2013); however; the effects of sexual abuse on body image and perception of service men and women has not been studied specifically. To the author's knowledge, there are no published studies examining the effects of sexual abuse on body image of service men and women. The present study looks to evaluate the relationship between sexual abuse that occurred while in the military and body image in the United States service members.

The Nature of the Present Study

According to O'Brien, Keith, and Shoemaker (2015), sexual assault is culturally assumed in America to be a female issue and a "myth" among male victims. There are stereotypical beliefs that exist, such as the belief that men who are victims of sexual abuse perpetrated by other men are homosexual (Turchik et al., 2013); these stigmas and fears potentially lead to underreporting of sexual assault and body shame (Turchik et al., 2013). Common male rape myths include "real and strong" males do not experience rape, male rape is not real or serious, and males cannot be raped by females (O'Brien et al., 2015). Servicemen returning from deployment were found to decline mental health services to appear "fine" and not "weak," decreasing the opportunity to allow for researchers to measure the effects of sexual trauma on individuals in the service (Katz, Bloor, Cojucar, & Draper, 2007). The military documents any clinical symptoms or

diagnoses of psychological disorders (PTSD, eating disorders, etc.), which can lead to a service member being discharged from the military (Antczak & Brininger, 2008); a recent study found that men who experienced MST were more likely to develop PTSD and substance use disorders, and women who experienced MST were also likely to develop PTSD, as well as eating disorders, depression, and anxiety (Maguen et al., 2012).

Since 2005, the Department of Defense has created two types of reporting for service members who experience sexual assault and harassment (Mengeling, Booth, Torner, & Sadler, 2014). Military service members may partake in restricted reporting, which allows them to confidentially report their incidences without an official investigation taking place, whereas unrestricted reporting allows service members to file a report on their assault experience and a formal criminal investigation will follow (Mengeling et al., 2014). Of the two types of reporting, restricted reporting was viewed more positively by service women and reasons for those who did not report were due to fear of confidentiality concerns, fear of retaliation, and beliefs that nothing would be done to punish the perpetrators (Mengeling et al., 2014). Previous research found that 52% of service women identified as being too embarrassed to file an unrestricted report and that 42% of women believed that reporting their assault experience would affect their military career negatively (Mengeling et al., 2014).

Underreporting sexual assault is not the only barrier in researching military sexual assault. There is also a lack of research on service members' body image and perception; namely, that the visual perceptions of body image in those who are sexually abused are highly affected (Kremer et al., 2013). Body image dissatisfaction and distortions are a high frequency sequela of sexual abuse in the general population. Strother, Lemberg,

Standord, and Tuberville (2012) found that 30% of individuals with disordered eating experienced sexual abuse in their lifetime. In the general population, males often react to trauma by manipulating their body size to be viewed as more muscular and masculine in order to protect themselves from revictimization (Strother et al., 2012). Kremer and colleagues (2013) found that survivors of sexual abuse experienced body image aberrations (i.e., undermining sense of ownership of their bodies and unclear body boundaries). Through evaluating the severity of abuse in service members who have experienced military sexual assault compared to service members who have not, body image of military service members can be measured through the lens of how they interpret and evaluate themselves, not how others perceive them.

Internal Factors Contributing to Sexual Abuse and Body Image: Visual-Perception of Body Image.

Body image is defined as, "the combination of an individual's psychological experiences, feelings and attitudes that relate to the form, function, appearance and desirability of one's own body" and "is influenced by individual and environmental factors" (Akyol et al., 2013, p. 338). Weaver, Griffin, and Mitchell (2014) define body image at a more conceptual level as an "organized cognitive structure or schema" (p. 460) that includes an internal depiction of an individual's appearance.

When an individual is sexually assaulted (attempted rape, molestation, unwanted physical advances, unwanted sexual coercion, or completed rape), his or her body is physically violated (through physical force, rough physical interaction, penetration, etc.). This physical violation has a significant impact on how one perceives and interprets his or her body image and body ownership (i.e., unclear body boundaries, anger directed

toward one's body, etc.; Kremer et al., 2013). For purposes of this study, body image is defined as the visual and cognitive perception and interpretation of one's physical appearance. The present study will evaluate average body image scores based off of two measures: the Body Esteem Scale (BES; Franzoi & Shields, 1984) and the Body Investment Scale (BIS; Orbach & Mikulincer, 1998). The minimum BES score that can be achieved is a 35; the maximum BES score that can be achieved is a 175. The minimum BIS score that can be achieved is a 24; the maximum BIS score that can be achieved is a 120.

According to a study done by Kremer and colleagues (2013), sexual abuse causes both external (physical) and severe internal (psychological/emotional) injury (body esteem, ownership of the abused individual's body, body image, and body attitudes), whereas physical abuse alone causes more external harm than internal harm. When individuals who experienced sexual abuse are confronted with their body appearance (i.e., their reflection in a mirror), their visual perception analyzes and stores visual representations of their interpretation of what their body image is to them now, after the abuse. For example, if individuals who were raped look in the mirror hours to days after the attack, their visual perception that once was "I look beautiful today, I love my curves" can turn into "I am disgusting…my body betrayed me…I do not even know who I am anymore when I see myself;" this new visual representation is analyzed and stored to later be recalled for perception the next time they have to face an image of themselves, creating internal cognitive dissonance (Kremer et al., 2013). According to Akyol and colleagues (2013), impaired body image predicts depression and lower quality of life.

Military service members must rely on their bodies in mentally and physically demanding work tasks, such as maintaining a specific body fat percentage, meeting weight requirements, and passing physical fitness examinations (Antczak & Brininger, 2008). If physical, weight, and fitness standards are not met by service members, they may be placed on a non-promotionable status, become ineligible for training programs, be placed in remedial fitness programs, be ostracized by fellow service members, or be discharged from the service (Antczak & Brininger, 2008). Weigh-ins, weight regulations, deployment, death, dying, killing during combat, changes in eating behaviors, physical fitness requirements, and the possibility of being exposed to violence or witnessing violence are all features specific to the military that may increase the risk of eating disorders and negative body perceptions in service members (Bartlett & Mitchell, 2015).

Antczak and Brininger (2008) found that more than half of all Army soldiers experience an inability to maintain ideal weight standards, and instead, experience a recurring pattern of weight gain and weight loss. Weight standards are stricter among the Marines; female marines must maintain a body fat percentage of 25% throughout the duration of their military service and career (Antczak & Brininger, 2008). Marine female recruits have been found to have high rates of body dissatisfaction and 77% experience disordered eating behaviors (Bartlett & Mitchell, 2015). Bartlett and Mitchell (2015) found that, among female veterans who experienced MST, binging, purging, and over-exercising were identified as three types of behavioral coping strategies used to manage the effects of abuse. Due to the heavy emphasis the military places on physical readiness and physical appearance, service members who experience abuse may engage in self-injurious behavior and may overstimulate the body (i.e., over exercising or other

compensatory behaviors) to help regain or provide a sense of control over the body (i.e., painful behaviors to feel connected to their body and chaotic world; Bell et al., 2014; Northcut & Kienow, 2014).

United States military services members are expected to rely on their bodies physically to ensure their safety in the workplace, as well as the safety of their fellow service members; this expectation can be observed through strict military weight requirements and standards, physical fitness tests, physical labor in the work environment, physical endurance and strength during combat, strict military dress codes, basic training, etc. (Antczak & Brininger, 2008; Bartlett & Mitchell, 2015; Bell et al., 2014). For the purposes of the current study, such changes in functioning include body image perception. When one's body image is altered or distorted due to sexual abuse, one may utilize coping mechanisms to manage the effects of their experienced trauma. For example, individuals in the general population may take personal days from work, wear loose fitting clothing, hide personal features by styling hair or clothes differently, sleep in late, or binge eat to distract themselves from their experienced trauma. Service members do not have such an opportunity to "escape" or cope with their sexual abuse experiences; service members are unable to call off from work, are unable to break military dress code, are unable to decline participation in a fitness test, and cannot miss drill or formation due to sleeping or isolating themselves (B. Simons, personal communication, July 13, 2017). Because military service members are constantly being reminded of the importance of their physical body, it is possible the trauma they experience through sexual abuse may remain present, which could increase the severity of their body image distortions.

External Factors Contributing to Sexual Abuse and Body Image: Unwanted Sexual Harassment, Physical Advances, or Rape and Sexual Assault.

The United States Veterans Health Administration (VHA) defines sexual abuse within the military as military sexual trauma (MST), which includes both sexual harassment and sexual assault (Booth et al., 2012). The National Center for PTSD (NCP) defines MST as unwanted sexual attention, unwanted gender harassment, sexual coercion, rape, and sexual assault (Cater & Leach, 2011). The Department of Veterans Affairs (VA) refers to MST, defined in 38 U.S. Code Sec. 1720D, as "physical assault of a sexual nature, battery of a sexual nature, or sexual harassment which occurred while the veteran was serving on active duty or active duty for training" (Barth et al., 2016, p. 77). Previous research found that the general population of individuals who have experienced trauma, as well as service members who experienced MST, no longer experience their surroundings and the world as safe (Northcut & Kienow, 2014). The National Sexual Violence Resource Center (2015) reported that, in the general population of individuals in the United States, 1 in 5 women and 1 in 71 men will experience rape at least once during their lifetime.

For the purposes of this study, abuse will be viewed as physical, sexual, and emotional. In this study, physical abuse is defined as slapping, punching, pushing, pinching, shaking, choking, squeezing, whipping, cutting, or any interaction that leaves a mark or hurts the victim physically. Sexual abuse is defined as molestation, rape, attempted rape, forced sexual acts, unwanted sexual verbal contact (i.e., sexual harassment), or any unwilling, nonconsensual sexual act with the victim. Emotional

abuse is defined as name calling, threats, teasing, isolating the victim, stalking, yelling, swearing, mocking, neglecting or controlling.

Unwanted sexual experiences and assault have been related to poor mental and physical health (LeardMann et al., 2013). Service women who experience MST tend to have increased self-reports of depression; gynecological, neurological, pulmonary, gastrointestinal, urological, and cardiovascular conditions; and increased substance abuse (Kimerling, Gima, Smith, Street, & Frayne, 2007; O'Brien & Sher, 2013; Smith et al., 2011). Kimerling and colleagues (2007) found that, among all traumatic events, PTSD was the most frequent outcome of individuals who have experienced rape. Previous research findings suggest women diagnosed with PTSD were more likely to have additional diagnoses of depressive disorders, anxiety disorders, and eating disorders, whereas men diagnosed with PTSD were more likely to have additional diagnoses of alcohol and substance use disorders (Maguen et al., 2012).

Research findings show that sexual assault in Afghanistan and Iraq war zones increased by 16% for the fiscal year 2009 (Cater & Leach, 2011). In 2011, the Pentagon released a report estimating that between 80% to 90% of MST experiences among service members were unreported (Conrad, Young, Hogan, & Armstrong, 2014). In 2012, the Department of Defense surveyed military service members and found that, among active duty service members, 61% of women and 1.2% of men reported experiencing sexual assault and 23% of women and 4% of men reported experiencing sexual harassment (Barth et al., 2016). A 2013 annual report by the Department of Defense (DoD) estimated there were 26,000 cases of military sexual assault in the year 2012, a 40% increase over two years, and only 3,374 of those cases were reported (Congressional Digest, 2013;

Keehn, 2015), with fewer than 10% tried in court (Keehn, 2015). The DoD military sexual assault estimate for 2012 was a 6% increase from the fiscal year 2011 (Keehn, 2015); these estimates are based on annual reports and surveys conducted on armed forces by the Department of Defense (Congressional Digest, 2013; Keehn, 2015).

A study by Katz and colleagues (2007) found that 56% of female soldiers in a military sample reported experiencing sexual trauma, that same percent reported experiencing sexual harassment on a weekly or daily occurrence, 33% reported experiencing unwanted sexual advances on a weekly or daily occurrence, and 17% reported being raped or sexually assaulted on a monthly basis; the latter female percentage identified their abusers as soldiers who were supposed to be their "friends" or other men in their units. Turchik and colleagues (2013) found that male soldier sexual assault victims experience a variety of stigma-associated barriers that may prevent them from reporting their sexual assault or prevent them from seeking the necessary mental health services. Although both genders report experiencing self-blame (e.g., "I must have led on my perpetrator; therefore, I deserved the assault."), shame (e.g., "How could I let this happen to myself?"), embarrassment (e.g., "Only people who are weak would allow themselves to get into this situation."), denial (e.g., "If I ignore what happened, it is as if nothing happened at all."), and self-isolation and alienation (e.g., "I cannot trust anyone anymore or else this can happen to me again."), males are seen to suffer more adverse effects from stigma-related barriers than females (Turchik et al., 2013). Stigma of reporting, stress of deployment, stress of acculturation, combat, sexual abuse, and lack of control over one's environment and interactions with one's perpetrator are all stressors that service members may experience (Bartlett & Mitchell, 2015; Street et al, 2009).

It was found that females underreport their sexual abuse experience based on the belief that their allegations would not be believed, whereas males underreport their sexual abuse experience based on stigma related to their sexual orientation (victims of sexual abuse are viewed as feminine, weak, and homosexual), masculinity (victims are viewed as more feminine and less aggressive or tough), and gender role expectations (the belief is tough men do not get sexually abused, only homosexual men do; Turchik et al., 2013).

According to Conrad and colleagues (2014), a report by the Pentagon stated that approximately 97% of the service members abused knew their attacker. A study conducted by Cater and Leach (2011) found that female military service members experienced increased sexual harassment and trauma after reporting MST. The same study found that the reason males did not report their assault was due to knowing their attacker, self-blame, shame, stigma, career loss, loss of trust, and fear of not being believed by an authority figure (Cater & Leach, 2011). There are programs implemented by the military to protect service members from sexual assault, such as the Sexual Harassment Abuse Response Prevention (SHARP) program; however, such programs may be ineffective due to military officials (i.e., battalion sergeants and commanders) holding SHARP positions; the fear of reporting an experienced or witnessed sexual assault to a military chain, regardless of the title or mission of the program, still encompasses the same fear-related barriers as reporting the assault to a military official. The fear felt by service members, as well as their expectations for retaliation from reporting sexual abuse in the military, does not allow for proper evaluation of the effects these events have on U.S. service members; this study's purpose is to assess the effects

sexual abuse has on body image perception and distortion among military service members.

Limits of Existing Research

Recent and current research on sexual abuse in the military has several limitations. According to Barth and colleagues (2016), it is difficult to decipher where in the service members' military careers the sexual abuse took place. Assessments and screenings used in research limit the depth of responses service members can provide and limit valuable information that can be provided in a lengthier questionnaire, such as a description of the abuse, who the abuser was, and specific experiences undergone by the service members' (Barth et al., 2016; Booth, Mengeling, Torner, & Sadler, 2011). There is much correlational research on military sexual abuse and its relationship with PTSD, substance abuse disorder, depression, and eating disorders (Antczak, & Brininger, 2008; Booth et al., 2012; Cater & Leach, 2011); however, there is a lack of research on military sexual abuse and the impact it has on service members' body image perception and distortion.

Barth and colleagues (2016) found that veterans who experienced combat exposure during deployment had an increased risk for MST than those who did not experience combat exposure. Previous research found sexual harassment perpetrated during deployment was experienced by 51.2% of women and 11.1% of men (Barth et al., 2016). Women were found to be at an increased risk for reporting sexual assault or sexual harassment while experiencing deployment-related combat exposure (Barth et al., 2016). Barth et al. (2016) found that women who experienced and reported combat exposure during deployment were 42% more likely to report MST and 43% more likely to

experience and report sexual harassment compared to women who did not report experiences of combat exposure during deployment. Men were 57% more likely to report MST if they were in the presence of combat exposure, were three times more likely to report sexual assault, and were 48% more likely to report sexual harassment if deployment-related combat exposure occurred compared to men who did not experience combat exposure (Barth et al., 2016).

Cater and Leach (2011) found that officers who permitted sexist behavior and harassment of women in the military was the strongest predictor of physical assault, followed by unwanted sexual contact. Keehn (2015) found that those accused of perpetrating sexual assault typically were older and were of higher rank than those they assaulted. Sadler, Booth, Cook, and Doebbeling (2003) found that one-third of service women who were raped did not report the assault to a ranking officer. Of these service women, one-fourth did not report the offense to the ranking officer because the ranking officer was the perpetrator, and one-third did not report to the ranking officer because the ranking officer was a friend of the perpetrator (Sadler et al., 2003).

Service members who experienced sexual harassment in the workplace were typically younger, of a racial or ethnic minority, lower in rank, had less education, had fewer years of active duty, and were single (Cater & Leach, 2011). Cater and Leach (2011) found youth, a sexualized environment, and low rank to be common risk factors for experiencing MST among both men and women. Keehn (2015) found that those who experienced military sexual assault were younger than 25 and of a junior enlisted rank (non-commissioned officer). Sadler et al. (2003) found that service women's frequency of rape was strongly associated with their ranking officer's, or supervisor's, behaviors.

The Present Study

The present study addressed these limitations through self-report measures. The questionnaires the service members completed assessed the type of sexual abuse they experienced (rape, molestation, sexual harassment, etc.), the relationship to the abuser, when the abuse occurred, the duration of the abuse, and whether the abuse occurred while in combat, on deployment, or while stationed in the United States. The present study also assessed for the effect sexual abuse had on service members' body image perception and distortion, which to the author's knowledge, has not been studied or published. The results could assist in helping to develop intervention programs in addition to those targeting PTSD and sexual harassment and assault prevention; because an individual's body belongs physically, emotionally, and mentally to the individual whose body it is, programs or interventions can be developed to help service members cope and adjust to negative cognitions about their body image distortions or perceptions after being sexually abused.

Hypotheses:

Based on the literature review, the following hypotheses will be evaluated:

1. Service members who have been sexually abused will obtain lower average scores on measures of body image scales than those service members who have not been sexually abused.
2. Service members who have been deployed and sexually abused will obtain lower average scores on measures of body image than service members who have been abused while stationed on base in America.

3. Service members who have been sexually abused by a soldier with more authority (i.e. Private vs. Sergeant) will obtain lower averages scores on body image measures than those who were sexually abused by soldiers with a lower rank.
4. Service members lower in rank will report having experienced sexual abuse more often than service members higher in rank.

Chapter 2

Methods

Participants

Participants for this study included 63 United States military service members and veterans. The participants ranged in age from 18 to 57 (*M* = 27.77, *SD* = 9.48). Participants' years in service ranged from 0.75 to 21 (*M* = 4.89, *SD* = 4.20) and their tours of duty ranged from 1 to 7 (*M* = 2.40, *SD* = 1.57). The duration of participants' deployments ranged from 3 months to 74 months (*M* = 12.26, *SD* = 12.67). The percentage of male service members in participants military units ranged from 0 to 100 (*M* = 80.99, *SD* = 23.62). Gender of participants included 42 (68.9%) male, 18 (29.5%) female, 1 (1.6%) "in another way," and 2 (3.2%) who did not list gender. Race/ethnicity of participants included 38 (62.3%) Caucasian, 11 (18%) African American, 4 (6.6%) Hispanic, 6 (9.8%) Multi-Racial, 1 (1.6%) Latino, and 1 (1.6%) other identified; 2 (3.2%) did not list race/ethnicity. Participants' military branches included 27 (45.8%) Army, 18 (30.5%) Navy, 10 (16.9%) Air Force, 2 (3.4%) Marine, 1 (1.7%) National Guard, and 1 (1.7%) Coast Guard. There were 29 (51.8%) Active Duty service members, 14 (25%) Reservists, and 13 (23.2%) Veterans.

There were 49 (83.1%) participants who did not experience sexual abuse, 10 (16.9%) participants who did experience sexual abuse, and 4 (6.3%) participants who did not report abuse status. Of those participants who identified as experiencing sexual abuse while in the military, 6 (37.5%) reported abuse occurred while on-duty in the military, and 10 (62.5%) reported the abuse occurred off-duty. There were 4 (28.6%) participants who reported experiencing sexual abuse while on deployment, 10 (66.7%) who reported

experiencing sexual abuse while stationed in America, 11 (68.8%) who reported experiencing sexual abuse while on a military base, and 8 (47.1%) who reported experiencing sexual abuse while on a military installation.

Measures

The participants initially completed a Demographics Questionnaire. Deployment experience was assessed by the Combat Experiences Survey (Vogt, Smith, King, & King, 2012) and the Relationships during Deployment Questionnaire (Vogt et al., 2012). Sexual trauma, abuse levels, and severity was assessed by the Relationships during Deployment Questionnaire (Vogt et al., 2012) and demographics. Body esteem and body image was assessed by the Body Esteem Scale (Franzoi & Shields, 1984), and Body Investment Scale (Orbach & Mikulincer, 1998). Each of the study measures is described below.

Demographics: Participants were asked to report their age, race/ethnicity, relationship status, socioeconomic status, sexuality, branch and rank of military, number of years enlisted, education level upon entering the military, descriptors about military sexual trauma (if any), and whether they have been deployed (See Appendix A).

Combat Experiences Scale (CES; Vogt et al., 2012; see Appendix B): The CES is a research questionnaire that consists of 17 questions that measure combat exposure on deployment and the circumstances that threatened the soldiers' life and lives of others (including civilians, fellow soldiers, and commanding officers). An example question consists of, "While on deployment, I was exposed to hostile incoming fire." Questions are rated on a six-point Likert-type scale, from 1 (*never*) to 6 (*daily or almost daily*) scale. The scores for each of the 17 questions are totaled and higher scores indicate greater exposure to combat. The CES expresses excellent internal consistency ($\alpha = .91$;

Vogt et al., 2012). For purposes of this study, "on-duty" refers to service members fulfilling their work-related obligations and duties; whereas "off-duty" refers to service members' personal time and activities unrelated to their occupational duties.

Relationships during Deployment Questionnaire (RDDQ; Vogt et al., 2012; see Appendix C): The RDDQ is a research questionnaire that consists of 16 questions that assess unwanted sexual contact and exposure on deployment from other soldiers, civilians, or commanding officers while enlisted in the military. An example question consists of, "While I was deployed, people I worked with threatened my physical safety." Questions are rated on a four-point Likert Scale from 1 (*never*) to 4 (*many times*). The results are evaluated using the total score from the 16 questions, with higher scores indicating greater exposure to sexual harassment. The RDDQ has evidenced adequate reliability ($\alpha = .86$; Vogt et al., 2012).

Body Esteem Scale (BES; Franzoi & Shields, 1984; see Appendix D): The BES is a research questionnaire that consists of 35 questions that measure participants' investment in, and feelings about, their own body parts and body part functions. Participants are asked to rate "Muscularity," for example, on a 1 (*strong negative feelings*) to 5 (*strong positive feelings*) scale. Items are scored based off a total sum of the three subscales (i.e., Physical Attractiveness/Sexual Attractiveness, Upper Body Strength/Weight Concern, and Physical Condition); higher scores per subscale indicate stronger positive feelings about participants' body-esteem for that designated subscale. An absolute minimum score consists of 35; an absolute maximum score consists of 175. According to previous research, the BES has good convergent and discriminant validity (Franzoi & Herzog, 1986); the BES has adequate internal consistency (coefficient alphas

range from .81 to .86 for males and from .78 to .87 for females; Franzoi & Shields, 1984).

Body Investment Scale (BIS; Orbach & Mikulincer, 1998; see Appendix E): The BIS is a research questionnaire that consists of 24 questions that measure the "emotional investment" in the body, body maintenance, body experience, and body protection. An example statement, “I don’t like when people touch me,” is scored on a five-point Likert scale from 1 (*do not agree at all*) to 5 (*strongly agree*). Items are scored by averaging the number of responses in each of the subscales; higher scores indicate participants’ positive feelings towards their bodies. An absolute minimum score consists of 24; an absolute maximum score consists of 120. The BIS has confirmed construct reliability (ranging from $\alpha = .80$ to $\alpha = .95$; Orbach & Mikulincer, 1998).

Procedure

Once the principal researcher received Institutional Review Board approval, the participants in the study were recruited through a variety of methods. Study information, the questionnaire online link, and contact information of the principle researcher was advertised through shared posts on Facebook pages, and through Western Kentucky University’s (WKU) Study Board. Prior to participating in the study, participants were instructed to click the online questionnaire link and to read and download the informed consent document. Participants were then instructed to complete Part I, the Demographics Questionnaire. Participants who have been deployed were instructed to complete Part II (CES) and Part III (RDDQ). All participants were prompted to complete Part IV (BES) and Part V (BIS). Upon completing the study, participants were instructed to review and download the provided referral document; participants were then prompted

to submit their questionnaire responses. The questionnaire took approximately 25 minutes to complete; however, participants were not limited to time constraints while participating. Participants recruited through WKU's Study Board emailed the principal researcher and were granted Study Board credit for their participation.

Ethical Issues

Informed consent was dispersed to participants prior to conducting the study and taking the questionnaires. Soldiers' identities were protected through anonymous responses. Participants were instructed to not leave any identifying information on the questionnaires (e.g., names, birth dates, social security numbers, platoon names, military ID numbers, etc.). Participants' questionnaires were submitted to the principle researcher online without being seen by any other individuals; additionally, no reports of abuse were made (due to participants leaving no identifiable marks or writings) with the collected data to ensure and maintain confidentiality. Re-traumatization is a risk, but was dealt with by giving each participant contact information to crisis hotlines, counseling facilities in the area, Sexual Harassment Abuse Response Prevention (SHARP) representative information, and clinical psychologist contact information.

Chapter 3

Results

Preliminary Analyses

The CES scores were summed to determine the exposure to combat. The RDDQ scores were summed to determine exposure to sexual harassment. The BES and BIS scores were summed to determine body-esteem and body investment. Table 1 presents the total number of participants, mean scores, standard deviations, minimum scores, and maximum scores for the measures. Cronbach's alpha was used to test reliability of the four measures used in the study. The CES and RDDQ both had a Cronbach's alpha of .92, indicating excellent internal consistency. The BES had a Cronbach's alpha of .97, also indicating excellent internal consistency. The BIS had a Cronbach's alpha of .86, indicating good internal consistency. Refer to Table 1 for alphas for the CES, RDDQ, BES, and BIS.

Table 1
Descriptive Statistics for Measures

	N	Minimum	Maximum	Mean	Std. Deviation	Alphas
CES	44	17.00	62.00	25.57	12.74	.92
RDDQ	41	16.00	44.00	21.02	7.54	.92
BES	56	80.00	175.00	125.57	25.53	.97
BIS	57	65.00	112.00	90.96	12.08	.86
Valid N (listwise)	36					

Note: CES= Combat Experiences Scale; RDDQ= Relationships During Deployment Questionnaire; BES= Body Esteem Scale; BIS= Body Investment Scale

Hypothesis Testing

To test the first hypothesis that service members who have been sexually abused will obtain lower average scores on body image measures than soldiers who have not experienced sexual abuse, an independent samples *t*-test was performed. Body image distortion is dependent on the service members' experiences of military sexual abuse. Body-image of service members and veterans who experienced sexual abuse (n = 10; BES: M = 114.20, SD = 20.44; BIS: M = 90.40, SD = 12.70) was not significantly different from body image of service members and veterans who did not experience sexual abuse (n = 49; BES: M = 126.41, SD = 25.32; BIS: M = 90.76, SD = 12.24), t (52) = 1.42, p = .16 (BES); t (53) = 0.08, p = .93 (BIS). The minimum BES score that can be achieved is a 35; the maximum BES score that can be achieved is a 175. The minimum BIS score that can be achieved is a 24; the maximum BIS score that can be achieved is a 120. A Levine's test was conducted, and also found to be non-significant.

The second hypothesis predicted that service members who experienced sexual abuse (n = 4; BES: M = 102.00, SD = 3.00; BIS: M = 92.00, SD = 8.40) while on deployment would obtain lower average scores on body image measures than those service members who experienced sexual abuse (n = 10; BES: M = 112.44, SD = 21.27; BIS: M = 84.30, SD = 13.23) while stationed in America. A Levine's test was conducted, and also found to be non-significant. Results of an independent samples t-test indicated that body image of service members who experienced sexual abuse during deployment was not significantly different from body image of service members who experienced sexual abuse while stationed in America, t (10) = 0.82, p = .43 (BES); t (12) = -1.07, p = .31 (BIS).

The third hypothesis predicted that service members who have been sexually abused by a higher-ranking service member will obtain lower average scores on body image measures than those who were sexually abused by service members with lower rank. None of the participants in the current study were abused by someone of lower rank; therefore, the third hypothesis cannot be evaluated.

The fourth hypothesis is that service members lower in rank (M = .70, SD = .26) report having experienced sexual abuse more often than service members of higher rank (M = 0.20, SD = 0.41). A Levine's test was conducted, and also found to be non-significant. Results of an independent samples t-test indicate that service members of lower rank who experienced sexual abuse were not significantly different in level of abuse than those of higher rank, t (46) = -1.32, p = .19.

Chapter 4

Discussion

The current study evaluated the effects of sexual abuse on body image of United States service members and veterans. By identifying the relationship between sexual abuse and body image distortion of service members, appropriate and effective treatment and intervention can be implemented to improve service members' relationships with their bodies and visual representations of their bodies for mental health and physical safety purposes.

Hypothesis Testing

The present study's first hypothesis predicted that service members who experienced sexual abuse while in the military would obtain lower average scores on body image measures than service members who did not experience sexual abuse while in the military. Body image measures included the BES and BIS. The minimum BES score that can be achieved is a 35; the maximum BES score that can be achieved is a 175. The minimum BIS score that can be achieved is a 24; the maximum BIS score that can be achieved is a 120. The first hypothesis was not supported; body image was not different between those who experienced sexual abuse and those who did not. This finding contradicts with previous literature. Bell, Turchik, and Karpenko (2014) found that men and women, who have survived sexual assault, feel disconnected from their bodies, believe their bodies betrayed them, and believe that their body shape and physical appearance were factors in their experienced assault. Comparison of demographics was not made between the two groups due to the low sample size.

The rejection of the first hypothesis may have been due to a variety of reasons. The number of total participants was less than the amount that was recruited in previous studies. Due to the low numbers of participants, there may not have been enough statistical power to detect true significant differences that may have existed in the analyses conducted in this study. Furthermore, there were significantly fewer participants in the present study who reported experiencing sexual abuse than participants who did not report experiencing sexual abuse. A study by Mengeling and colleagues (2014) found that, of 205 service women who experienced military sexual abuse, only 25% reported their experiences.

Sexual abuse within the military is suggested to weaken trust in military units and negatively affect mission readiness (Mengeling et al., 2014). Fear of career effects, retaliation from the perpetrator, negative treatment and subjectivity, punishment, and confidentiality concerns are apprehensions survivors of sexual abuse in the military have, which could account for the low numbers of service members who reported abuse in the current study (Congressional Digest, 2013; Conrad et al., 2014; Mengeling et al., 2014). Furthermore, the Pentagon reported that an estimated 80% to 90% of all military sexual trauma experiences are unreported (Conrad et al., 2014). Mengeling and colleagues (2014) suggest that service women were more likely to report their abuse experience if they utilized the restricted reporting method, due to confidentiality concerns, rather than unrestricted reporting. In addition, service women were found to not report their abuse experiences due to fear of retaliation, anonymity, and beliefs that nothing would be done to punish the perpetrators (Mengeling et al., 2014). In a previous study, Mengeling and colleagues (2014) found that 52% of service women identified as being too embarrassed

to file an unrestricted report and that 42% of women believed that reporting their assault experience would affect their military career in a negative manner.

Additionally, not all participants completed each item on the body image questionnaires. Missing data from the body image questionnaires may have skewed the data and weakened generalizability of the current study's findings. Data that was missing and data that did not provide a total score were not included in the analysis of that scale. However, if there are no significant differences in body image among service members who experience sexual abuse and service members who do not experience sexual abuse, then either service members' body image is low overall and treatment should focus on their relationships to their bodies or body image is not a critical component to their identity and does not warrant further intervention.

The second hypothesis, which stated that service members who experienced sexual abuse while on deployment, would obtain lower average scores on body image measures than those who experienced sexual abuse while stationed in America, was not supported. The results of the present study indicate that there is no difference between service members who experience sexual abuse while on deployment and service members who experience sexual abuse while stationed in America. The present study's findings contradict previous research, which suggests that military sexual trauma is abhorrent while service members are deployed because survivors of sexual abuse cannot escape their perpetrator and are expected to rely on their perpetrator for protection during combat (Cater & Leach, 2011). During deployment, service members may live in close quarters together for approximately 12 to 18 months, and rely on each other for safety (Cater & Leach, 2011). Previous research found that, in a sample of Operation Enduring

Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans, 51.2% of women and 11.1% of men experienced deployment-related sexual harassment (Barth et al., 2016). Another study found that active duty deployed service women experienced more incidences of sexual assault compared to non-deployed service women (Barth et al., 2016). In a sample of female veterans from OIF/OEF, Katz and colleagues (2007) found that sexual harassment and sexual assault occurred on a weekly or daily basis while deployed. Additionally, service women who deployed and reported experiencing combat were more likely to report experiencing sexual harassment and sexual abuse than service women who were not deployed.

Hypothesis two may have been unsupported due to the low sample size of participants who experienced abuse, which may not be representative of the actual experiences of individuals who experience abuse in the military. Without appropriate participant representation of service members who have experienced sexual abuse on deployment and while stationed in America, evaluating body image perceptions of those groups may be an inaccurate representation of other sexual abuse survivors' body image. Low sample size and unequal number of participants in each group contribute to a lack of power to find statistical significance.

The third hypothesis predicted that service members who have been sexually abused by a service member with more authority would obtain lower average scores on body image measures than those who were sexually abused by service members with a lower rank. This hypothesis was unable to be evaluated due to none of the participants experiencing sexual abuse by an individual of lower rank.

The fourth hypothesis, which stated that service members of lower rank would report having experienced sexual abuse more often than service members of higher rank, was not supported. The results of the present study indicate that service members of lower rank did not report experiencing more sexual abuse than service members of higher rank. This finding contradicts with previous research; Haaken and Palmer (2012) suggest that military sexual assault occurs within a hierarchical structure. Because the service members who experienced sexual abuse is required to interact with their perpetrator regularly (i.e., battalion commander, sergeant, etc.), the survivors are expected to protect the perpetrator and unit by keeping the assault a secret and not reporting their experience (Haaken & Palmer, 2012). Additionally, previous studies suggest that service members of lower rank are at an increased risk for experiencing sexual abuse (Cater & Leach, 2011; Keehn, 2015; Sadler et al., 2003) and that members of higher rank are more likely to perpetrate the assault (Keehn, 2015; Sadler et al., 2003), which would cause the lower ranking service members to experience more sexual abuse than higher ranking service members; these findings support the reason the third hypothesis was unable to be evaluated.

Northcut and Kienow (2014) suggest that military culture encourages service members of lower rank to believe they are protected and cared for by service members in higher ranking positions, which may cause service members of lower rank to be vulnerable and susceptible to higher ranking officials targeting them and pressuring them to keep experienced or witnessed sexual assault a secret. This finding provides future researchers with evidence that targets of sexual abuse can vary in age and occupational roles. Given previous research suggesting that sexual abuse is the most underreported

violent act in the United States (Holland, Rabelo, & Cortina, 2015), it is noteworthy that service members of lower rank may have underreported their experiences in the study.

Although the present study's sample of participants who experienced sexual abuse is low (n = 10), the present study still provides awareness and sheds light of the reality that sexual abuse is present in the United States military. There is a lack of research that evaluates the effects of sexual abuse of service members and the relationships they have with their bodies. The present study's findings were unsupportive of body image distortion among service members who experienced abuse; however, the present study did not measure for other effects that may result from experiencing sexual abuse. Military sexual abuse and sexual harassment are associated with depression, PTSD, anxiety disorders, eating disorders, substance use disorders, chronic health problems, financial problems, physical health problems, occupational problems, and suicidal ideation (Maguen et al., 2012; O'Brien et al., 2015; Street et al., 2009). This study contributes to the literature by providing information pertaining to sexual abuse in the military and may be used to support efforts, treatments, or interventions intended to target the relationship service members have with their bodies in general. Such interventions should also include testing and treatment for additional effects of sexual abuse (i.e., psychological, physical, emotional, social, and occupational problems).

Limitations of the Present Study

Limitations of the current study include a small sample size and a low level of sexual abuse survivors compared to service members who have not experienced abuse. Due to the small sample size overall and the limited number of service members who reported sexual assaults, there may not have been enough statistical power to detect true

effects that may have existed in the analyses conducted in this study. Further assessment with a larger sample size is recommended to determine the relationship between sexual abuse and body image in service members; this will allow the findings to be more representative of the experiences of the military population. Another limitation includes time measured since the abuse occurred; body image disturbance may be more acute immediately after experienced sexual abuse as compared to a longer lapse in duration since the abuse occurred.

Furthermore, the present study was not an internal military-funded research study, which decreased the present study's ability to recruit within military bases and installations as previous studies have done. Finally, a larger sample size of participants who have experienced sexual abuse is needed to be able to appropriately compare body image scores to those who have not experienced sexual abuse. Future research should include body image interventions in their study to determine whether service members in general and those who have experienced sexual abuse benefit from treatment that targets improving their relationships with their bodies.

Conclusion

In conclusion, results of the current study indicate that United States service members who have experienced sexual abuse did not statistically differ in body image perceptions than service members who did not experience sexual abuse, nor did location where their abuse happened (i.e., deployment vs. U.S. duty station) statistically impact body image perception. Additionally, service members' rank did not significantly determine the amount of sexual abuse experienced. Future researchers and clinicians should focus on improving United States service members' overall body image

perception as a means to increase service members' ownership of and relationship to their bodies, which they must rely on to perform their occupational duties.

Chapter 5

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Appendix A: Demographics

Part I: Demographics **Date Taken: _____**

Directions: please circle/fill the best answer that describes you:

1. Current Age: _____

2. Gender: _____

Male Female Other_____

3. Race/Ethnicity: _____

Hispanic Asian African American Caucasian

Latino Multi-Racial Other _____

4. Sexuality: _____

Heterosexual Homosexual Asexual Bisexual

Other: _____

5. Relationship Status: _____

Single Dating Committed Relationship

Married Divorced Widowed

6. Branch of the Military: _____

Army Navy Marine

Air Force National Guard

7. Current Rank in the Military: _____

8. Active Duty, Reserve, or Veteran: _____

9. Number of Years in Service: _____

10. Have you ever been deployed? _____

If you answered yes to the question above:

a. What was your highest level of education before the (first) deployment:

Not complete High School GED High School Some College Associates Degree

Bachelor's Degree Master's Degree Doctorate Degree Medical Degree

b. How many deployment and/or tours have you been on? _____

c. How long were your deployments? (in months) _____

11. What is the gender ratio (male to female) in your platoon? _____

For this survey, please use the following definitions (Please Note: they are not legal definitions under Uniform Code of Military Justice).

Please fill in the blanks with the answer that best describes you:

Abuse definitions:
Physical abuse is defined as slapping, punching, pushing, pinching, shaking, choking, squeezing, whipping, cutting, or any interaction that leaves a mark or hurts the victim physically.

Sexual abuse is defined as molestation, rape, attempted rape, forced sexual acts, or any unwilling, nonconsensual sexual act with the victim.

Emotional abuse is defined as name calling, threats, teasing, isolating the victim, unwanted sexual verbal contact, stalking, yelling, swearing, mocking, neglecting or controlling.

Abuser is defined as an individual who physically, sexually, or emotionally assaults another person.

1. Have you ever experienced physical, sexual, or emotional abuse, as defined above, while serving in the military? _____

YES NO

If you answered "yes", please continue to the next question.
If you answered "no", please skip to Part II

2. What was your age when the abuse started? _____

3. What was your rank at the time the abuse started? _____

4. Using the definitions listed above, how would you categorize your abuse? _____

0-Sexual
1- Sexual and Physical
2- Sexual and Psychological
3- Sexual, Physical, and Psychological

5. Did you experience abuse while on duty? _____

YES NO

6. Did you experience abuse while on a military installation of any type? _____

YES NO

7. How many times have you been abused? (numerical amount—once, five times, etc.)

_____

If numerical amount is more than once, did the abuse happen at different times? _____

YES NO

If numerical amount is more than once, did the abuse happen at different locations? _____

YES NO

If the answer is Yes, please explain _____

_____

If the numerical amount is <u>more than once</u>, were the abusers the same person? _____

YES NO

If the answer is Yes, please explain _____

_____

8. Did you experience abuse during a deployment? _____

YES NO

9. Did the abuse happen while stationed in America? _____

YES NO

10. Did the abuse happen on base? _____

YES NO

11. Please explain, without stating a name, who the abuser was (Private, Sergeant, overseas civilian or soldier, etc.)

_____

12. What was the duration of the abuse (i.e., an hour, several attacks by abuser over the duration of a month, etc.)?

_____

13. What was your relation to the abuser? _____

_____

14. Have you experienced abuse by more than one individual? (If so, please explain below) _____

YES NO

_____

_____

15. If comfortable, please state the year(s) the abuse(s) happened:

_____

16. Have you ever experienced abuse prior to enlisting in the military?

YES NO

If yes, please explain:_____

_____

_____

17. Do you continue to feel or experience any effects/symptoms?

YES NO

If yes, please explain:_____

_____

_____

18. Did you/have you sought care/counseling for the abuse you experienced:

YES NO

If yes, please explain the type of care:_____

_____

_____

Appendix B: Combat Experiences Scale

The statements below are about your combat experiences during your deployment. As used in these statements, the term "unit" refers to those you lived and worked with on a daily basis during deployment. Please mark how often you experienced each circumstance.

While deployed…	**Never**	**Once or twice**	**Several times over entire deployment**	**A few times each month**	**A few times each week**	**Daily or almost daily**
1. …I went on combat patrols or missions	1	2	3	4	5	6
2. … I took part in an assault on entrenched or fortified positions that involved naval and/or land forces	1	2	3	4	5	6
3. … I personally witnessed someone from my unit or an ally unit being seriously wounded or killed.	1	2	3	4	5	6
4. … I encountered land or water mines, booby traps, or roadside bombs (for example, IEDs).	1	2	3	4	5	6
5. … I was exposed to hostile incoming fire.	1	2	3	4	5	6
6. … I was exposed to "friendly" incoming fire.	1	2	3	4	4	6
7. … I was in a vehicle (for example, a "Humvee", helicopter, or boat) or part of a convoy that was attacked.	1	2	3	4	5	6
8. …I was part of a land or naval artillery unit that fired on enemy combatants.	1	2	3	4	5	6
9. … I personally witnessed enemy combatants being seriously wounded or killed.	1	2	3	4	5	6
10 … I personally witnessed civilians (for example, women and children) being seriously wounded or killed	1	2	3	4	5	6
11. … I was injured in a combat-related incident.	1	2	3	4	5	6
12. … I fired my weapon at enemy combatants.	1	2	3	4	5	6

13. …I think I wounded or killed someone during combat operations.	1	2	3	4	5	6
14. … I was involved in locating or disarming explosive devices.	1	2	3	4	5	6
15. … I was involved in searching or clearing homes, buildings, or other locations.	1	2	3	4	5	6
16. … I participated in hand-to-hand combat.	1	2	3	4	5	6
17. … I was involved in searching and/or disarming potential enemy combatants.	1	2	3	4	5	6

Appendix C: Relationships during Deployment Questionnaire

The next set of questions is about your relationships with others (for example, other unit members, other unit leaders, civilians) during your deployment. Please mark how often you experienced each circumstance.

While I was deployed, the people I worked with…	**Never**	**Once or Twice**	**Several Times**	**Many Times**
1. …treated me in an overly critical way	1	2	3	4
2. … behaved in a way that was uncooperative when working with me.	1	2	3	4
3. …treated me as if I had to work harder than others to prove myself.	1	2	3	4
4. …questioned my abilities to commitment to perform my job effectively.	1	2	3	4
5. …acted as though my mistakes were worse than others'	1	2	3	4
6. …tried to make my job more difficult to do.	1	2	3	4
7. … "put me down" or treated me in a condescending way.	1	2	3	4
8. … threatened my physical safety.	1	2	3	4
9. … made crude or offensive sexual remarks directed at me, either publicly or privately.	1	2	3	4
10. … spread negative rumors about my sexual activity.	1	2	3	4
11. … tried to talk me into participating in sexual acts when I didn't want to.	1	2	3	4
12. … used a position of authority to pressure me into unwanted sexual activity	1	2	3	4
13. … offered me a specific reward or special treatment to take part in sexual behavior.	1	2	3	4

14. … threatened me with some sort of retaliation if I was not sexually cooperative (for example, the threat of a negative review or physical violence).	1	2	3	4
15. …touched me in a sexual way against my will.	1	2	3	4
16. … physically forced me to have sex.	1	2	3	4

Appendix D: Body Esteem Scale

On this page are listed a number of body parts and functions Please read each item and indicate how you feel about this part or function of <u>your own body</u> using the following scale:

1= Have strong negative feeling
2= Have moderate negative feelings
3=Have no feeling one way or the other
4= Have moderate positive feeling
5=Have strong positive feelings

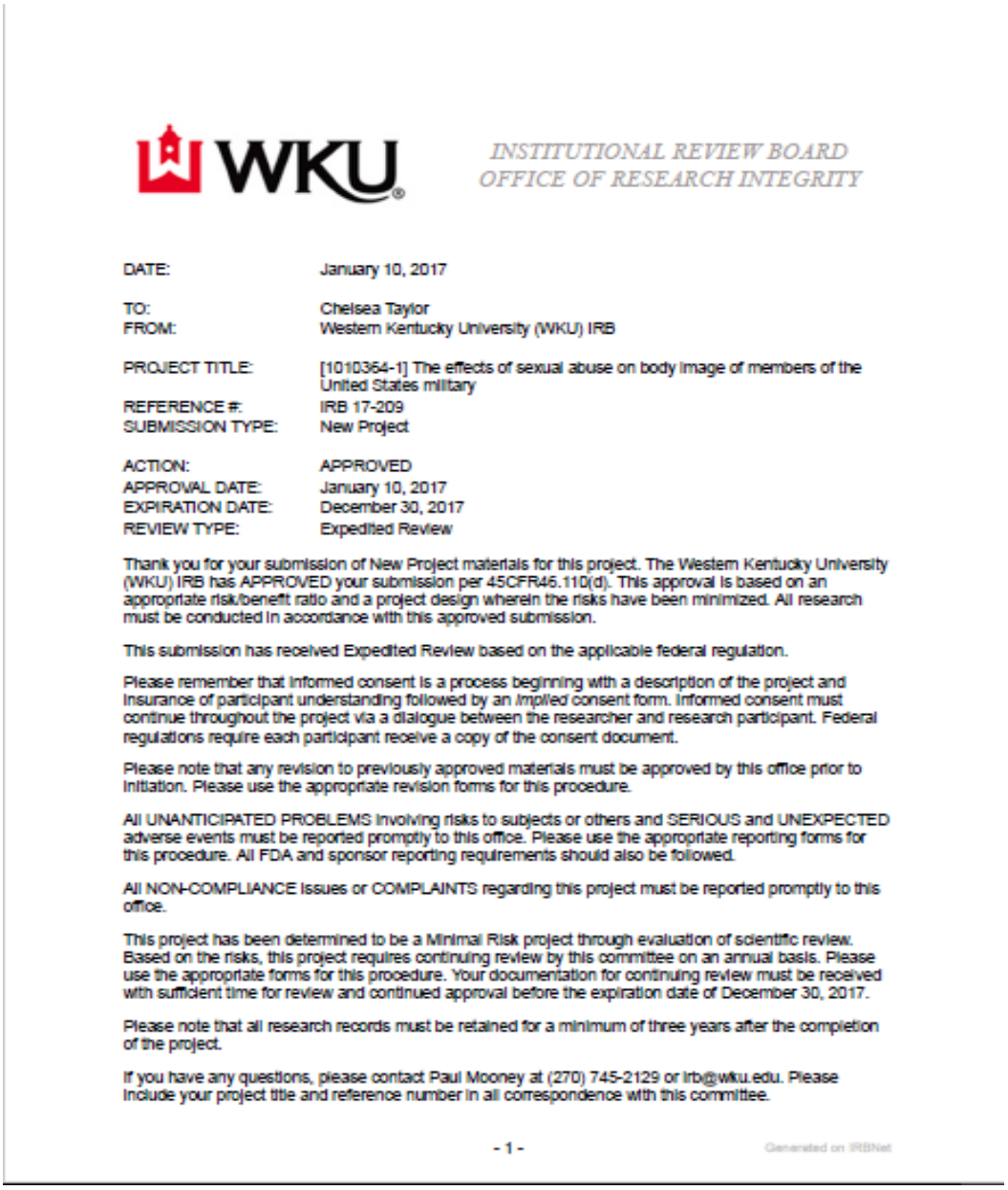
0. Body scent _____
1. Appetite _____
2. Nose _____
3. Physical stamina _____
4. Reflexes _____
5. Lips _____
6. Muscular Strength _____
7. Waist _____
8. Energy Level _____
9. Thighs _____
10. Ears _____
11. Biceps _____
12. Chin _____
13. Body Build _____
14. Physical coordination _____
15. Buttocks _____
16. Agility _____
17. Width of shoulders _____
18. Arms _____
19. Chest/breasts _____
20. Appearance of eyes _____
21. Cheeks/cheekbones _____
22. Hips _____
23. Legs _____
24. Figure/physique _____
25. Sex Drive _____
26. Feet _____
27. Sex Organs _____
28. Appearance of stomach _____
29. Health _____
30. Sex activities _____
31. Body hair _____
32. Physical condition _____
33. Face _____
34. Weight _____

Appendix E: Body Investment Scale

The following is a list of statements about one's experience, feelings, and attitudes of her body. There are no right or wrong answers. We would like to know what your experience, feelings, and attitudes of your body are. Please read each statement carefully and evaluate how it relates to you by circling the degree to which you agree or disagree with it. If you do not agree at all: circle (1). If you do not agree: circle (2). If you are undecided: circle (3). If you agree: circle (4). If you strongly agree: circle (5). Try to be as honest as you can. Thank you for your time and cooperation.

1. I believe that caring for my body will improve my well-being	1	2	3	4	5
2. I don't like when people touch me	1	2	3	4	5
3. It makes me feel good to do something dangerous.	1	2	3	4	5
4. I pay attention to my appearance.	1	2	3	4	5
5. I am frustrated with my physical appearance.	1	2	3	4	5
6. I enjoy physical contract with other people.	1	2	3	4	5
7. I am not afraid to engage in dangerous activities.	1	2	3	4	5
8. I like to pamper my body.	1	2	3	4	5
9. I tend to keep a distance from the person with whom I am talking.	1	2	3	4	5
10. I am satisfied with my appearance.	1	2	3	4	5
11. I feel uncomfortable when people get too close to me physically.	1	2	3	4	5
12. I enjoy taking a bath.	1	2	3	4	5
13. I hate my body.	1	2	3	4	5
14. In my opinion it is very important to take care of the body.	1	2	3	4	5
15. When I am injured, I immediately take care of the wound.	1	2	3	4	5
16. I feel comfortable with my body.	1	2	3	4	5
17. I feel anger toward my body.	1	2	3	4	5
18. I look in both directions before I cross the street.	1	2	3	4	5
19. I use body care products regularly.	1	2	3	4	5
20. I like to touch people who are close to me.	1	2	3	4	5
21. I like my appearance in spite of its imperfections.	1	2	3	4	5
22. Sometimes I purposely injure myself.	1	2	3	4	5
23. Being hugged by a person close to me can comfort me.	1	2	3	4	5
24. I take care of myself whenever I feel a sign of illness.	1	2	3	4	5

Appendix F: IRB Approval



WKU

INSTITUTIONAL REVIEW BOARD
OFFICE OF RESEARCH INTEGRITY

DATE: January 10, 2017

TO: Chelsea Taylor
FROM: Western Kentucky University (WKU) IRB

PROJECT TITLE: [1010364-1] The effects of sexual abuse on body image of members of the United States military
REFERENCE #: IRB 17-209
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: January 10, 2017
EXPIRATION DATE: December 30, 2017
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission per 45CFR46.110(d). This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by an *implied* consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project through evaluation of scientific review. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of December 30, 2017.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.

- 1 -

Generated on IRBNet

Appendix F: IRB Approval

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Western Kentucky University (WKU) IRB's records.

Appendix G: Informed Consent

INFORMED CONSENT DOCUMENT

Project Title:
The effects of sexual abuse on body image of members of the United States military
Investigator:
Chelsea A. Taylor, B.S., Psychology Department, chelseataylor7794@gmail.com
Dr. Rick Grieve; Psychology Department, rick.grieve@wku.edu

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your agreement to participate in this project.

You must be 18 years old or older to participate in this research study.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have. You should keep a copy of this form for your records.

1. **Nature and Purpose of the Project:** The purpose of this study is to gain a better understanding of what factors influence service members' body image. We want to know the relationship between sexual abuse and the development of negative perceptions of body image among the military population.
2. **Explanation of Procedures:** You will be asked to respond to several questions that evaluate your experience with your service and abuse and two questionnaires that relate to body image. The surveys assessing abuse are explicit and cover a number of different areas. Including these questionnaires were done in order to evaluate even the most severe levels of abuse. The study will take approximately 30 minutes.
3. **Discomfort and Risks:** Some people may have strong reactions to the questionnaires. If you do, please stop filling out the survey and let your researcher know. Also, please utilize the referral sheet provided to you with appropriate resources, psychologists, and services.
4. **Benefits:** Your data will be combined with the data of others and submitted for presentation at a conference and/or publication in scholarly journals.
5. **Confidentiality:** The responses that you provide will be kept completely anonymous. Neither your name, nor any identifying information, will ever be associated with any of the data that you generate today or requested. Nor will the researcher ever identify you in any report of this research.
6. **Refusal/Withdrawal:** Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Your continued cooperation with the following research implies your consent.

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD
Paul Mooney, Human Protections Administrator
TELEPHONE: (270) 745-2129

WKU IRB# 17-209
Approval - 1/10/2017
End Date - 12/30/2017
Expedited
Original - 1/10/2017

Appendix H: Referrals

Referrals

If immediate assistance is needed upon participating in the study, please refer to the following:

Fort Campbell:

- SHARP 24/7 Hotline:
  - 270-498-4319
- DOD Safe Helpline:
  - 877-955-5247
- Adult Behavioral Health (M-F, 7:30 am-4:30 pm)
  - 270-798-4269 or 270-798-4097
  - 650 Joel Drive, E Building
- Emergency Behavioral Health 24/7
  - 270-798-8500
  - BACH Emergency Center, 650 Joel Drive, Fort Campbell, KY
- Chaplain Care Line:
  - 1-270-798-2273
- Fort Campbell Abuse Reporting:
  - 1-270-798-8601

Clarksville, TN:

- Sexual Assault Center
  - 931-241-4143
  - 1725-I Wilma Rudolph Blvd., Clarksville TN 37040
- Domestic Violence Unit
  - Natalie Blackmon: 931-221-1181
  - Andrea Tennyson: 931-221-1180
- Centerstone
  - 931-920-7200
  - 511 8th St., Clarksville TN 37040
- Centerstone at Gateway Crisis Center
  - 931-502-2025

Bowling Green, KY:

- Dr. Rick Grieve, Ph.D. Clinical Psychologist
  - (270) 781-1116
  - Chesnut Park Pro LLC: 1215 High St, Bowling Green, KY 42101

Important Numbers:

- Crisis Intervention Center:
  - 931-648-1000
- National Stalking Resources:
  - 1-800-394-2255
- National Sexual Assault/Rape Crisis Hotline:
  - 1-800-656-4673
- National Suicide Prevention Hotline:
  - 1-800-273-8255