

**UNIVERSITY OF GHANA**

**COLLEGE OF HUMANITIES**

**THE RELATIONSHIP BETWEEN POST DEPLOYMENT TRANSITION,  
PSYCHOLOGICAL WELL-BEING AND FAMILY RELATIONSHIP AMONG  
MILITARY PERSONNEL IN GHANA.**

**BY**

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN  
PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
MPHIL SOCIAL PSYCHOLOGY DEGREE.**

**JULY, 2019**

**DECLARATION**

I, Nathanael Nartey Agah, declare that the current thesis is as result of my research supervised by Dr. Wiafe-Akenten Brenya C. and Prof. Joseph Osafo. This current study has not been submitted to any university for the award of any degree. All references to views and ideas of others used in the study have been duly acknowledged.

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## ABSTRACT

*The study assessed the relationship between post deployment transition, psychological well-being and family relationship among Ghanaian soldiers. The study further investigated the role of post deployment social support in moderating the relationship between post deployment transition and psychological well-being. A total of One hundred and thirty- four Army personnel of the Ghana Armed Forces participated in the study. A survey questionnaire was used to collect data. Four hypotheses were analyzed using the Pearson Correlation Coefficient, Multivariate Analysis of Variance and Hierarchical Multiple Regression. The outcome of the analysis indicated that post deployment transition had a significant relationship with psychological well-being as well as family relationship. Also, post-deployed military personnel reported significantly poorer psychological well-being and family relationship when compared to their non-deployed counterparts. Post deployment social support did not moderate the relationship between post deployment transition and psychological health. Results of the study are discussed with reference to other studies as well as within the framework of theories. Recommendations for future studies as well as implications of study outcome are discussed.*

## **DEDICATION**

I dedicate this work to my mum, Mrs. Rosina Tetteh Agah and also to my best friend Emmanuel Yaw Sakyi Dadson, for his encouraging words and for being there for me always before his untimely demise.

### **ACKNOWLEDGEMENT**

To the Almighty God, for His favour on me throughout my life. I also want to thank my mum, Rosina Tetteh Agah for the encouragement as well as providing financial and emotional support throughout my MPhil program.

To my supervisors, Dr. Wiafe-Akenten Brenya C. and Prof. Joseph Osafo, your assistance with respect to providing guidance and contributions is appreciated.

Also to my father, EX WOI. Victor Biantey Agah, my brothers and all my close friends.

Finally, I want to thank all those who in diverse ways were of tremendous help throughout the research process.

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### **LIST OF ABBREVIATIONS**

ECH	Ethics Committee for Humanities
FR	Family Relationship
MANOVA	Multiple Analysis of Variance
NCPTSD	National Center for Post – Traumatic Stress Disorder
NGM	National Guard Members
NQLS - MR	Navy Quality of Life Scale – Marriage/Intimate Relationship
NQLS – RWC	Navy Quality of Life Scale – Relationship with Children
PCL – M	Post-Traumatic Stress Disorder Checklist- Military Version
PDSS	Post Deployment Social Support
PDT	Post Deployment Transition
PTSD	Post-Traumatic Stress Disorder
PWB	Psychological Well-being
SPSS	Statistical Package of Social Sciences
U.S.A	United States of America
U.S	United States
WASSCE	West African Secondary School Certificate Examination
WOI	Warrant Officer Class One
WOII	Warrant Officer Class Two

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of study

Military work is usually accompanied by frequent separations from family as well as loved ones (Lester et al., 2016). Separations can either be in the form of performing internal duties in other regions or states within the country or being deployed to peacekeeping missions or combat missions outside the country (Newby et al., 2005). Internal duty related separations are usually shorter than external duty related separations. For instance, in Ghana, soldiers are involved in a 2-3 month periodic duties of Operation Vanguard or Operation Jubilee which are undertaken by the Army and the Navy branch of the Armed forces respectively. These operations are undertaken to safeguard natural resources like land and water as well as arrest people who misuse these resources. Barracks and camps are provided for personnel within their home countries to cater for their basic need for shelter while performing their respective internal duties. On the other hand, during external duties like humanitarian operations, peacekeeping operations or combat operations, military personnel are taken from their native countries to other countries. In other words, service personnel are separated physically from their family, friends and other relatives for a relatively longer time frame and given new roles and identity that differs from that at home.

Even though there is physical separation with respect to both internal and external deployment duties, the possibility and frequency of communicating with loved ones is relatively higher with regards to the former. There is therefore the need to establish the role that identity plays in the lives of service personnel when at peacekeeping operations and also when they are at home. This

will aid in providing understanding as to the challenges military personnel face during their transition from deployment to barracks or camp life. Military personnel upon being deployed to other countries are introduced to a new identity as oppose to the life in the barracks. Also, during deployment, military personnel are exposed to different environment (Zapf, 2010). In addition, different roles and responsibilities are assigned to military personnel during deployment.

Personnel, especially the married ones, are usually accustomed to negotiating with spouse at home as oppose to given or receiving orders from superiors in order to ensure that a task is successfully accomplished during deployment (Bowling & Sherman, 2008).

Soldiers on deployment duties do not have individual identities but learn to abide by a collective identity of looking out for each other as well as following strict rules and regulations on how to do things. The focus of military personnel during deployment is mainly on mission completion and safety of their comrades or fellow soldiers (Knobloch & Theiss, 2012). Military personnel at home perform individual roles as parents or spouse. These roles are replaced with group goals like loyalty, conformity to official attitudes as well as unquestioning acceptance of authority during deployment. In other words, individual roles and identity as spouse or parent are replaced with military identity, roles, values and attributes that are needed to survive in combat operations or peacekeeping operations (Demers, 2011).

Military personnel's concept of collectiveness acquired during deployment is essential with regards to shaping the emotional lives of military personnel. This can have an impact on their lives after returning from deployment (Baysinger, 2015). Therefore, the transition from barracks life as a parent or spouse to being deployed and then back to barracks or camp life can be stressful and most often little attention is given to it (Basham, 2008; Danish & Antonides, 2013).

One cannot ascertain the strain associated with transiting from home to deployment and back home without having adequate knowledge of the deployment cycle (Baysinger, 2015).

According to Lincoln, Swift and Shorteno-Frazer (2008), the cycle of deployment is in three distinct stages. Stage one of the cycle is the “pre-deployment” stage. This is usually from the day military personnel are notified of impending deployment till the day he or she is deployed.

Deployment is the second stage. This stage refers to the period between actual departure from home to the time the personnel returns home. The third stage is the post-deployment stage, that is, being at home after deployment. All the stages have their own challenges that soldiers and members of the family have to deal with, which includes changes in family roles and routines, emotional detachment as well as reintegration of military personnel into the family (Lincoln et al.,2008).

In Ghana for instance, names of service personnel who have been selected to perform deployment duties outside the country are published in a military news outlet. Service personnel whose names are published are sent to *Bondase* in the Greater Accra Region of Ghana or *Achiase* in the Eastern Region of Ghana, depending on the type of operation, for pre-deployment training which is termed as *Bush*. Upon returning from the pre-deployment training, military personnel are given a couple of months to prepare for deployment. During that period, medical checks are performed on individuals to ensure that they are medically fit to be deployed. Medically approved military personnel are then deployed on a one-year peacekeeping operation where they are exposed to environment as well as individual roles and identity that differ from the environment and the roles they play at home (Castro, Hoge & Cox, 2006).

After a specific period of deployment duties, one has to return home to barracks or camp life while awaiting future deployment and this period can be stressful to soldiers especially the first

six months of post deployment (Morse, 2006). Most of the attributes and values needed to survive during deployment are no more applicable upon returning home (Knobloch & Theiss, 2012). This makes the transition period very significant when coming back to a life of being a spouse and or parenting a child. The attributes and value needed to survive during deployment do not disappear but are occasionally manifested in the military personnel whilst at home, like given orders to children and wife and feeling angry or irritated when they do not comply (Armstrong, Best & Domenici, 2006). Also, studies have shown cases where military personnel who are not able to have a smooth transition from deployment to being at home developing psychological problems like depressive symptoms and Posttraumatic Stress Disorder (PTSD) symptoms (Marek et al., 2012; Monteith, Hoffmire, Holliday, Park, Mazure & Hoff, 2018; Yosick et al., 2012).

## **1.2 Post Deployment Transition**

There is the need to define what deployment is in order to understand post deployment transition. Deployment in military terms differs from civilian understanding of deployment. According to Bog et al. (2014), “deployment refers to performing military service in an operation at a location that is outside one’s home country for a limited period of time that is pursuant to orders” (p.5). During this period, there is a physical separation between service personnel and their family with limited or low communication throughout their stay in the foreign country. After the specified time given for deployment duties ends, military personnel then return to their home country to their family and loved ones. In other words, they transition from being away from home for a while to performing daily life routines at home.

Post deployment transition refers to the period between deployment and returning home to ones’ daily lives (Knobloch & Theiss, 2012; Lincoln et al, 2008). The transition from an identity of

soldier or military personnel on deployment duties to playing the role of a father, mother or a spouse can be quite complicated and challenging (Gambardella, 2008). Post deployment experiences like initial excitement upon return, reintegration into family, work and personnel life have been reported by some Ghanaian soldiers (Afful, 2017). This experience can be difficult to manage as military personnel have to adjust to daily duties and roles at home upon returning (Mmari, Sudhinaraset & Blum, 2009). These transition challenges are not experience by the military personnel only but other individuals also like the spouse and children (De Burgh, White, Fear & Iversen, 2011; Sinclair & Britt, 2013).

Knobloch and Theiss (2012) argue that, transition from deployment to barracks life can result in unexpected feelings and problems like relationship changes, relational uncertainties and interference from partners. They are of the view that those who are able to transition well, enjoy positive psychological benefits such as resilience and value for relationship as well as social benefits like spending much time with each other. On the other hand, military personnel who do not transition well are faced with psychological problems like PTSD symptoms and distress (Sareen et al., 2010) as well as relationship problems like communication difficulties, challenges in parenting as well as reintegration problems (Bowling & Sherman, 2008). A successful transition however can be difficult especially for personnel who are unable to let go of the roles, attributes and values that were needed to survive during deployment (Weins & Boss, 2006).

### **1.3 Psychological Well-being**

The service personnel's psychological well-being is considered as very significant as it can have an impact on future deployments as well as operation readiness (Zamorski, Rusu & Garber, 2014). Consideration must be given to post deployment factors that operate to define general

well-being as difference in environment, relations, roles and responsibilities may impact the well-being of soldiers upon their return home.

According to Reber and Reber (2001), psychological well-being can be defined as operating at a high level of emotional and behavioural adjustment as well as adaptiveness but not only the absence of illness. Also, psychological well-being can refer to a state in which an individual who is of good psychological health acquires a number of positive mental health qualities that includes actively adjusting to his or her surroundings as well as personality unity (Shek, 1992).

Psychological well-being in this study is conceptualized as a military personnel's level of post-traumatic stress disorder (PTSD). Post-traumatic stress disorder can be defined as a form of psychiatric disorder that occurs after an individual experiences any form of traumatic or non-traumatic event (Mol, Arntz, Metsemakers, Dinant, Vilters-van Montfort & Knottnerus, 2005). Traumatic events include event such as combat or wars, natural disasters, rape, among others whilst non-traumatic events include divorce, unemployment, among others. In this study, post deployment experience is categorized as a non-traumatic experience. An individual who experience PTSD is likely to exhibit symptoms such as emotional numbness, hyperarousal, sleep disturbance, depression symptoms, among others (Erbes, Meis, Polusny & Compton, 2011).

The transformation that accompanies returning home after deployment is a social problem that may be related to the psychological health of soldiers (Lincoln et al., 2008; McNulty, 2005). In other words, the reception as well as level of support given to soldiers when they return from deployment play a role in influencing their mental health. Some scholars argue that some military personnel returning home develop a positive psychological well-being of resilience and improvement of self (Knobloch & Theiss, 2012; Newby et al., 2005). However, some are of the view that PTSD symptoms like emotional numbing, hyperarousal, sleep disturbance and

impaired concentration, which better reflects general distress, are associated with military personnel returning home after deployment (Erbes et al., 2011; Simms, Watson & Doebelling, 2002). Also, some military personnel become emotionally detached from family members and other relations either due to fear of anger or possibility of future deployments (Bowling & Sherman, 2008). In addition, there have been reports of personality changes among returning military personnel (Danish & Antonides, 2013). However, some of these challenges are minimized when family, friends as well as community provide social support to returning military personnel (Laffaye, Cavella, Drescher & Rosen, 2008).

#### **1.4 Family Relationship**

One other problem faced by returning service personnel is how to adjust to roles and responsibilities at home as well as relate with members of the family. The way of life of a regular military family is a repeated and continuous separation of military personnel and his or her family (Lester et al., 2016). Usually, deployment is the time where personnel are separated from their family for a period of time. In view of this, the initial response upon returning from deployment is happiness and pride, however, these emotions worn off with time (Bowling & Sherman, 2008). At the initial stage, military personnel as well as their family are happy and excited to see each other after a long period of absence (Afful, 2017)

However, with time, such feelings of delight, harmony and excitement reduce as everyday stressors begin to affect the service personnel (Milliken, Auchterlonie & Hoge, 2007). During the deployment stage, both the returning personnel and the spouse have taken on different roles and identity (Faber, Willerton, Clymer, MacDermid & Weiss, 2008; Sahlstein, Maguire & Timmeman, 2009). Thus, the military personnel as well as his or her family become accustomed to their daily routine during deployment. As the days go by, returning service personnel begin to

face challenges such as reacquaintance, sharing information about deployment experiences, managing strong emotions, reorganizing daily routines as well as redistribution of control (Bowling & Sherman, 2008). In addition, interference in daily routine, leisure time, goals for diet, everyday schedules as well as entertainment and exercise are some reintegration challenges faced by military personnel upon returning home (Knobloch & Schmelzer, 2008). Furthermore, returning service personnel are faced with parental challenges with regards to parental responsibilities and the appropriate way to discipline his or her child (Knobloch & Theiss, 2012). The process of reintegrating into the role of parent or spouse as a full-time responsibility becomes very difficult due to regular deployment (Ray & Heaslip, 2011).

### **1.5 Problem Statement**

According to Mental Health Advisory Team (2006, cited in Bog et al., 2014), during deployment, individuals are exposed to conditions such as inadequate emotional support, unhygienic environment and personal space, which might differ from conditions at home. In addition, there are differences in the demands, roles and responsibilities assigned to military personnel during deployment and at home (Bowling & Sherman, 2008). Also, individual experiences of work and emotional expression are controlled during deployment. It is essential to note that during deployment, personnel adhere to codes of conduct at all times from the moment they are deployed to the moment they return home (Knobloch & Theiss, 2012). Attributes and values adapted by military personnel necessary to survive but harmful to family relations do not easily disappear upon returning home (Gottman & Levenson, 1986). For instance, accounting for subordinates and other unit members at all times may be appropriate during deployment but seen as being controlling at home, aggressiveness at deployment may not be an appropriate behavior

at home and not exhibiting emotions might be interpreted at home as detachment (Danish & Antonides, 2013).

Most military personnel upon returning home conform to behavioural patterns during deployment that are incompatible with behaviours at home (Basham, 2007). For some, the transition period is a smooth experience which is followed by adaptation to lives at home (Knobloch & Theiss, 2012). On the other hand, the period of transition from deployment to being at home becomes difficult for others, especially within six to twelve months after returning (Zamorski, Rusu & Garber, 2014). The consequence of not successfully transiting from deployment to being at home affects the military personnel's psychological well-being and family relationship (Newby et al., 2005)

Post deployment transition is a meaningfully but not adequately researched event in the life of military personnel as little is known about experiences at home after deployment (MacDermid-Wadsworth, 2010). For instance, in Ghana, the Armed Forces is an under-researched population as most of their operations are classified and specific information with regards to military norms are not publicly and generally accessed.

In addition, little is known about post deployment transition as majority of studies focus on experiences during deployment. The literature on post deployment have focused on the mental health of veterans with little attention given to active duty soldiers. Studies that include active duty soldiers are usually combat related. The non-combat related studies usually focus less on family related challenges associated with post deployment transition. In Ghana, the most significant study on post deployment and mental health is a Doctoral Dissertation conducted in 2017 by Joana Afful at the Department of Psychology, University of Ghana. However, in that study, the relationship between the post deployment experience and family relationship was not

established quantitatively. What makes this a compelling area of research is the challenges that returning soldiers go through due to inadequate preparation prior to returning as oppose to pre-deployment as well as lack of rehabilitation programs to aid successful post deployment transition. In sum, there is the need to address the influence of post deployment challenges on military personnel's psychological well-being and family relationship when transitioning into daily lives at home.

### **1.6 Relevance of Study**

Throughout the years, studies conducted on deployment have provided much understanding of the process through which military training is able to achieve transition from life at home to life during deployment (Castro et al.,2006). The result of this training is embedded in the way of life during deployment. It should be understood that during the period of deployment, military personnel live regimented lives and as a result, upon returning to life at home may often feel a sense of rejection, not being wanted and lack of control (Erbes et al., 2011; Knobloch & Theiss, 2012). Even though a recognizable amount of studies has been conducted on personnel transition from deployment to daily routine lives at home, more work needs to be done to highlight the difficulty that arises when soldiers return from peacekeeping operations especially within the context of Ghana. In the case of Ghana Armed Forces, the Army personnel are usually involved in peacekeeping operations, reconciliation roles and consensus building than playing active combat role in countries they have been deployed. These operations are relatively free from conflict or combat but are far from being stress-free (Bog et al.,2014). The main strength of the current study is to address the gap in knowledge with regards to scholarly literature on post deployment transition and this is timely for policy formation for all the stakeholders who work with soldiers when transiting from deployment to daily life routines at home. This will in tend

bring to the attention of the Ghana Armed Forces the challenges returning military personnel from peacekeeping operation face upon returning home and consequently equip them with the needed skills to enhance smooth transition.

Most scholars and researchers base their understanding of post deployment transition on studies from the United States of America (USA), where majority of the studies have been conducted using National Guards and Veterans returning from Iraq and Afghanistan operations. The present study seeks to understand post deployment transition within the context of Ghana by determining whether post deployment transition influenced the psychological well-being of service personnel as well as their ability to relate to family members.

### **1.7 Aims and Objectives**

The purpose of the study is to find out the relationship between post deployment transition, psychological well-being and family relationship among military personnel in the Ghana Armed Forces.

The following objectives are specifically proposed.

1. To examine the relationship between post deployment transition and psychological well-being among military personnel.
2. To determine the association between post deployment transition and the quality of family relationship among military personnel.
3. To identify which group (post-deployed and non-deployed) will exhibit better psychological well-being and family relationship.

4. To evaluate the role of post deployment social support in moderating the relationship between post deployment transition and psychological well-being.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter examines existing theories which serve as a foundation and guide for the study.

Afterwards, previous and related studies are reviewed to examine the relationship between Post Deployment Transition, Psychological Well-being and Family Relationship. The rationale of the study, proposed hypotheses which are usually based on literature review, as well as a hypothesized model of the relationships between variables are outlined.

#### **2.2 Theoretical Framework**

The present study is mainly guided by three theoretical frameworks. They are the Transition theory, Role Exit Theory and Homecoming theory.

##### **2.2.1 Transition theory**

Schlossberg (1984) views any event or non-event that leads to changes in relationships, routines, roles and assumptions as transition. The Transition theory is a psychosocial model of development which examines events in life that can have an influence on aspects of an individual's life as well as their roles in the society. According to the theory, transition experiences differs from person to person and in order to understand what a transition means to an individual, consideration must be given to the type, context and the impact of the transition. The type of transition can be anticipated, unanticipated or non-event transition. In the case of the military, the type of transition that occurs after being deployed is an anticipated one. Military personnel are made aware that after serving for a specified period of time, he or she will return home (Bog et al.,2014). The context within which this transition take place is from an environment that one has adapted to for a certain time period during deployment to readjusting to

family life at home. This impacts on their psychological well-being due to changes in emotional levels as well as impacts the daily routine of personnel due to interference from partner and children (Bowling & Sherman, 2008; NCPTSD, 2007).

An individual's ability to transition from deployment to being at home is influenced by situation, self, support and strategies. Relating these factors to post deployed service personnel, the perception of the military personnel on the transition situation with respect to him or her being in control or out of control can affect the transition process (Knobloch & Theiss, 2012). In other words, personnel who perceive themselves as being in control of the transition process might not recognize the challenges that comes with post deployment transition. In view of this, such individuals are less likely to seek assistance from family or professionals in dealing with such challenges, thereby making the transition process much difficult as oppose to others who seek assistance. Also, the experience of role change from being a soldier at deployment mission to being a parent or a spouse can have an impact on the transition process as emotions and other psychological values that were deemed appropriate during deployment might be unacceptable at home (Castro et al., 2006).

Again, as to whether the personnel have had previous experience of similar transition, the coping mechanisms adapted, the implication of coping mechanism adapted for current transition as well as the temporary nature of post deployment transition in the military can affect the transition process (Bowling & Sherman, 2008). However, according to Adler, Huffman, Bliese and Castro (2005) this is not always the case as female service personnel who have been on multiple deployment duties reported experiencing some level of transition stressors. Also, during the transition process, the military personnel can acquire certain psychological resources such as ego development, different outlook of life, commitment issues as well as values (Newby et al.,2005)

and this is in line with one of the assertion made by the theory. Contrary to this, service personnel usually report experiencing psychological challenges like depressive symptoms, anxiety, hyper-arousal as well as personality changes, during the transition period (Danish & Antonides, 2013; Erbes et al., 2011). Nonetheless, the type of support from family units, friends and intimate relationships that the military personnel receives and the coping strategies adapted to modify situation, control meaning of problem and help manage stress in the aftermath determines as to whether the personnel will have a successful transition or otherwise (Schlossberg, 1984).

Burns (2010) argues that even though the transition theory indicates how socially complex it is to understand transition, it poses a danger to all disciplines, especially psychology, in that one is likely to make an assumption that all the variables, namely, self, support, situation and strategies are accounted for in all transitions. This might not always be the case as not all transitions might have all the variables and as such careful consideration must be taken in the application of the theory to research and practice.

### **2.2.2 The Homecoming Theory**

The Homecoming theory was developed by Schuetz (1945) after World War II. This theory postulates that a traveler like military personnel, is separated in time and space from his or her family during deployment. The service personnel as well as the home partner encounter different unique individual experiences during separation (Baysinger, 2015). At home, the life of the service personnel's daily activity is guided by an organized pattern of habits, traditions as well as timetable for activities of all kinds which overtime have proved to be efficient in attaining target goals. In other words, schemes of how to do things are developed by the service member over time and this helps in mastering problems of daily life at home. However, these

schemes are interrupted when service personnel are deployed to perform military duties in another country.

According to the theory, since marriage is a recurrent character of social relationship and does not consist of continuous face to face relationship, it is possible to re-establish any interruption that occurs as well as continue where the relationship was halted the last time. The probability of re-establishment is usually taken for granted, even though it is not certain that the re-establishment and continuation of the relationship between the service member and the family will succeed.

Military personnel on deployment duties cannot immediately access life at home due to the difference in environment. In order to have any connections with home, the service member builds a system of false image of the family at home which cannot be removed entirely since the returning soldier as well as the family change during deployment. When leaving home, service members replace vivid experiences with memories which might not reflect what life at home actually meant up to the day he or she left. During deployment, the military personnel no longer has total experience of the partner's gestures, way of talking, speaking, listening as well as way of doing things as all that remains are just memories and recollections. Also, old experiences are re-evaluated as new ones also develop for both the service personnel and the partner at home. The inaccessibility of these experiences by both parties, changes the degree of reliable knowledge that one has of the other or of the relationship.

The desire of the returning service personnel is to re-establish old intimate relations. This becomes difficult as both the returning soldier and the at-home partner experience different system of relevance and degree of intimacy. The difference in the uniqueness in experience of service personnel and at-home partner during deployment alter what each consider as significant.

The at-home partner continues with daily routines at home (Bowling & Sherman, 2008), but is usually unaware of the experiences of the service member during deployment. Deployed military personnel permanently receive additional meanings to previous experiences at home through the influence of experiences overseas which has caused a change in their state of mind, thereby influencing the attitudes of returning soldiers. The home that the soldier returns to differs from the one he left or longed for during deployment and he or she does not return as the same person who left (Blais, Thompson & McCreamy, 2006). Service members return home surprised as to why people do not understand how unique their experiences have changed them (Danish & Antonides, 2013). “The discrepancy between the uniqueness and decisive importance that the service member attributes to his experiences and their pseudo-typification by the people at home who impute to them pseudo-relevance, is one of the biggest obstacles to mutual re-establishment of the disrupted relation” (Schuetz, 1945, p.374).

The shock of being misunderstood can lead to disconnection and alienation from family which poses as a challenge for returning soldiers during post deployment transition (Ahern et al., 2015). Though the theory has its advantages, it turns to overlook the role of factors such as number of deployments as well as marriage duration. Soldiers who have gone on multiple deployments are more likely to avoid some level of transition stressors that might influence their relationship with the family due to experience and coping strategies used over the years. Also, couples who are married for a longer duration of time are more likely to be accustomed to repeated separations when compared to couple who have been married for a relatively short period of time, therefore, the former less likely to have reintegration challenges.

The success or failure of homecoming depends on the probability of changing social relations into recurrent ones where both parties agree that there will be times where they will be separated.

Efforts must therefore be taken to change activities repeatedly into routine work as well as reactivate recurrent relations with family. Even though much has been done to prepare soldiers coming home after deployment, more still needs to be done in order to enhance a successful post deployment transition.

### **2.2.3. Role Exit Theory**

Role exit occurs when an individual departs from a role that is central to his or her self-identity (Ebaugh, 1977). Military personnel during deployment adapt and identify with roles that are needed to survive which differs from the roles played at home (Castro et al., 2006; Danish & Antonides, 2013). In the case of Ghana, for a whole year of peacekeeping operation, military personnel perform the roles of subordinate and supervisor and identify themselves with these roles. At home, personnel who are married perform the role of husband, wife or parent.

Therefore, during transition, the military personnel have to change from the identified roles during deployment to roles at home (Bowling & Sherman, 2008). According to the role exit theory, departing from one's role that is central to self-identity if not managed well can lead to disengagements and dis-identification. This is when the military personnel withdraw emotionally from family and other relations and might resort to identify with roles that were helpful during deployment but might be inappropriate at home (Meis et al., 2010). There is also the possibility of re-socialization according to the theory. This is where the military personnel have to readjust to perform his or her responsibility as a parent or a spouse (Weins & Boss, 2006).

The theory further proposes four phases of role exit process. The first stage is first doubts, which refers to individual experiencing doubts about the new role occupied. In other words, the military personnel begin to have doubts as to whether he or she is capable of performing the roles at home after returning from peacekeeping missions (Gambardella, 2008). The second stage has to

do with seeking alternatives, that is, looking outside current role toward other roles. This occurs when military personnel instead of performing his or her role as a parent or spouse resort to hanging out with friends and comrades who returned from deployment duties with him or her. (Bowling & Sherman, 2008). The next stage is turning points and this refers to events or behaviours that trigger decision to leave role. Military personnel are used to given and following orders during deployment. In the case where a spouse or a child goes against the request of a personnel who has returned from deployment duties, the personnel is likely to withdraw from performing his or her duties of being understanding and providing emotional support at home (King, Leskin, King & Weathers, 1998). The final stage is creating the ex-role which has to do with creating a new identity through the new role. This occurs when military personnel upon returning from deployment is able to successfully transition to roles and responsibilities at home. By identifying themselves with the new role as a spouse or parent, the returning service personnel encounters little or no challenges with respect to readjusting to family life (Knobloch & Theiss, 2012). The role exit theory however is not clear on what happens when roles changes frequently as is the case for most military personnel who usually experience frequent deployment. In other words, most military personnel throughout their service are deployed on multiple occasions which serve as a challenge to family members who are burden with the task of making rapid adjustments (Basham, 2007).

The Role Exit theory and the Transition theory acknowledge the influence of role identity with respect to transiting from deployment to being at home. However, the transition theory provide insight as how to cope when individuals are deployed again. Homecoming theory throw more light on how differences in experiences, environment, expectations and reality of service members as a result of separation influence the mind set of soldiers when transiting from

deployment to being at home. It also emphasizes the need for spouse to accept that separation is inevitable and therefore efforts must be made to ensure successful transition that will enhance family relations.

### **2.3 Review of related studies**

Relevant studies of the variables under study are reviewed in this section. The review examines the relationships between Post Deployment Transition, Psychological Well-being and Family Relationship.

#### **2.3.1 Psychological Well-being**

In relation to the deployment cycle, there are arguments on which aspect of the deployment cycle affects psychological well-being. While some studies are in favour of post deployment stressors, others emphasis deployment stressors with regards to predicting psychological well-being among military personnel. With respect to deployment stressors, Adler et al. (2005) focused their study on deployment length and experience. In a cross sectional survey comprising 3,339 US soldiers, those who were deployed for a relatively longer period of time reported increased distressed than those who were deployed for a relatively shorter period of time. In addition, first time deployment personnel also reported an increase in distress than those who have had multiple deployment experience. Even though results from the study reveals the significance of exposure to long term deployment stressors on well-being, the distress was prevalent only in males. Also, since data gathered for the study was after personnel have returned from deployment, there could be other post deployment stressors like adjusting to family life and relational uncertainties, that might account for the distress observed which were not considered in the study.

In contrast to the study above, which focused on just deployment, Afful (2017) in an explanatory mixed method study involving two hundred and four (N = 204) post –deployed active duty

Ghanaian soldiers found a significant relationship between combat experience and mental health as well as post deployment experiences and mental health. In addition, Bonanno et al. (2012) undertook a research on deployment and psychological well-being among US military service members across all the cycle of deployment, thus, pre deployment, deployment and post deployment. A total number of 77,047 US Military service personnel were sampled from all branches including National Guard, Active duty and Reserve duty. The study was a cross sectional longitudinal study. In order to control for deployment stressors, a self-report symptom of posttraumatic stress was acquired prior to deployment with at a two follow up study with 3years interval. The results from the analysis showed a similar posttraumatic stress trajectory over time. In other words, majority of the participants (80%) reported a stable trajectory of low posttraumatic stress from pre-deployment to post deployment. In a related study, 474 soldiers reported equal levels of anxiety as well as alarming suicidal ideation at all the phases of deployment (McNulty, 2005). These findings indicate that each phase of the deployment cycle can predict psychological well-being of soldiers.

Nonetheless, in a two-year longitudinal research comprising 277 military personnel, MacDonald, Chamberlain, Long and Mirfin (1999) observed that findings from the effect of deployment length on mental health outcome was inconsistent, indicating that deployment duration does not necessarily predict well-being. However, results from their study showed reports of higher anxiety and higher psychological distress at pre-deployment and post deployment. In addition, the level of positive psychological well-being at pre-deployment and deployment were stable but decline significantly at post deployment.

Post deployment stressors are events that service personnel encounter after returning from deployment and being at home for a while. Some studies are of the view that post deployment

stressors rather than deployment itself have an influence on the psychological well-being of military personnel. In a longitudinal research on Swedish peacekeeping soldiers, a total of 316 soldiers were sampled across four phases of the deployment cycle, thus, deployment, immediately after deployment, six months post deployment and one-year post deployment. In this study, Michel, Lundin and Larsson (2003) observed that, among all the four phases, personnel who encountered a stressful post deployment reported the poorest mental health. Logistic regression analysis on life events before deployment, traumatic event during deployment and post deployment stressors showed that post deployment stressors was the significant contributor to poor mental health when compared to all the other phases of the deployment cycle.

In view of this, most of the psychological problems related to deployment are screened when military personnel have been home for a while after deployment. In relation to this, Hoge et al. (2014) assessed post deployment health with respect to the percentage of military personnel in need of PTSD treatment, the percentage that were being given minimal adequate care as well as reasons for dropping out of care. Data collected from a population of active duty based-cohort of 45,462 service men and a cross sectional survey of 2,420 infantry soldiers who have returned from a yearlong deployment duty in Afghanistan indicated that, 75% of soldiers who were referred to a mental health care at a military treatment facility followed up the referral. In addition, 229 surveyed military personnel screened positive for PTSD within six months after returning from deployment with 48% receiving minimally adequate care with regards to mental health treatment at any health care facility. This shows that most of the personnel who screen positive for PTSD did not receive medical attention and this can lead to sleep deprivation as well as affect readiness and well-being in general. However, 24% of military personnel dropped out

of care with reasons such as being able to handle one's own problems, work interference, insufficient time, stigma, treatment ineffectiveness, discomfort as well as confidentiality concerns. The study argues that high percentage of military personnel are being given low to moderate treatment with respect to PTSD and therefore calls on the need for research and intervention strategies in order to aid improve treatment.

Not only are military personnel faced with PTSD when they return home after deployment, some also experience sleep problems. Seelig et al. (2010) in their study focused on determining the associations between deployment and sleep quantity and quality among service personnel returning from deployment in Iraq and Afghanistan. This was an online longitudinal study with which the Millennium Cohort Study was administered online via secure website. Personnel who participated in the study numbered up to 41, 225 service personnel. Personnel in the study completed a baseline survey from 2001-2003 and a follow up survey from 2004-2006. Based on deployment status between 2004-2006, personnel were divided into three groups, that is, non-deployed (N= 30,190), deployed (N= 9,264) and post-deployed (N= 1771). Self-reported outcome with regards to sleep duration and trouble sleeping was used. Results indicated that, among deployed and post deployed personnel, sleep duration was significantly shorter than non-deployed ( $p < .01$ ). Also, report from multivariable logistic regression modeling indicated that, trouble sleeping was significantly high in deployed and post deployed personnel compared to non-deployed service men (AOR 0.97, 95% CI and AOR 0.91, 95% CI). The study proposed that post deployed military personnel who have mental health problems are likely to have shorter sleep duration as well as trouble sleeping. Therefore, the need for research addressing issues of sleep and mental health especially after deployment.

Even though from the literature reviewed so far, it seems that soldiers always experience psychological challenges during their post deployment experience. This is not always the case as there have been studies that have reported improved psychological well-being as a result of good post deployment experiences (Duma et al., 2010) as well as other positive psychological traits like improvement of self and resilience (Knobloch & Theiss, 2012; Newby et al, 2005) when soldiers transition from deployment to life at home. These studies found that soldiers who had a positive post deployment experience reported self-improvement, improvement in marital relationship, value for relationship as well as increased autonomy

### **2.3.2 Family Relationship**

Soldiers returning from deployment have reported both positive as well as negative impact of deployment on the quality of their family relationship. A quantitative study by Newby et al., (2005) attempted to investigate the perceived positive and negative consequences of military deployment among soldiers. Survey questionnaires were administered and retrieved from 951 US Army soldiers who have returned from deployment duties in Bosnia. The results of the study indicated that 478 personnel reported at least one positive consequences, with the most cited positive comment being making additional money. On the other hand, 403 reported at least one negative consequences whilst 447 reported both negative and positive consequences. Also, single soldiers were more likely to give positive feedbacks than married personnel. In other words, out of 519 married soldiers, 70% of them reported negative consequences such as being away from home as well as decline in relationship with marital or significant others.

In a related study, Wilcox et al. (2015) attempted to assess the challenges that a battalion of National Guard Members (NGM) experienced after returning home from a one-year deployment to Iraq. The number of participants included in the study were one hundred and twenty-six

(N=126). These were individuals who have been home three to six months post deployment. Data was collected based on self-report survey. As a baseline, data was collected immediately after returning from deployment which was followed by data collection at 3, 6, 9 and 12 months post deployment. Variables measured include relationship satisfaction and family reintegration challenges. Paired sample t-tests was used to analyze the psychosocial challenges from baseline 3 and 6 months post deployment. From the analysis, there was a significant difference in relationship satisfaction between baseline and three months [ $t(76) = 2.11, p = 0.04, d = 0.24$ ]. Relationship satisfaction were fairly high ( $M=45.23, SD=9.62$ ) at the baseline with 78.9% agreeing to having a good relationship. However, relationship satisfaction reduced by 7% at 3 months compared to baseline but improved by 3.3% at 6 months compared to 3 months. Nonetheless, there was a reduction in relationship satisfaction at 6 months compared to baseline. ( $-7\% + 3.3\% = -3.6\%$ ).

In addition, results from family reintegration challenges showed a significant difference between baseline and 3 months [ $t(60) = 2.62, p < 0.01, d = 0.34$ ]. Results indicated that, 24% of participants reported having high level of reintegration challenges (11 or more) of total family reintegration challenges ( $M = 26.20, SD = 4.53$ ). Also, 13.9% reported having two or more child behavior problems ( $M = 5.21, SD = 1.35$ ) and 34.7% reporting four or more family post deployment readjustment problems ( $M = 9.60, SD = 2.06$ ). Again, at 3 months there was a significant increase in family reintegration challenges. There is therefore the need to address marital satisfaction as well as family reintegration with regards to post deployment transition. Furthermore, the relational turbulence model was adopted in a study by Theiss and Knobloch (2011) to understand how post deployment transition impact communication among returning service personnel and at home partners. The study included 235 participants with 128 of them

being military personnel and 107 being at -home partners. Questionnaires were administered online to participants within six months following reunion. Constructs used as predictor of post deployment transition include relational uncertainty and interference from partners. Three turbulence markers were evaluated, they include, partner responsiveness, turmoil appraisal and relational maintenance. They hypothesized that both relational uncertainty and interference from partners will correlate negatively with reports of relational maintenance, partner responsiveness but correlate positively with turmoil appraisal. Analysis from Independent sample t test showed that at home partners ( $M=5.49$ ) were more open with respect to communication than returning military personnel ( $M=4.82$ ,  $SD=1.86$ ),  $t(233) = 2.91$ .  $p=4$ . Results from hierarchical multiple regression indicated that relational uncertainty and interference from partners predicted turbulence markers as well as partially mediated the association between relationship satisfaction and turbulence markers. Findings from the study indicates the usefulness of relational turbulence model in addressing the experiences of military couples during the post deployment transition as well as reveals turbulence markers that may be hidden during various relationship transitions.

The literature reviewed supports findings from other studies that predicts that during post deployment transition, military families are faced with the challenge of assessing the ability of one's partner to meet his or her needs, maintaining their relationship, as well as examining the climate of their partnership (Bowling & Sherman, 2008; Vormbrook, 1993).

### **2.3.3 Post Deployment Transition**

Knobloch and Theiss (2012) conducted a qualitative study, guided by the Relational Turbulence Model, to identify the various issues or challenges faced by military couple during post deployment transition. They conducted an open-ended online survey on personnel who have returned home to their partners after deployment during the past six months. A total of 259

individuals participated in the study, out of which 137 were service personnel and 122 were partners of returning service personnel. The results from the survey showed that majority of personnel encountered reintegration challenges upon returning home. It was also observed that only few reported not having family reintegration challenges. Again, military personnel experienced conflict between deployment identity and role and at-home identity and role. This was attributed to the fact that behaviours that are seen as functional during deployment might be seen as dysfunctional during reintegration. In addition, it was reported that 91% of military personnel returning from deployment faced relationship challenges like difficulty in communicating, problems reconnecting, problem reintegrating into daily life at home and heightened conflict. Furthermore, 89% of personnel expressed relational uncertainty like commitment, adjusting to life after deployment, household stressors and personality changes. Interference from partners such as control issues, feeling smothered, household chores, interference in everyday activities as well as parenting challenges were also reported by 81% of personnel as reintegration challenges.

Also, in a related study conducted by Verey and Smith (2012), the qualitative experience of fifteen (15) military personnel who have returned from deployment and how deployment event impacted on their transition back to the United Kingdom were analyzed. A semi-structured interview was used to collect information from informants pertaining to stressful deployment experiences and the effects on work, family relationships, civilian society and emotional health. Thematic analysis was used in analyzing the transcripts. Six themes emerged from the analysis, they include, significance of being part of a group, shared experience, help seeking, professionalism and emotional processing, relationship and family as well as civilian society.

The significance of being part of a group gave military personnel a sense of collective identity during deployment as oppose to individual identity as a spouse or parent when at home. This made them feel equipped to partake in violence that were considered legal because the situation demands it. Also, shared experience with partners and help seeking was a problem. In that, military personnel upon their return from deployment preferred seeking support from comrades as well as other personnel who have similar experiences. Again, as oppose to seeking professional help, military personnel preferred to seek assistance from friends and comrades. In addition, there were issues of professionalism, emotional processing, relationships and family. In that, most military personnel perceive themselves as being tough or “macho” and can handle issues on their own. This prevented them from seeking professional help to deal with emotional challenges. Their inability to manage their emotions and distinguish between appropriate and inappropriate emotion had an impact on family relations. Furthermore, making personal adjustments with regards to personal relationships was a challenge. The study argues the need for pre-deployment training as well as post deployment training in order to enhanced smooth post deployment transition.

Furthermore, Adler, Britt, Castro, McGurk and Bliese (2011), undertook an Exploratory and Confirmatory factor analysis of a 16-item transition scale with participants from an Army Base in the United States. One thousand, six hundred and fifty-one (N=1,651) participants were sampled from active duty brigade combat team soldiers who have been home for four months after returning from a one-year long deployment duty. Previous survey data gathered four months earlier during initial reintegration from a subset of the sample (N=1,051) with respect to combat experiences and PTSD symptoms was obtained. This served as a baseline for comparison (Time 1) and the transition four months later served as Time 2. From the analysis, four factors

which accounted for 60% of variance were retained, they include, benefit ( $\alpha=.83$ ), appreciation ( $\alpha=.73$ ), anger/alienation ( $\alpha=.73$ ) and Guilt ( $\alpha=.74$ ). Military personnel reported relatively high levels of appreciation, moderate levels of benefit and anger/alienation and relatively low levels of guilt/remorse. However commissioned officers scored significantly higher on benefit ( $M=3.62$ ;  $SD=.69$ ) whilst non-commissioned or junior rank soldiers scored higher on anger/alienation ( $M=3.24$ ,  $SD=.70$ ) as well as guilt/remorse ( $M=2.33$ ;  $SD=.77$ ). This indicated the role of ranks in post deployment challenges. Again, anger/alienation correlated moderately with a types of combat experience with a low to moderate relation to PTSD syndrome.

From the literature, life after returning home from deployment duties can be a challenging one and maybe more challenging than deployment itself (Morse, 2006; Sareen et al, 2010). In that, most non-commissioned officers are likely to return from deployment with hyperarousal symptoms like anger and might lead to emotional withdrawal or alienation from family which can pose as challenge when transitioning from deployment to being at home (Yosick et al, 2012).

#### **2.3.4 Relationship between Post Deployment Transition, Psychological well-being and Family Relationship.**

There are studies that have found a link between post deployment experiences of military personnel, their psychological health as well as their relationship with family members. The California National Guard (2010) conducted a longitudinal study from 2006 to 2010 in order to keep track of the mental health contact of US military personnel who have returned home from deployment. Mental health contact was categorized into four, they include, self-initiated, provider-initiated, requested by commander and suggested by a peer. Almost 14,000 personnel participated in the study. Majority (60%) reported having difficulties transitioning from

deployment to being at home. In addition, less than 25% of respondents reported issues of PTSD Syndrome while 40% reported having marriage and family issues.

Also, Erbes et al. (2011) assessed the views of 313 married or partnered National Guard military personnel who have recently returned from combat mission in Iraq on issues of couple adjustment and PTSD symptoms. It was a longitudinal study with Time 1 being two to three months after return and Time 2 being one year after return. At time 1, all participants reported being married or in a relationship whereas at Time two, the number had reduced to 225. The Navy Quality of Life Survey was used to assess relationship adjustment while psychological well-being was examined using the PTSD Checklist- Military Version. Four factors were delineated from the PTSD Military checklist, they include, reexperiencing, avoidance, dysphoria and hyperarousal with all four factors attaining a reasonable fit at Time 1 and Time 2. A Structural Equation Model was therefore used to analyze the results of the study. At time 1, 17% reported having PTSD symptoms and these soldiers reported significantly poorer relationship adjustment. The situation was not different from Time 2 as soldiers screened positive for PTSD also reported having poorer relationship readjustment. Emotional numbing and arousal were identified as the variables that had the most impact on poorer relationship adjustment.

Furthermore, Meis et al. (2010) in an attempt to diverse from the usual research on post deployment that focused solely on the role of PTSD, directed some of their attention to studying other correlates of PTSD and relationship quality like personality and problematic drinking. The study was conducted a month prior to deployment and two to three months after returning from deployment. All participants (N = 308) were in a romantic relationship after deployment with half of them having at least one child. The results showed 15.8% of participants screened positive for PTSD, 22.1% screened positive for relationship distress and 30% for hazardous

drinking. In addition, military personnel who reported positive symptoms of PTSD were more likely to report relationship distress than those who reported negative symptoms of PTSD as well as those who reported positive for hazardous drinking were more likely to screen positive for relationship distress than those with negative drinking screens. In other words, the results from the study showed a significant relation between post deployment PTSD and relationship quality. In addition, negative emotionality correlated significantly with post deployment PTSD symptoms. This negative emotionality can lead to severe post deployment PTSD symptoms and poorer post deployment relationship adjustment.

The literature reviewed indicate that returning from deployment and being at home demands an unlearning process to adjust successfully (Danish & Antonides, 2013). Military personnel who face challenges during the transition period from deployment to being at home may feel separated from family as well as misunderstood. These feelings if not addressed properly might lead to emotional numbness, hyperarousal or other psychological problems. Consequently, this can lead to reintegration challenges that might result in unhealthy behaviours.

### **2.3.5 Post Deployment Social Support as a Moderator**

Military personnel returning from deployment operations are usually at risk of developing PTSD symptoms (Milliken et al., 2007). PTSD severity is not usually as a result of combat related stressors only but also non-traumatic stressors as well as post deployment transition stressors, as combat related stressors were found to be less associated with PTSD than current stressors like post deployment non traumatic stressors (Possemato, McKenzie, McDevitt- Murphy, Williams & Ouimette, 2014), thereby making combat stressors necessary but not sufficient for PTSD severity. However, the severity of PTSD regardless of the type of stress related event can be controlled by the level of social support given to returning military personnel (Charuvastra &

Cloitre, 2008). Ozer et al. (2003, cited in, Possemato et al., 2014), argue that returning military personnel who do not receive any form of social support are at risk of developing various psychiatric symptoms.

In an attempt to investigate the role of social support in managing post deployment PTSD, Possemato et al. (2014) conducted a cross sectional quantitative study to examine pre-deployment, peri-deployment as well as post-deployment factors that are related to post deployment PTSD symptoms. Participants used in the study were 150 combat veterans who have been diagnosed with PTSD symptomatology as well as harmful abuse of alcohol. PTSD risk factors were measured before, during and after deployment as well as the level of social support given to personnel after deployment. Data acquired was analyzed using the hierarchical linear regression.

Findings from the study indicated that risk factors at all three deployment cycle exclusively predicted PTSD severity after controlling for combat related trauma. Post deployment factors like post deployment social support, post deployment life events, employment and alcohol use independently predicted PTSD severity after controlling for combat related traumas. This indicates that non traumatic post deployment stressors are closely associated with PTSD severity. In addition, combat stressors did not predict PTSD severity but current post deployment stressors were found to be related to PTSD severity. However, the severity of PTSD symptoms can be minimized as family and friends provide support to returning military personnel in order to enhance psychological well-being.

In relation to this, Welsh, Olson, Perkins, Travis and Ormsby (2015) examined relations among three different types of social support (romantic partners, friends and neighbours as well as unit leaders) on the wellbeing of service personnel. The outcome of their study showed that all the

three types of social support moderated the effects of negative deployment experiences on depressive symptoms.

Also, Griffith and West (2010) observed that a sizeable number of soldiers returning from deployment reported transition challenges like post deployment negative emotions and post deployment loss of personal relationship which were all related to risky behaviours like aggression and alcohol use. However, evidently, social support played a significant role in lessening the adverse effects on these transition stressors on the military personnel. In addition, Smith et al. (2013) reported that, at higher levels of stress related to post-deployment, social support from unit and members of the family was significant in reducing the occurrence of depression symptoms as well as PTSD symptoms among service personnel.

Furthermore, Martin, Houtsma, Green and Anestis (2015) studied the interaction effect of time spent at home after deployment and post deployment social support on suicide risk factors such as hopelessness, suicidal ideation as well as resolved plans and preparations. They found that the interaction effect predicted hopelessness and resolved plans and preparations but not suicidal ideation. Their findings suggest that when military personnel do not have access to both unit support as well as support from family and friends, hopelessness and resolved plans and preparations are likely to increase but when soldiers are given the needed social support, they are more likely to be hopeful and have better resolved plans and preparations.

#### **2.4 Rationale of the study.**

The current study might be the first to contribute to knowledge on how post deployment experiences can influence the quality of family relationships among military personnel in Ghana and possibly, in Africa at large. Presently, the focus of most studies on the deployment cycle and the quality of family relationships have been on deployment stressors and experiences. The

current study is one of the few researches that focus solely on post deployment experiences of Ghanaian soldiers.

In addition, most studies conducted on post deployment experience and psychological well-being have involved combat veterans, National Guard and Reserve Military personnel with little attention given to active duty soldiers. Unlike National Guards/ Reserves soldiers and combat veterans, active military personnel return from deployment to continue with military duties while awaiting future deployment. The experiences of these groups of soldiers might differ when they return home from deployment duties. Therefore, the present study will add to knowledge on the post deployment experiences of active duty soldiers in Ghana, Africa and the world at large.

Also, the present study would throw light on the idea that non-traumatic events can also have an influence on psychological well-being with regards to post-traumatic stress disorder as well as the quality of family relationships among military personnel. In other words, the mental health of a soldier as well as his or her relationship with family are not only affected by experiencing traumatic events during deployment like death or being held hostage but can also be influenced by the experiences they have when they return home from deployment.

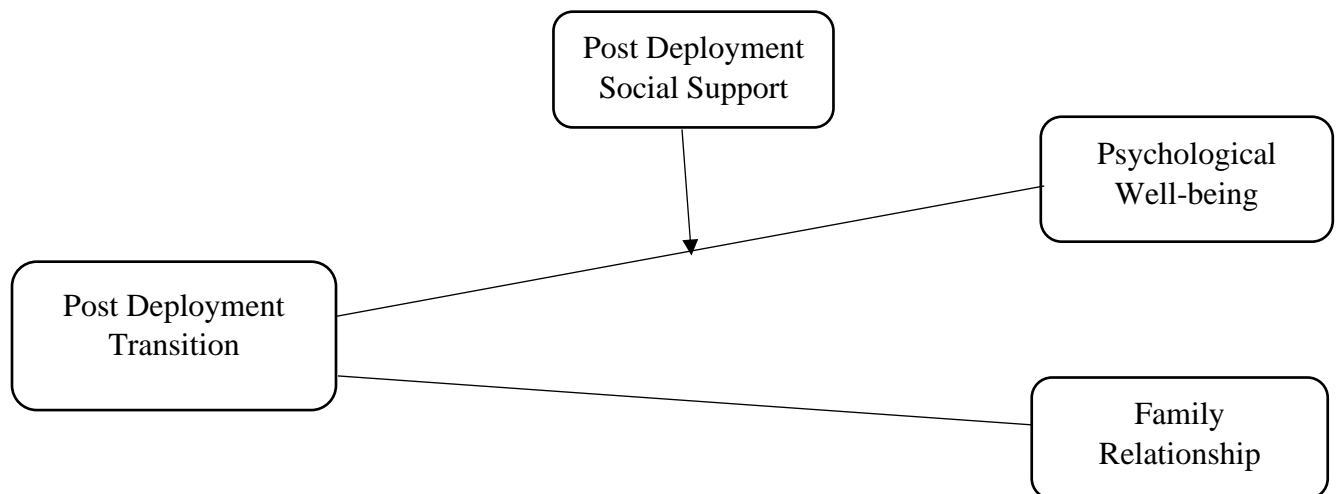
Generally, the study was undertaken for its potential implications for psychologist, counsellors, policy makers, researchers, health workers as well as all other stakeholders who work with military personnel especially in Ghana.

## **2.5 Statement of Hypotheses**

- 1.** There will be a positive relationship between post deployment transition and psychological well-being.

2. Post deployment transition will have a negative association with the quality of military personnel's family relationship.
3. Post deployed military personnel are more likely to experience lower psychological well-being and poorer family relationship than non-deployed military personnel.
4. Post deployment social support will moderate the relationship between post deployment transition and psychological well-being.

### Conceptual Framework



**Figure 2.0: Summary of hypothesized relationship between study variables**

The conceptual framework proposed shows that post deployment transition will have a significant relationship with psychological well-being as well as family relationship. Also, the relationship between post deployment transition and psychological well-being will be moderated by post deployment social support.

## 2.6 Operational Definitions

**Post Deployment Transition:** It is the movement of military personnel from a deployed area to being at home for six (6) months up to one year as measured by the Homecoming Issue Scale (Farley & Murphy, 2000).

**Family Relationship:** The relationship between a soldier, his or her spouse and child(ren) as measured by the Navy Quality of Life Scale (Wilcove, 2005).

**Post Deployment Social Support:** Actual support given by members of the family, friends, co-workers and community to a soldier returning from peacekeeping operations as measured by the Post Deployment Support Scale (King et al., 2008).

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

Information on the type of research method used in conducting this study is provided in this chapter. In addition, details on the population, sample and sampling techniques, research setting, research design as well as instruments used to collect data are provided. The chapter also includes the pilot study, procedure through which data was collected as well as ethical considerations.

#### **3.1 Research Method & Design**

The quantitative research method was used in this study. A descriptive, cross-sectional survey design was used to collect data for this study. A survey refers to a collection of a large quantity of evidence which are numeric or evidence that will be changed to numbers normally through a questionnaire (Remenyi, Williams, Money & Swatz, 1998). Questionnaires were administered to sampled participants and the data collected helped the researcher to generalize findings from the responses that were given by the sample to aid in making inferences to the population. The dependent variables in this study were psychological well-being and family relationship. The independent variable, which is, post deployment transition was measured on post deployed military personnel. There was another group which is the non-deployed group. Participants in this group were the control group that served as a baseline for comparison. The non –deployed group were not measured on the post deployment transition scale and the post deployment social support scale since they have no experience with regards to deployment. Therefore, the non-deployed group were advised not to respond to the items on the post deployment transition scale and the post deployment social support scale.

### 3.2 Research Setting

The study was conducted within selected military barracks of the Ghana Armed Forces. These include Flagstaff House barracks, 37 Military Hospital Barracks, El Wak barracks, Burma Camp barracks and Tema barracks, all within the Greater Accra Region of Ghana. These barracks were selected because they host majority of the army personnel in the Ghana Armed Forces.

The Flagstaff house barracks can be located opposite the Office of the Presidency, that is the Jubilee House. It has six storey buildings with three of them inhabited by army military personnel. Each storey building has three floors and houses forty-two (42) rooms. Unlike the Flagstaff barracks, the 37 Military Hospital barracks, located behind the 37 Military Hospital does not have storey building apartments. However, the houses are ground floor apartments with less than ten rooms.

The El Wak barracks can be located behind the El Wak Stadium on the 37 – Burma Camp road. It houses mostly two storey building apartments with less than 15 rooms in each building. The Burma Camp barracks which is the headquarters of the 5<sup>th</sup> Infantry Battalion of the Ghana Armed Forces, on the other hand has all kinds of apartments and settlements. It also has both the Army Headquarters (Army HQ) and the General Headquarters (GHQ) as well as the Ministry of Defence situated within it. Settlements such as Arakan barracks and Gondar barracks can be found within the Burma Camp barracks.

The Tema barracks hosts the 1<sup>st</sup> Battalion Regiment of the Ghana Armed Forces. Michel camp is the name given to the barracks situated in Tema in the Greater Accra Region of Ghana. The camp also has settlements and apartments allotted to army personnel of the Ghana Armed Forces.

The researcher selected these areas as the research setting because they host a lot of junior army officers of the Ghana Armed Forces. Therefore, participants and information needed to achieve the aim of the current study are likely to be available and easily accessed.

### **3.3 Population**

The research population was selected from the Greater Accra Region in the Republic of Ghana. It comprised both post-deployed and non-deployed service personnel of the Ghana Armed Forces. The reason for targeting soldiers is that, in Ghana, there is a higher probability of every soldier experiencing at least one deployment as compared to officers in the other security services. In addition, Greater Accra was chosen because it is the only region with two infantry battalions, namely, 1<sup>st</sup> Infantry Battalion in Tema and 5<sup>th</sup> Infantry Battalion in Burma Camp, and therefore more likely to have a relatively higher concentration of soldiers in the Region.

The interest of the researcher is also on junior army officers of the Ghana Armed Forces. This is because the majority of Ghanaian soldiers who are deployed to perform military duties outside the country are junior officers with most of them being affiliated to the army. This presents the researcher an opportunity to sample from a relatively larger population which could lead to generating a large sample size as this is a significant factor to consider when conducting a study using the quantitative research design.

The closeness of the region to the researcher was also considered. Furthermore, factors such as cost, feasibility of the study as well as duration required to conduct this study since it is time bound, accounted for the selection of this region. In view of these, conducting the study in this region was deemed as appropriate as well as convenient

### **3.4 Sample size**

Two hundred (200) military personnel in total were given survey questionnaires to fill and submit to the researcher. However, a total of one hundred and thirty-four (134) completed questionnaires were retrieved for analysis, indicating a 67% response rate.

The one hundred and thirty-four (134) completed questionnaire was accepted as an appropriate sample size for this study. This is in view of the recommendation made by Tabachnick and Fidell (2007), who made a proposition that any study using multiple regression analysis, the appropriate sample size (N) should be  $(N > 50 + 8M)$  where M is the total number of independent variables. Since this study has one independent variable, the minimum sample size needed is fifty-eight (58) [i.e.  $50 + 8(1) = 58$ ]. In view of that, the sample size of one hundred and thirty-four (134) participants satisfies this recommendation.

In the frequency table below is a summary of the background characteristics of the participants involved in the study.

**Table 3.0: Summary of Participants' Demographic Characteristics**

<b>Demographics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age</b>		
21 – 30	34	25.4%
31 – 40	68	50.7%
41 – 50	32	23.9%
<b>Gender</b>		
Male	92	68.7%
Female	42	31.3%
<b>Military Status</b>		
Lance-Corporal	24	17.9%
Corporal	20	14.9%
Sergeant	24	17.9%
Staff Sergeant	31	23.1%
Warrant Officer II	24	17.9%
Warrant Officer I	11	8.2%
<b>Educational Status</b>		
Degree	9	6.7%
Diploma	43	32.1%
WASSCE	60	44.8%
Other	22	16.4%
<b>Years in Service</b>		
1 to 10 years	51	38.1%
11 to 20 years	50	37.3%
21 to 30 years	33	24.6%
<b>Number of Children</b>		
1	47	35.1%
2	35	26.1%
3	29	21.6%
More than 3	23	17.1%
<b>Religion</b>		
Christianity	100	74.6%
Islam	34	25.4%
<b>Deployment Status</b>		
Deployed	92	68.7%
Non Deployed	42	31.3%
<b>Length of time at home after last deployment</b>		
1 to 3 months	13	14.1%
3 to 6 months	17	18.5%
6 to 9 months	37	40.2%
9 to 12 months	25	27.2%

From Table 3.0, the highest number of the participants involved in the study were between the ages of 31 to 40 years (50.7%), followed by ages 21 to 30 years (25.4%) and ages 41 to 50 years recorded the least number of participants (23.9%). Out of total of one hundred and thirty-four (134) participants, ninety-two (92) were males whilst forty-two (42) were females. Also, the rank with the largest number of participants was Staff Sergeant (31 respondents) representing 23.1%, followed by Lance Corporal (24 participants), Sergeant (24 participants) and Warrant Officer Class Two (WOII) (24 participants), each representing 17.9%, then, Corporal with 20 participants (representing 14.9%) and with 11 respondents, Warrant Office Class One (WOI) recorded the least number of participants (constituting 8.2% of the total number of participants). In addition, participants with West African Senior Secondary School Certificate Examination (WASSCE) certificate being their highest form of education had the highest number of representation of 60 (44.8%) while Degree holders (9 in number) had the least number of representation (6.7%). Furthermore, fifty-one (51) of the respondents, representing 38.1%, have been in active military service between 1 to 10 years, 50 (37.3%) have been in service between 11 to 20 years and 33 (24.6%) have served in the military between 21 to 30 years. Also, majority of the participants had three or less number of children (82.8%). All of the one hundred and thirty-four participants had a religious affiliation with majority of them (100 participants), representing 74.6% being Christians with the remaining thirty-five (34), representing 25.4% being Muslims. With regards to deployment status, ninety-two (92) of the participants involved in the study were post deployed soldiers whilst forty-two (42) have never been deployed, representing 68.7% and 31.3% of the total number of respondents respectively. Most of the post deployed soldiers representing 40.2% had spent six to nine months at home after returning from deployment.

### **3.5 Sampling technique**

The Non- probability sampling technique was used to select the population and respondents, specifically, the convenient and purposive sampling techniques. The target population was conveniently sampled because the technique is cost effective as well as enables gathering large sample sizes in a relatively inexpensive and fast manner. The purposive sampling technique was used to sample the participants for the study because it allowed for the possibility of selecting the required and appropriate participants since the interest of the study is on army personnel of the Ghana Armed Forces.

### **3.6 Inclusion and Exclusion Criteria**

All married non-commissioned Army personnel of the Ghana Armed Forces, both males and females, were selected to participate in the study. The reason being that the researcher sought to compare the psychological well-being and family relationship of post deployed to that of non-deployed non-commissioned officers with the goal of observing differences between the groups. However, non-commissioned Army personnel of the Ghana Armed Forces who are not married were disallowed from participating in the study. Also Navy and Air Force personnel of the Ghana Armed Forces did not fall within the target population because the researcher was interested in non-commissioned army personnel. In addition, Commissioned Army Officers of the Ghana Armed Forces were excluded from the study.

### **3.7 Measures**

The instruments used in the study, namely, Homecoming Issues Scale, PTSD Checklist Military Version, Navy Quality of Life Scale and Post Deployment Social Support Scale, were standardized for the present study.

### **Post Deployment Transition**

Homecoming Attitudes, which is a subscale of the Human Issues Scale was used to address issues that are of relevance to homecoming experiences of military personnel such as readjustment problems, positive attitudes/engagement and negative attitudes/disengagement (Murphy & Farley, 2000). It is a five-point Likert scale ranging from 1 to 5 (Never=1, Rarely=2, Sometimes=3, Frequently=4 and Very frequently=5) with a higher score indicating greater transition difficulty. It is a 23 item scale with both positive and negative statements and as a result, some items had to be reversed coded. However, item 18 is a double barrel item and therefore was divided into two separate item in this study, given the scale a total of 24 items. The mean score recorded was 67.60 with minimum and maximum score ranging from 35 to 104 respectively. Sample items on this scale are; *“You felt proud having served overseas,” “You experienced a period of adjustment getting back to your old self”*, and *“You felt like dropping out of family life”*. In a study conducted by Thompson and Blais (2000) the subscales in the scale recorded a Cronbach alpha ranging from .63 to .78. In the current study, the scale had a reliability Cronbach alpha of .90.

### **Psychological Well-being (PTSD)**

The PTSD Checklist- Military Version (PCL-M) was used to measure psychological well-being (PTSD) among participants. The scale was developed by Weathers, Litz, Herman, Huska, and Keane in 1993. This scale which addresses problems and complaints that military personnel face in response to a stressful military experience was used to measure psychological wellbeing among military personnel with regards to emotional numbness, hyper arousal and depression symptoms. It has seventeen items which are measured on a five-point Likert scale ranging from 1 to 5 (1 = Not at all, 2= A little bit, 3=Moderately, 4=Quite a bit and 5 = Extremely) with a higher

score indicating higher psychological challenges. The scale recorded a minimum and maximum score of 19 and 79 respectively as well as a mean of 47.96. Sample items from the scale include “*Loss of interest in things you used to enjoy?*”, *Feeling emotionally numb or being unable to have loving feelings for those close to you?*” and “*Being super alert or watchful on guard?*”. This instrument scored Cronbach alpha of .94 in a study by Erbes et al. (2011). In the present study, the scale recorded a Cronbach alpha of .93.

### **Family Relationship**

Initiated in 1999 by the US Navy, but developed by Wilcove (2005), the Navy Quality of Life Scale was intended to assess overall quality of life of US Navy personnel. Family Relationship was measured using two subscales of the Navy Quality of Life Survey (NQLS). They are the Marriage/Intimate Relationship (NQLS-MIR) and Relationship with children (NQLS-RWC). NQLS-MIR has eight items and NQLS-RWC has nine items and both subscales were measured on a seven-point Likert Scale from 1 to 7 (1=Completely dissatisfied, 2= Dissatisfied, 3=Somewhat dissatisfied, 4=Neutral, 5= Somewhat satisfied, 6= Satisfied and 7=Completely satisfied). NQLS-MIR addressed issues of marriage and intimate relationships whilst NQLS-RWC examined relationship issues between participants and child or children. Sample items under NQLS-MIR and NQLS-RWC are “*The communication within the relationship*” and “*The love and understanding between you and your child(ren)*”, respectively. Both subscales have no negative worded item. Therefore, lower scores indicate high family relationship challenges and higher score indicate low family relationship challenges. The mean score obtained from the sample for this scale was 73.46 with a minimum and maximum score of 17 and 118 respectively. Using this scale in their study, Erbes et al. (2011) recorded a Cronbach alpha of .92. In the current study, the scale recorded an internal consistency reliability of .97.

### **Post Deployment Social Support**

Developed by King et al. (2006), the post deployment social support scale was used to identify emotional and instrumental support received by soldiers upon their return home after deployment. It has 15 items; with some negative worded items, therefore, these items were reversed coded. The scale was measured on a five-point Likert scale from 1 to 5 (Strongly agree=1, Disagree= 2, Neither= 3, Agree=4 and Disagree=5). The mean score of the participants was 51.65 with minimum and maximum score ranging from 21 to 74 respectively. The Cronbach alpha recorded for this scale was  $\alpha = .80$ . In a related study by Pietrzak et al. (2009), the scale recorded a Cronbach alpha of .82. *“Family members and friends made me feel at home when I returned”* and *“People at home just don’t understand what I have been through overseas”*, are sample items on the scale.

### **3.8 Pilot study**

A pilot study is the pretesting of a particular research instrument and as a result the appropriate sample size for testing is 10 – 20% of the sample size for the actual study (Baker, 1994). On the basis of that, 20 participants from the post deployed as well as non-deployed were purposively and conveniently sampled. Four instruments were used to measure the Post Deployment Transition, Psychological Well-being, Family Relationship and Post Deployment Social Support. The pilot study was undertaken two weeks before the actual day of data collection to aid in evaluating the psychometric properties of the scales since some of them were modified and adapted to suit this study. In addition, the pilot study was used to test whether the methodology that will be used in the study is feasible.

Presented below in Table 3.1 are the reliability obtained the scales.

**Table 3.1: Summary of the reliability Statistics Obtained for each Scale**

Scale	Number of Items	Alpha
Post Deployment Transition	24	.787
Psychological Well-being	17	.874
Family Relationship	17	.863
Post Deployment Social Support	15	.617

The figures obtained indicated that the instruments tested were reliable to be used in the collection of actual data.

### **3.9 Ethical Consideration**

Guidelines that guide researchers have been outlined by the American Psychological Association on what to do and what not to do when conducting a study with the objective of protecting participants' interest. In addition, the Department of Psychology and the School of Graduate studies, both in the University of Ghana also have guidelines and principles with respect to conducting a research. The initial steps taken in this research were to ensure that these guidelines were adhered to. A formal request from the Department of Psychology was taken to the Ethics Committee for Humanities (ECH) to conduct the study which included a research proposal and other relevant documents for approval before commencing data collection. The mandate of the ECH is to ensure that ethical conduct of research within the various disciplines in the humanities at the University of Ghana are well regulated. Participants consent and approval were sort as well as encouraging them to fill a consent form before data collection. Participants were assured of

anonymity and confidentiality of information that were given. Also, participants were informed that they could terminate or withdraw from participating in the study before, during and after the study without being penalized. The researcher left his contact details with participants before leaving in case anyone had any concerns or questions afterwards.

### **3.10 Procedure**

Clearance was sought from the Ethics Committee for Humanities which was presented to the Department of Psychology, University of Ghana for a letter of introduction. This letter introduced the researcher as well as his intentions to conduct the study. The introduction letter was presented to Personnel Administration Unit of the Ghana Armed Forces in Burma Camp. After receiving approval from the authorities of the institution in question, a pilot study was undertaken two weeks before actual collection of data. The assistance of two research assistants was employed. There was a brief period of orientation for the research assistance as well as practice questionnaire administration during the pilot study in order for them to have adequate understanding of the process involved. They were compensated at the end of each data collection exercise.

On the day of data collection, the researcher and his research assistants sought consent from participants who were willing to be involved in the study. Data was collected from the Flagstaff house barracks, 37 barracks, El-Wak barracks, Burma Camp barracks and Tema barracks.

Collection of data was from both post deployed married personnel and non-deployed married personnel. Guidelines were given to participants with regards to responding to items on the questionnaire and were encouraged to draw the attention of the researcher or the research assistants when needed. For some, there was the need to explain some of the items in *twi* in order for them to be able to respond to them. The purpose of the study was further explained as well as

the long-term benefits associated with the study. Assurance was given to participants with respect to confidentiality and anonymity of responses while emphasizing the purely academic purpose of the study. Some of the questionnaires were given to participants and retrieved later on another day while others fill the questionnaire on the spot. The average amount of time taken by participants to complete a questionnaire was fifteen minutes. The actual data collection occurred within a period of one month. Questionnaires were taken from participants after filling in order to ensure responses given are kept private. The researcher thanked participants for their involvement in the study. Data collected were scored and coded for statistical analysis.

## CHAPTER FOUR

### RESULTS

#### 4.0 Introduction

Presented in this chapter are the results of computed means, standard deviation, test of normal distribution, reliability test of instruments used as well as hypotheses testing. The purpose of analyzing the data was to aid in providing valid and reliable results in explaining the relation between post deployment transition, psychological well-being and family relationship as well as the moderating role of post deployment social support on the relationship between post deployment transition and psychological well-being. The Pearson Correlation Coefficient, Multivariate Analysis of Variance as well as the Hierarchical Multiple Regression were used in testing the four hypotheses outlined in the study. The Statistical Package of Social Sciences (SPSS) version 21.0 was used for preliminary analysis of data as well as for hypotheses testing.

#### 4.1 Preliminary Analysis.

This analysis consists of test for normal distribution of variables, descriptive analysis, Pearson's Product Moment correlation coefficient of variables as well as the reliability of study variables.

##### 4.1.1 Normal Distribution Analysis

The skewness and kurtosis of participants' scores on study variables were examined in order to aid in testing for normality. A variable with its skewness and kurtosis value ranging from 2 to -2 has a normal distribution (Tabachnick & Fidell, 2007). In the present study, the skewness and kurtosis of the variables ranged from -.27 to -.004 and -1.00 and -.21 respectively (See Table 4.0). Since the values from the study fall within the range of 2 and -2, the data obtained is normally distributed. Therefore, an appropriate parametric test can be used in this study.

#### 4.1.2 Reliability Analysis

The respective Cronbach's  $\alpha$  of each instrument used in the study were analyzed. The measure for Post Deployment Transition with twenty-four 24 items had a Cronbach's  $\alpha$  value of .90. The following are the Cronbach's  $\alpha$  values observed for the other variables; Psychological Well-being (17 items,  $\alpha$ = .93), Family Relationship (17 items,  $\alpha$ =.97) and Post Deployment Social Support (15 items,  $\alpha$ = .81). On the basis of the views of Brewerton and Millward (2001) in that the minimum reliability range of a scale is from 0.6 to 0.7, all the scales used in the study are said to be reliable since they all scored above the minimum reliability range.

#### 4.1.3 Descriptive Analysis

The means and standard deviation of the raw data acquired were examined as the part of the descriptive analysis and the results are showed in the Table 4.0 below.

**Table 4.0: Descriptive Statistics and Reliability Indices of Variables (N= 134)**

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<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>Alpha</b>
Post Deployment Transition	67.33	15.48	35.00	104.00	-.004	-.66	.90
Psychological Well-being	47.96	14.71	19.00	79.00	-.27	-1.00	.93
Family Relationship	73.74	26.84	17.00	118.00	-.27	-1.00	.97
Post Deployment Social Support	51.59	10.88	21.00	74.00	-.15	-.212	.80

---

Observation from Table 4.0 shows Post Deployment Transition having a mean and standard deviation of 67.33 and 15.48 respectively as well as a minimum and maximum scores of 35 and 104 respectively. In comparison to the sample population mean of the developers of the

instrument ( $M= 41.05$ ), it can be observed that the population mean is higher than the standardized norm, therefore, they had greater post deployment transition challenges. In addition, the mean score, standard deviation, minimum and maximum score for Psychological Well-being were 47.96, 14.71, 19 and 79 respectively. The study population performed better on psychological well-being since the mean was lower than the standardized norm ( $M=63.6$ ). Also, Family relationship reported a mean as well as a standard deviation of 73.74 and 26.84 and as well as a minimum and maximum scores of 17 and 118 respectively. The study sample performed poorer on family relationship than the standardized norm ( $M=79.5$ ) because their mean score was lower. Again, with a mean and standard deviation of 51.59 and 10.88 respectively, post deployment social support recorded a minimum and maximum score of 21 and 74 respectively. Here also, the mean score of the sample population is lower than the standardized norm ( $M= 60.53$ ), meaning that they received less post deployment social support.

#### **4.1.4 Pearson Correlations among Variables**

As a prerequisite for performing regression analysis in the present study, the Pearson Product Moment Correlation analysis was used to examine the relationship between dependent variable, the independent variable as well as the moderating variable. Summary of the results obtained are presented in Table 4.1.

**Table 4.1: Summary of Pearson Correlation Matrix of the Relationship between Study Variable (N= 134)**

Variables	1	2	3	4
<b>1. Post Deployment Transition</b>	-	-	-	-
<b>2. Psychological Well-being</b>	.695**	-	-	-
<b>3. Family Relationship</b>	-.457**	-.427**	-	-
<b>4. Post deployment Social Support</b>	-.526**	-.587**	.597**	-

\*\* Correlation is significant at the 0.01 level (1-tailed).

From Table 4.1 above, there was a significant positive relationship between post deployment transition and psychological well-being ( $r = .695, p < .01$ ). This means that as post deployment transition challenges increases, psychological challenges increases as well and therefore service personnel who were faced with higher transition stressors had poorer psychological well-being. In addition, post deployment transition had a significant negative relationship with family relationship ( $r = -.457, p < .01$ ), meaning that, the higher the level of difficulty in post deployment transition, the lower the level of family relationship. In other words, as service personnel encountered higher transition stressors, they were not able to relatively relate well with the family and when they experienced less transition stressors, family relationship became less difficult. Furthermore, the results indicate that post deployment social support recorded a significant negative relationship with post deployment transition ( $r = -.526, p < .01$ ) and psychological well-being ( $r = -.587, p < .01$ ) as well as a significant positive relationship with family relationship ( $r = .597, p < .01$ ).

## 4.2 Hypotheses Testing

Four hypotheses were proposed based on the objectives stated in this study. Hypotheses 1 and 2 were analyzed using the Pearson Correlation matrix. Hypotheses 3 and 4 were analyzed using the Multivariate Analysis of Variance and the Hierarchical Multiple Regression respectively.

### Hypothesis One

The first hypothesis assessed whether there will be a positive relationship between post deployment transition and psychological well-being of military personnel. This hypothesis was examined using the Pearson Correlation Coefficient (Pearson's  $r$ ) in order to aid in analyzing the relationship between post deployment transition and psychological well-being. Summary of the results are shown in Table 4.2 below.

**Table 4.2 Results of the Pearson Correlation Coefficient for Post Deployment Transition and Psychological Well-being (N= 92)**

Variables	1	2	Sig.
1. Post Deployment Transition	-	.695	.000
2. Psychological Well-being	-		

The results from the Pearson correlation coefficient indicated a significant positive relation between post deployment transition and psychological well-being ( $r = .695$ ,  $p < .01$ ). In view of this, hypothesis one which states that “there will be a positive relationship between post deployment transition and psychological well-being” was supported.

### Hypothesis Two

This hypothesis which examined whether post deployment transition will have negative association with the quality of military personnel’s family relationship was analyzed using the Pearson Correlation Coefficient (Pearson’s  $r$ ). This was to help in identifying the association between post deployment transition and family relationship. Summary of the results obtained are presented in the Table 4.3 below.

**Table 4.3 Results of Pearson Correlation Coefficient for Post Deployment Transition and Family Relationship (N= 92)**

Variables	1	2	Sig
1. Post Deployment Transition	-	-.457	.000
2. Family Relationship	-		

Results from the Pearson  $r$  showed a negative relationship between post deployment transition and family relationship. In addition, the relationship was a significant one ( $r = -.457, p < .01$ ). Therefore, Hypotheses two which states that “post deployment transition will have a negative association with the quality of family relationship” was supported.

### Hypothesis Three

This hypothesis assessed if post deployed military personnel are more likely to have low psychological well-being and family relationship than their non-deployed counterparts. The hypothesis was analyzed using the Multivariate Analysis of Variance (MANOVA). This is because, it compared two groups of the same sample on two dependent variables measured at least on an interval scale. Summary of the results are presented in Table 4.4

**Table 4.4: Summary of MANOVA Results (N= 134)**

	Wilks' L	F	df	p	Partial $\eta^2$
<b>Group</b>	.950	3.439	1,132	.035	.64

The Multivariate Analysis of Variance (MANOVA) was conducted to find out the difference between deployment status and psychological well-being as well as family relationship among service personnel. The test showed a significance difference between deployment status, psychological well-being and family relationship (Wilks' L= .950, F (1, 132) = 3.44,  $p < .05$ ,  $\eta^2 = .64$ ). Presented below is the significance of the overall tests between deployment status and the univariate main effects.

**Table 4.5: Summary of Between Subject Effects (N= 134)**

Variable	Group	Mean	SD	df	F	p	$\eta^2$
PWB	Deployed	49.88	14.56	1,132	5.142	.02	.615
	Non-Deployed	43.76	14.34				
FR	Deployed	70.42	25.90		4.596	.03	.567
	Non-Deployed	81.00	27.75				

PWB stands for Psychological Well-Being and FR stands for Family Relationship.

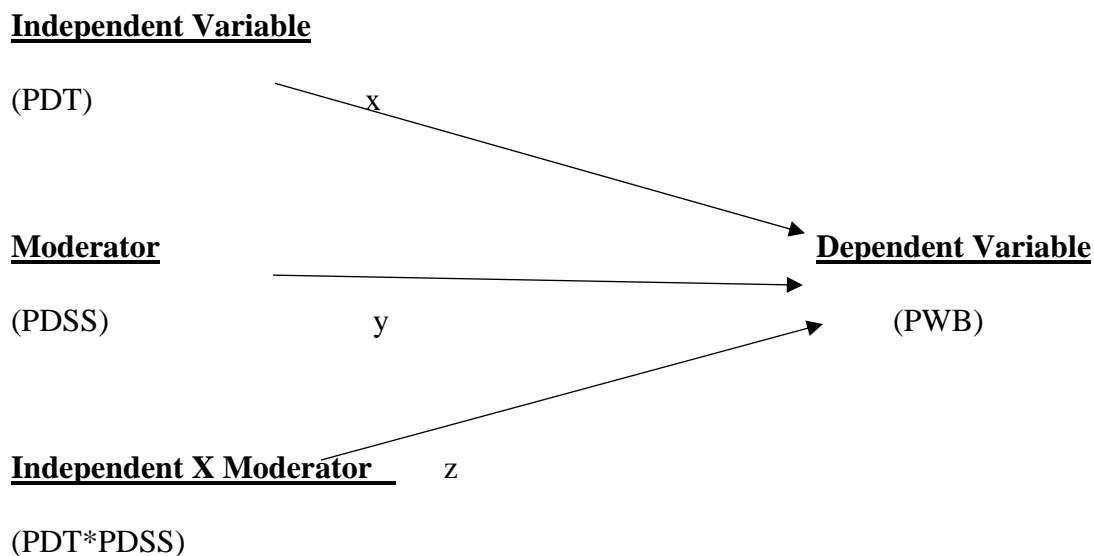
The results from Table 4.5 indicate that that deployment status had a significant influence on psychological well-being (F (1, 132) = 5.142,  $p < .05$ ,  $\eta^2 = .615$ ). Also the mean scores obtained shows that post deployed soldiers (M= 49.88, SD= 14.56) reported higher PTSD and therefore had a poorer psychological well-being than non-deployed soldiers (M= 43.76, SD= 14.34), because the higher the score, the higher the psychological challenges. In addition, deployment

status had a significant influence on family relationship ( $F(1, 132) = 4.596, p < .05, \eta^2 = .567$ ).

The mean also shows that post deployed personnel ( $M=70.42, SD=25.90$ ) performed poorer on family relationship than non-deployed personnel ( $M=81.00, SD=27.75$ ). Therefore, the hypotheses “Post deployed personnel will perform poorer on psychological well-being and family relationship than non-deployed” was supported.

#### Hypothesis Four

The fourth hypothesis assessed whether post deployment social support will moderate the relationship between post deployment transition and psychological well-being. Therefore, a moderating analysis was conducted.



**Figure 4.0: Path diagram of the moderating model (Baron & Kenny, 1986)**

Each of the three paths in Figure 4.0 are causal and relate to psychological well-being, which is the outcome or dependent variable. The first path is the effect of post deployment transition as an independent variable (x). The second path is the influence of post deployment social support as a moderator (y). The third path (z) is the interaction between the independent variable (post deployment transition) and the moderator (post deployment social support) on the dependent

variable (psychological well-being). Therefore, hypothesis four is confirmed if there is a significant interaction (z).

In order to test for significance, the hierarchical multiple regression was used. This is because, the required significant correlation between post deployment transition and psychological well-being was established. The outcome of the analysis is in Table 4.6 below.

**Table 4.6: Hierarchical Multiple Regression for Post Deployment Social Support on the Relationship between Post Deployment Transition and Psychological Well-being. (N= 92)**

Model	B	Std. Error	$\beta$	F	p
Step 1: Constant	6.266	4.928			.207
PDT	.651	.71	.69	83.20	.000
Step 2: Constant	37.363	9.694			.000
PDT	.500	.079	.53		.000
PDSS	-.406	.111	-.306	54.01	.000
Step 3: Constant	37.163	9.681			.000
PDT	.494	.079	.53		.000
PDSS	-.384	.113	-.290		.001
PDT*PDSS	.006	.005	.083	36.54	.264

$R^2 = .483, .551$  and  $.558$  for steps 1, 2 and 3 respectively.  $\Delta R^2 = .483, .068$  and  $.006$  for steps 1, 2 and 3 respectively  $**p < .01$ .

The analysis from Table 4.6 indicate in step one that post deployment transition significantly predicted psychological well-being (PTSD) ( $\beta = .695, p < .01$ ) as well as accounted for a 48.3% variance in explaining psychological well-being ( $F(1,90) = 83.20, p < .01, R^2 = .483$ ). The second step indicated that post deployment social support explained 6.8% variance in psychological well-being (PTSD) and this contribution was significant ( $F(1,90) = 54.01, p < .01, R^2 = .551$ ). In other words, post deployment social support had a significant negative relationship

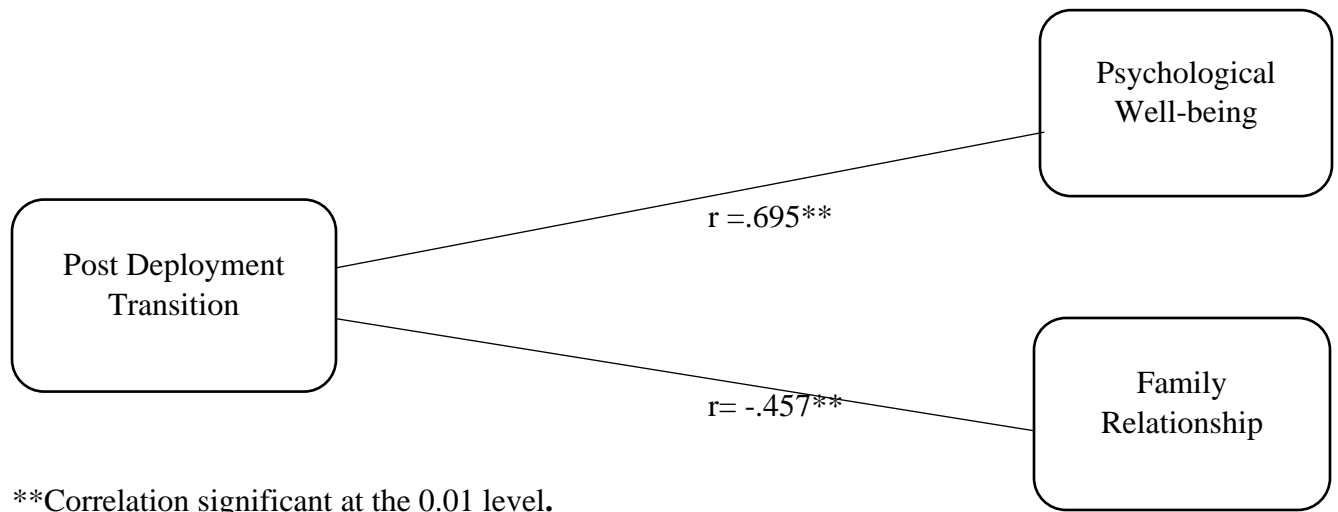
with psychological well-being ( $\beta = -.306, p < .01$ ). At step three, interaction between post deployment transition and post deployment social support did not significantly predict psychological well-being (PTSD) even though it accounted for 0.6% variance in explaining psychological well-being ( $F(1,90) = 36.54, p > .01, R^2 = .558$ ). In other words, the interaction was not statistically significant ( $\beta = .083, p > .01$ ). Therefore, the fourth hypothesis was not supported.

### **4.3. Summary of Findings**

Four hypotheses were tested and below are the outcomes;

1. Post deployment transition had a positive relationship with psychological well-being of military personnel (hypothesis 1).
2. Post deployment transition had a negative association with the quality of military personnel's family relationship (hypothesis 2).
3. Post deployed military personnel experienced low psychological well-being as well as low family adjustment than non-deployed military personnel (hypothesis 3).
4. Post deployment social support did not significantly moderate the relationship between post deployment transition and psychological well-being (hypothesis 4)

**Observed Model**



\*\*Correlation significant at the 0.01 level.

**Figure 4.1: A summary of the observed relationship among study variables**

From the above, Post deployment Transition has a significant relationship with Psychological Well-being and Family Relationship.

## **CHAPTER FIVE**

### **DISCUSSION**

The present study aimed at examining the relationship between Post Deployment Transition, Psychological Well-being and Family Relationship among soldiers of the Ghana Armed Forces. The moderating role of Post Deployment Social Support on the relationship between Post Deployment Transition and Psychological Well-being was also analyzed. Results are also discussed with reference to the theories and previous literature that guide the study. Furthermore, the implications of the study findings on theory and recommendations for future studies are discussed.

#### **5.1 Discussion of findings**

The section explains as well as discuss the results presented in the previous chapter (Chapter 4). This is in accordance with the tested hypotheses and related studies as well as theories used in the study. This is to help provide an appreciable understanding of the data analysis results in the study.

##### **5.1.1 Relationship between post deployment transition and psychological well-being**

This study examined the relationship between post deployment transition and psychological well-being. Findings from the analysis conducted showed that the hypothesis “There will be a positive relationship between post deployment transition and psychological well-being of military personnel” was supported. The Pearson r correlation revealed a significant positive relationship between post deployment transition and psychological well-being. The PTSD Checklist Military Version used to measure psychological well-being indicate that a higher score denotes higher psychological challenges, that is, PTSD symptoms and a lower score denotes lower psychological challenges (PTSD). This means that an increase or decline in the difficulty

level of post deployment transition could result in an increase or decline in psychological challenges associated with PTSD among military personnel. Also a decline or increase in the occurrence of PTSD symptoms could lead to a decline or increase in post deployment transition challenges that service personnel experienced. For instance, military personnel who faced more transition stressors such as, problems in adjusting to family and work life or not given adequate reception upon returning, were more likely to have higher psychological challenges such as losing interest in things one used to enjoy or having feelings of emotional numbness as opposed to those who were able to have a smooth transition. Also, those who experienced psychological challenges associated with PTSD like depression or avoidance were more likely to experience post deployment transition challenges like communication problems and adjustment challenges than those who experienced little or no PTSD symptoms.

Contrary to this finding, some studies have argued that deployment related psychological well-being is mainly due to experiencing trauma during deployment (Adler et al., 2005; Zamorski et al., 2014). However, consistent with the outcome of this study, other studies suggest that the influence of stressors that occur after returning from deployment are more important than deployment itself (Blevins et al., 2011; Marek et al., 2012; Meis et al., 2010). By way of highlighting the significance of post deployment transition on the psychological health of soldiers, Thomas et al. (2010) evaluated the prevalence rate of depression and PTSD symptoms at 3 months and 12 months post deployment. They observed that the prevalence of depression and PTSD symptoms increased with time (9%-31%), indicating other stressors face by military personnel upon returning worsened that psychological health.

According to the homecoming theory, the shock of being misunderstood can lead to emotional withdrawal and alienation from family which poses as a psychological challenge for returning

soldiers during post deployment transition (Schuetz, 1945). In other words, as a form of post deployment transition challenge, the kind of reception received by service personnel from family and friends at home can affect their psychological well-being. In line with this, Bolton, Litz, Glenn, Orsillo and Roemer (2002) found out that more positive homecoming experience was related to lower psychological distress levels and a more negative homecoming reception was related to higher levels of psychological distress. In addition, they emphasized the essential role of homecoming experience on post peacekeeping wellbeing as being independent of the level of exposure to deployment stressors.

Also, Marini, Wadsworth, Christ and Franks (2017), examined the association between emotion expression and avoidance during the transition process and the psychological health of military personnel. They observed a positive relationship between emotion expression and psychological health and a negative relation between avoidance and psychological health. This indicates that the more emotions expressed during the transition period, the better the psychological health of personnel but psychological health decline as military personnel withdraw from expressing their emotions. In addition, the lesser the rate of avoidance by way of communicating more with family and friends, the better the psychological health but as the rate of avoidance increase by way of less communication, psychological health declines.

### **5.1.2 Relationship between post deployment transition and family relationship.**

The second hypothesis was to determine if post deployment transition would have a negative association with the quality of family relationship. The Pearson Correlation Coefficient was used to analyze the hypothesis “Post deployment transition will have a negative association with the quality of military personnel’s family relationship”. Results obtained from the correlation analysis showed that post deployment transition had a significant negative relationship family

relationship. In other words, an increase in post deployment transition stressors could result in a decrease in the ability to relate well with family members and a decrease in transition stressors could lead to an increase in the ability to have a quality relationship with family members. Also, soldiers who had family problems were more likely to have challenges transiting back home after deployment than those who encountered less family relationship problems. This means that, post deployed military personnel who had more challenges relating with family members were less likely to have a successful transition and those who had less family relationship challenges were more likely to have a better transition from deployment to being at home.

As postulated by the homecoming theory, couples who are of the view that marriage or romantic relationship is recurrent and as a result there are bound to be separation from time to time are more likely to have a successful transition and adjustment than couples who view marriage or romantic relationship as being solely physical. In other words, military personnel who have a physical view about their marriage are more likely to experience transition stressors such as marital or relationship problems and people refusing to listen to their deployment experience which can lead to more family relationship challenges such as communication challenges and loss of respect. On the other hand, personnel who have a recurrent view about their marriage are more likely to avoid such transition stressors and relate well with spouse and children.

This means that service personnel who experience more transition stressors are likely to encounter more family relationship problems. In relation to this, Sayers et al. (2009) observed that most of married participants involved in their research who were faced with reintegration challenges reported more family issues like feeling like a guest at home, children acting afraid as well as having feelings of uncertainty about family roles.

In a related study, Baptist et al. (2011) found out that soldiers who had communication challenges and therefore refused to share their experience were faced with problems of spouse avoiding sexual desires as well as the over-extension of responsibilities which had a negative impact on the quality of their marital relationship. Also, separation that comes with deployment has an influence on the relationship between parents and their child or children (Lowe, Adams, Browne & Hinkle, 2012, Riggs & Cusimano, 2014).

Military post deployment transition comes with its own challenges with respect to family relationship. Therefore, it is important for service personnel to identify the skills needed to overcome these stressors in order to help them have an effective and a successful transition.

### **5.1.3 Relationship between deployment status, psychological well-being and family relationship.**

The study sought to identify which group of military personnel (post deployed or non-deployed) will perform better on psychological well-being and family relationship. The Multivariate Analysis of Variance (MANOVA) was employed to analyze the hypothesis “Post deployed military personnel will exhibit poorer psychological well-being and family relationship than their non-deployed military personnel”. Analysis conducted on this hypothesis showed a significant difference between deployment status, psychological well-being and family relationship. In addition, post hoc analysis revealed that post deployed soldiers exhibited poorer psychological well-being and family relationship than non- deployed.

The difference in psychological well-being and family relationship among the two groups can be explained using the role exit theory. The theory states that a change in a role that is central to one’s identity if not managed well can have an impact on the individual (Ebaugh, 1977). In other words, among the two groups involved in the study, post deployed personnel are the ones that

have experienced role change, that is, from a deployed soldier to being a spouse or a parent. Since the non-deployed soldiers have not experienced any form of deployment, they do not experience role change, therefore, they are not faced with the challenges that come with post deployment transition. As indicated earlier in this study that post deployment transition had a significant positive influence on psychological well-being and family relationship, the outcome of the third hypothesis helps confirm that post deployed military personnel are faced with additional challenges that affect their wellbeing as well as their ability to relate well with family members at home. This explains why they performed poorer on psychological well-being and family relationship than their non-deployed counterparts.

Knobloch, Ebata, McGlaughlin and Ogolsky (2013) reported that during post deployment transition, military personnel are faced with depressive symptoms and relational turbulence that affects their ability to reintegrate. Service personnel who are able to manage these stressors are able to transition back to home smoothly and therefore have good psychological health as well relate well with family members at home. However, those who are unable to manage such transition stressors are face with psychological and family relationship problems. Since, non – deployed personnel do not have to deal with transition, there are spared from its associated problems and therefore are likely to perform better on psychological well-being and family relationship.

In a related study, Vasterling et al. (2010) examined the influence of deployment experience and post deployment stress on PTSD symptoms increase among post deployed and non-deployed soldiers. The study involved both Active duty soldiers and National Guards. They observed that post deployed soldiers reported an increase in PTSD symptoms from pre-deployment to post deployment than their non-deployed counterparts. In addition, among post deployed soldiers,

more post deployed National Guards (14%) reported higher PTSD symptoms than deployed active soldiers (12%). This was attributed to the fact that the period between returning home and post deployment assessment was relatively longer for National Guards than active-duty soldiers. This means that, post deployment transition stressors increase the prevalence of PTSD symptoms among the National Guards.

In addition to depressive symptoms and relational turbulence, high rates of alcohol use and its associated impact on wellbeing and family relationships have been observed among soldiers returning from deployment. Comparing post-deployed and non-deployed soldiers, Jacobson et al. (2008) noticed that service personnel who have returned from deployment were likely to develop new-onset of binge drinking as well as alcohol related problems than those who have not been deployed and this can have an impact on their mental health as well as the quality of family relationships.

#### **5.1.4 Moderating role of post deployment social support on the relationship between post deployment transition and psychological well-being.**

The fourth hypothesis evaluated the role of post deployment social support in moderating the association between post deployment transition and psychological well-being. The hypothesis “Post deployment social support will moderate the relationship between post deployment transition and psychological well-being” was analyzed using the Hierarchical Multiple Regression. Results obtained from the study showed that social support received after returning from deployment duties did not moderate the relationship between post deployment transition and psychological well-being. In other words, the impact of post deployment transition on psychological well-being was neither strengthened nor weakened by the amount of social support received. This means that, regardless of the level of support received by military personnel upon

returning from the deployment, stressors related to their post deployment experience had an influence on their mental health.

This surprising outcome might be a result of soldiers in this study not accurately responding to items on the psychological well-being scale out of fear of stigma or being seen as weak (Blocker & Miller, 2013; Hoge & Castro, 2012) and this might have led to the non-significant interaction effect. However, this outcome of the study is in line with that of Martin et al., (2015). In that study, they observed that social support received after returning from deployment duties did not moderate the relation between length of being at home after last deployment and a psychological problem like suicidal ideation. Thus, whether a soldier received social support or not, suicidal ideation was related to post deployment experiences.

Nonetheless, this study outcome is somewhat surprising since in most previous studies, post deployment social support significantly moderated the association between post deployment experiences and psychological well-being (Charuvastra & Cloitre, 2008; DeBeer et al., 2014; Griffith & West, 2010; Martin et al., 2015; Monteith et al., 2018; Possemato et al., 2014; Smith et al., 2013, Welsh et al., 2015). Thus, even though transition stressors experienced after deployment might have a significant influence on the psychological health of soldiers, the level of social support that post deployed soldiers received from family and friends reduced or increased the intensity of the effects.

Also, this study finding poses as a challenge to the transition theory. According to the transition theory, an individual's ability to transition is influenced by the support received from family units, friends and intimate relationships. Thus, even though there is a change in relationships, routines, assumptions and roles as a result of the deployment cycle, the social support given to returning military personnel from deployment can help reduce feelings of emotional withdrawal,

hyper arousal and depressive symptoms that are associated with post deployment transition.

However, in this study, social support did not have an influence on the adverse effects associated with the transition process. In other words, regardless of whether one received social support upon arriving from deployment or not, in this study, the stressors related to the transition process had an influence on their psychological health. This is in line with Burns (2010) who argued that it is dangerous to assume that all the variable of transition, namely, self, support, situation and strategy, are always present during transition. Thus, in this study, support was not accounted for during the transition process of the soldiers involved in the study. Therefore, in the application of Schlossberg's transition theory, careful consideration must be given to the context within which it is being applied.

Even though post deployment social support did not have a moderation effect in this study, it independently predicted psychological health. This finding is consistent with that of Pietrzak et al. (2009) where soldiers in the PTSD group scored lower on post deployment social support as well as unit support, indicating that unit support and post deployment social support were significant in addressing issues of post deployment PTSD and depressive symptoms severity. Also, James, Kampen, Miller and Engdahl (2013) in their study observed that post deployment social support was a strong predictor for psychological well-being challenges like depressive symptoms and post-traumatic stress. Similar observation was also made by King et al. (2006) when they assessed the relationship between post deployment social support and PTSD among 1990-1991 veterans of the Gulf War.

In a related study, Shea, Reddy, Tyrka and Sevin (2013) observed that, among National Guard soldiers in the United States, post deployment social support independently predicted PTSD. In addition, Han et al. (2014) in a longitudinal study observed that, within active U.S Army

soldiers, unit support before deployment did not predict PTSD severity as this might be due to the fact that soldiers experience more unit support during deployment as compared to unit support given before deployment. However, post deployment social support had a significant negative correlation with PTSD severity and this indicates that the influence of social support received from family, friends as well as community play an important role in minimizing the severity of PTSD symptoms. Thus even though post deployment social support did not have a significant moderation effect on post deployment transition and psychological well-being, its relevance in predicting psychological well-being cannot be overlooked.

## **5.2 Implication of the study**

The main aim of this study was to find out the relationship between post deployment transition, psychological well-being and family relationship among military personnel in the Ghana Armed Forces. The study outcome was in line with this aim in that, it confirmed that post deployment transition predicted psychological well-being and family relationship. This means that, military personnel do face psychological and family relationship challenges when transiting from deployment to being at home.

The outcome of this study will add to literature on post deployment challenges in Ghana in that, not only does post deployment experience affect psychological well-being as reported by previous studies, it also can have an impact on the quality of family relationships. In other words, the results from this study showed that there was a significant relationship between what soldiers experience when they return from deployment and the quality of the relationship they have with their spouse and children. Therefore, it adds to the few existing literature that address the quality of military personnel's family relationship with respect to their post deployment experiences.

Most of the attention of literature have been on traumatic events and PTSD. Findings from the present study adds to the relatively few studies that advocate or argue that individuals or soldiers can also develop PTSD from experiencing non-traumatic event, which is in this case is post deployment transition. In other words, returning soldiers from deployment are not only affected by what they encounter during deployment with regards to their mental health but also what happens to them when they return home. This will aid in serving as a form of guide to future research on soldiers returning from deployment duties.

Also, the findings give empirical support for the homecoming theory and the role exit theory as well as challenge some assumptions of the transition theory. In addition, the study's quantitative and cross sectional nature serve as a foundation for longitudinal research in this area as it gives a preview of the relationship between post deployment transition, psychological well-being and family relationship. Furthermore, findings from the study highlight the need to provide psychological assistance to returning Ghanaian military personnel from deployment duties. For instance, the Battlemind training in USA and Transition program in Canada are some of the interventions put in place to aid returning soldiers deal with psychological distress associated with post deployment transition as well as help them relate well with family members after deployment. Such programs can be adopted and used to help Ghanaian soldiers.

### **5.3. Suggestions and Recommendations**

The following suggestions and recommendations are made on the basis of the current study findings. In most of the developed countries like USA and Canada, there are well defined programs to aid military personnel to have a successful transition from deployment to being at home. Some of the services provided in such programs include therapy, information, advice as well as training on successful transition. Most of these programs focus not only on the short term

benefit to military personnel but also on the long term as follow up evaluation of programs are done consistently.

The Transition program in Canada is one of the well-defined programs to help soldiers deal with stress related to post deployment transition such as anger outburst, drinking problems, withdrawal, depression as well as relation or marital problems. Intervention is in the form of group therapy led by professionals. Military personnel with similar deployment experience and post deployment stressors share their experience with each other without being judged and this have yielded positive feedbacks. On the basis of the outcome of the current study which indicates that post deployment transition had an influence on psychological well-being and family relationship, this program can be implemented in Ghana for returning soldiers to have a safe space where they can share their transition experience as well as seek help from professionals to aid in limiting the effects of the stressors experienced during transition.

Also it will be of great help to soldiers in Ghana as more qualified psychologists are employed in the Ghana Armed Forces. Such qualified psychologist can travel along with deployed soldiers and help prepare them for life after deployment. In addition, since the qualified psychologist will have the same deployment experience as the deployed service personnel, he or she will be able to better understand their experiences during deployment which will in turn help in providing the required assistance during the post transition period. In so doing, the needed professional guide or help can be given to returning soldiers from peacekeeping duties in order to aid them transition well into daily life routines.

Furthermore, a multidimensional approach could be adopted to study this concept of post deployment transition. Psychologist, physical therapist as well as other stakeholders should join hands together to come up with a more holistic approach in dealing with transition stressors. This

can help identify appropriate strategies and interventions that can be of help to military personnel when transiting from deployment to being at home. Also, there should be future research on the influence of post deployment transition on female soldiers as well as make comparison between female soldiers and male soldiers with regards to difference in transition experience. In addition, future research should include spouse as well as children. Last but not least, there should be a longitudinal study on the effects of post deployment transition on psychological well-being and family relationship in the Ghanaian context as well as a comparative study between commissioned and non-commissioned officers in Ghana on post deployment transition.

#### **5.4 Limitation**

Most of the soldiers were not at home when data was being collected as most of them had gone to work. Therefore, the researcher was limited to collecting data in the evening and on weekends as during these periods of time, soldiers reported being tired and not willing to partake in the study. Also, some of the soldiers were hesitant to complete the questionnaire because they thought the questions were too many. This affected the researcher's targeted sample size as a greater sample size would be more representative of the population as well as make the findings generalizable.

The research method used in the study had some limitations. The quantitative nature of the study prevented the researcher from acquiring detailed and subjective views on post deployment transition experiences of participants. Also, findings from the study are not devoid of bias, therefore, cannot be generalized to all soldiers because the instruments used to examine the constructs were self-reported. Nonetheless, the findings from the study is not different from previous studies that used measures that were self-reported.

Even though an association between variables were observed, the study could not establish a direct cause-effect relationship between post deployment transition, psychological well-being and family relationship. As a result of the use of cross sectional design as well as regression for the study, a reciprocal relationship could not be established either but only a predictive relationship. Due to time constrains, it was impossible to study the long term effects of transition stressors as this can be achieved through a longitudinal research.

### **5.5 Conclusion**

The present study employed the cross-sectional survey to examine the relationship between post deployment transition, psychological well-being and family relationship among service personnel of the Ghana Armed Forces. A total of One hundred and thirty-four (134) Non-commissioned Army soldiers of the Ghana Armed Forces participated in the study. Similar to other studies, it was observed that post deployment transition influences the psychological health of soldiers. In addition, the quality of the relationship between military personnel and family members were also influenced by post deployment experiences. However, contrary to other findings, social support from friends and family members received by military personnel upon their return from deployment duties did not have a moderating effect on the relationship between post deployment transition and psychological well-being.

The outcome of this study indicates that stressors that military personnel experience when they return from deployment have an influence on their psychological health and family life. This indicates the psychological health and family relationship needs that service personnel require upon returning from deployment. Therefore, there is the need for the development of policies and initiatives that targets such needs in order to aid a smooth post deployment transition among Ghanaian military personnel.

## REFERENCES

- Adler, A. B., Britt, T. W., Castro, C. A., McGurk, D., & Bliese, P. D. (2011). Effect of transition home from combat on risk-taking and health-related behaviors. *Journal of Traumatic Stress, 24*(4), 381–389.
- Adler, A. B., Huffman, A. H., Bliese, P. D., & Castro, C. A. (2005). The impact of deployment length and experience on the well-being of male and female soldiers. *Journal of Occupational Health Psychology, 10*(2), 121–137.
- Afful, J. (2017). *The effects of combat and reintegration experiences on the mental health of post-deployed soldiers of the Ghana Armed Forces*. (Unpublished doctoral dissertation). University of Ghana.
- Ahern, J., Worthen, M., Masters, J., Lippman, S. A., Ozer, E. J., & Moos, R. (2015). The challenges of Afghanistan and Iraq veterans' transition from military to civilian life and approaches to reconnection. *PLoS ONE, 10*(7): e0128599. doi: 10.1371/journal.pone.0128599.
- Armstrong, K., Best, S., & Domenici, P. (2006). *Courage after fire: Coping strategies for returning soldiers and their families*. Berkeley, CA: Ulysses Press.
- Baker, T. L., (1994). *Doing Social Research* (2<sup>nd</sup> ed.). New York McGraw-Hill Inc.
- Baptist, J. A., Amanor-Boadu, Y., Garrett, K., Goff, B. S. N., Collum, J., Gamble, P., & Gurss, H. (2011). Military marriages: The aftermath of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) deployments. *Contemporary Family Therapy, 33*, 199-214.

- Basham, K. (2008). Homecoming as safe haven or the new front: Attachment and detachment in military couples. *Clinical Social Work Journal*, 36, 83-96.
- Baysinger, K. (2015). Psycho-social variables regarding military reintegration. *Master of Social Work Clinical Research Papers*. Retrieved from [http://sophia.stkate.edu/msw\\_papers/422](http://sophia.stkate.edu/msw_papers/422).
- Blais, A. R., Thompson, M., & Donald, M. R. (2006). The post-deployment reintegration scale: Associations with organizational commitment, job-related affect, and career intentions. *Defence R&D Canada*, 1-48.
- Blevins, D., Roca, V. J., & Spencer, T. (2011). Life guard: Evaluation of an ACT-based workshop to facilitate reintegration of OIF/OEF Veterans. *Professional Psychology: Research and Practice*, 42(1), 32–39.
- Blocker, G. M., & Miller, J. A. (2013). Unintended consequences: Stigma and suicide prevention efforts. *Military Medicine*, 178, 473.
- Bog, M., Lindstrom, M., Filges, T., Lyk-Jensen S. V., & Jorgensen, A. M. K. (2014). Protocol: Deployment of personnel to military operations: Impact on mental health and social functioning. *The Campbell Collaboration*. Retrieved from <http://www.campbellcollaboration.org>
- Bolton, E. E., Litz, B. T., Glenn, M. D., Orsillo, S., & Roemer, L. (2002). The impact of homecoming reception on the adaptation of peacekeepers following deployment. *Military Psychology*, 14(3), 241-251.

- Bonanno, G. A., Mancini, A. D., Horton, J. L., Powell, T. M., LeardMann, C. A, Boyko, E. J., & Smith, T. C. (2012). Trajectories of trauma symptoms and resilience in deployed US military service members: Prospective cohort study. *The British Journal of Psychiatry*. doi:10.1192/bjp.bp.111.096552.
- Bowling, U. B., & Sherman, M. D. (2008). Welcoming them home: Supporting service members and their families in navigating the tasks of reintegration. *Professional Psychology: Research and Practice*. 39 (4),451–458.
- Brewerton, P. M., & Millward, L. J. (2001). *Organisational research methods: A guide for students and researchers*. London: Sage.
- Burns, E. (2010). Capturing the diversity of transition from a multidisciplinary perspective. *Australian Journal of Career Development*, 19(3), 43- 51.
- California National Guard. (2010). *CANG pilot program 2006–May 2010*. Unpublished manuscript.
- Castro, A. A., Hoge, C. W., & Cox, A. L. (2006). Battlemind training: Building soldier resiliency. *In Human Dimensions in Military Operations–Military Leaders’ Strategies for Addressing Stress and Psychological Support*, 42, 1-6.
- Charuvastra, A., & Cloitre, M. (2008). Social bonds and posttraumatic stress disorder. *Ann Rev Psychol*, 59, 301–328.
- Danish, S. J., & Antonides, B. J. (2013). The Challenges of reintegration for service members and their families. *American Journal of Orthopsychiatry*, 83(4), 550–558.

- DeBeer, B. B., Kimbrel, N. A., Meyer, E. C., Gulliver, S. B., & Morissette, S. B. (2014). Combined PTSD and depressive symptoms interact with post-deployment social support to predict suicidal ideation on Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Psychiatry Research, 216*, 357–362.
- Demers, A. (2011). When veterans return: the role of community in reintegration. *J Loss Trauma, 16*(2), 160–79.
- De Burgh, H. T., White, C. J., Fear, N. T., & Iversen, A. M. (2011). The impact of deployment to Iraq or Afghanistan on partners and wives of military personnel. *International Review of Psychiatry, 23*, 192–200.
- Duma, S. J., Reger, M. A., Canning, S. S., McNeil, J. D., & Gahm, A. G. (2010). Longitudinal mental health screening results among post-deployed US soldiers preparing to deploy again. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies, 23*(1), 52-58.
- Ebaugh, H. R. F. (1977). *Out of the cloister*. Austin, TX: University of Texas Press.
- Erbes, C. R., Meis, L. A., Polusny, M. A., & Compton, J. S. (2011). Couple adjustment and posttraumatic stress disorder symptoms in National Guard Veterans of the Iraq War. *Journal of Family Psychology, 25*(4), 479-487.
- Faber, A. J., Willerton, E., Clymer, S. R., MacDermid, S. M., & Weiss, H. M. (2008). Ambiguous absence, ambiguous presence: A qualitative study of military reserve families in wartime. *Journal of Family Psychology, 22*, 222-230.

- Gambardella, L. C. (2008). Role-exit theory and marital discord following extended military deployment. *Perspectives in Psychiatric Care, 44*(3), 169-174.
- Gottman, J. M., & Levenson, R. W. (1986). Assessing the role of emotion in marriage. *Behavioral Assessment, 8*, 31–48.
- Griffith, J., & West, C. (2010). The Army National Guard in OIF/OEF: Relationships among combat exposure, post-deployment stressors, social support, and risk behaviors. *Applied and Preventive Psychology, 14*, 86– 94.
- Han, S. C., Castro, F., Lee, L. O, Charney, M. E, Marx, B. P, ... & Brailey, K. (2014). Disorders, military unit support, post deployment social support and PTSD symptoms among active duty and National Guard soldiers deployed to Iraq. *Journal of Anxiety Disorders, 28*, 446–453.
- Hoge, C. W., & Castro, C. A. (2012). Preventing suicides in US service members and veterans: Concerns after a decade of war. *Journal of the American Medical Association, 308*, 671–672.
- Hoge, C.W., Grossman, S.H., Auchterlonie, J.L., Riviere, L.A., Milliken, C.S., & Wilk, J.E. (2014). PTSD treatment for soldiers after combat deployment: Low utilization of mental health care and reasons for dropout. *Psychiatric Services, 65*(8), 997-1004.
- Jacobson, I. G., Ryan, M. A. K., Hooper, T. I., Smith, T. C., Amoroso, P. J., Boyko, E. J., & Gackstetter, G. D. (2008). Alcohol use and alcohol-related problems before and after military combat deployment. *Journal of American Medical Association, 300*(6), 663-675.

- James, L. M., Van Kampen, E., Miller, R. D., & Engdahl, B. E. (2013). Risk and protective factors associated with symptoms of post-traumatic stress, depression, and alcohol misuse in OEF/OIF veterans. *Military medicine*, *178*(2), 159-165.
- King, D. W., King, L. A., Case, T., Hammond, C., & Stone, E. R. (2006). Directionality of the association between social support and posttraumatic stress disorder: A longitudinal investigation. *Journal of Applied Social Psychology*, *36*(12), 2980–2992.
- King, D. W., Leskin, G. A., King, L. A., & Weathers, F. W. (1998). Confirmatory factor analysis of the clinician-administered PTSD Scale: Evidence for the dimensionality of posttraumatic stress disorder. *Psychological Assessment*, *10*, 90-96.
- Knobloch, L. K., Ebata, A. T., McGlaughlin, P. C., & Ogolsky, B. (2013). Depressive symptoms, relational turbulence, and the reintegration difficulty of military couples following wartime deployment. *Health Communication*, *28*(8), 754-766.
- Knobloch, L. K., & Schmelzer, B. (2008). Using the Emotion-in-Relationships Model to predict features of interpersonal influence attempts. *Communication Monographs*, *75*, 219-247.
- Knobloch, L. K., & Theiss, J. A. (2012). Experiences of U.S. military couples during post-deployment transition: Applying the relational turbulence model. *Journal of Social and Personal Relationships*, *29*(4), 423-450.
- Laffaye, C., Cavella, S., Drescher, K., & Rosen, C. (2008). Relationships among PTSD symptoms, social support, and support source in veterans with chronic PTSD. *Journal of Traumatic Stress*, *21*(4), 394-401.

- Lester, P., Aralis, H., Sinclair, M., Kiff, C., Lee, K. H., Mustillo, S., & Wadworth, S. D. (2016). The impact of deployment on parental, family and child adjustment in military families. *Child Psychiatry & Human Development, 47*(6), 938-949.
- Lincoln, A., Swift, E., & Shorteno-Fraser, M. (2008). Psychological adjustment and treatment of children and families with parents deployed in military combat. *Journal of Clinical Psychology, 64*(8), 984-992.
- Lowe, K. N., Adams, K. S., Browne, B. L., & Hinkle, K. T. (2012). Impact of military deployment on family relationships. *Journal of Family Studies, 18*(1), 17-27.
- MacDermid-Wadsworth, S. M. (2010). Family risk and resilience in the context of war and terrorism. *Journal of Marriage and Family, 72*, 537-556.
- MacDonald, C., Chamberlin, K., Long, N., & Mirfin, K. (1999). Stress and mental health status associated with peacekeeping duty for New Zealand Defence Force Personnel. *Stress Medicine, 15*, 235-241.
- Marek, L., Hollingsworth, W. G., D'Aniello, C., O'Rourke, K., Brock, D. J. P., Moore, L., & Wiles, B. (2012). Returning home: what we know about the reintegration of deployed service members into their families and communities. Available online: <https://www.ncfr.org/ncfr-report/focus/military-families/returning-home>.
- Marini, C. M., Wadworth, S. M., Christ, S. L., & Franks, M. M. (2017). Emotion expression, avoidance and psychological health during reintegration: A dyadic analysis of actor and partner associations within a sample of military couples. *Journal of Social and Personal Relationships, 34*(1), 69-90.

- Martin, R. L., Houtsma, C., Green, B. A., & Anestis, M. D. (2015). Support systems: How post-deployment support impacts suicide risk factors in the United States Army National Guard. *Cogn Ther Res*, doi: 10.1007/s10608-015-9719-z.
- McNulty, P. A. F. (2005). Reported stressors and health care needs of active duty Navy personnel during three phases of deployment in support of the war in Iraq. *Military Medicine*, 170, 530-535.
- Meis, L. A., Erbes, C. R., Polusny, M. A. & Compton, J. S. (2010). Intimate relationships among returning soldiers: The mediating and moderating roles of negative emotionality, PTSD symptoms, and alcohol problems. *Journal of Traumatic Stress*, 23(5), 564–572.
- Michel, P. O., Lundin, T., & Larsson, G. (2003). Stress reactions among Swedish Peacekeeping Soldiers serving in Bosnia: A longitudinal Study. *Journal of Traumatic Stress*, 16(6), 589-593.
- Milliken, C. S., Auchterlonie, J. L., & Hoge, C. W. (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *Journal of the American Medical Association*, 298, 2141-2148.
- Mmari, K., Roche, K. M., Sudhinaraset, M., & Blum, R. (2009). When a parent goes to war: Exploring the issues faced by adolescents and their families. *Youth & Society*, 40, 455-475.
- Mol, S. S. L., Arntz, A., Metzmakers, J. F. M., Dinant, G. J., Vilters-van Montfort, P. A. P., & Knottnerus, J. A. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *The British Journal of Psychiatry*, 186(6), 494-499.

- Monteith, L. L., Hoffmire, C. A., Holliday, R., Park, C. L., Mazure, C. M., & Hoff, R. A. (2018). Do unit and post- deployment social support influence the association between deployment sexual trauma and suicidal ideation? *Psychiatry Research*, *270*, 673-681.
- Morse, J. (2006). *The new emotional cycles of deployment*. Retrieved June 1, 2010 from [www.hooah4health.com/deployment/familymatters/emotionalcycle.htm](http://www.hooah4health.com/deployment/familymatters/emotionalcycle.htm)
- Murphy, P. J., & Farley, K. M. J. (2000). Morale, cohesion and confidence in leadership. *The Human Command*, 311-331.
- National Center for Posttraumatic Stress Disorder. (2007). Common reactions to trauma. Retrieved from <http://www.ncptsd.va.gov/ncmain/information/reactions.jsp>
- Newby, J. H., Carroll, J. E., Ursano, R. J., Fan, Z., Shigemura, J., & Tucker-Harris, Y. (2005). Positive and negative consequences of a military deployment. *Military Medicine*, *170*(10), 815-819.
- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. T. (2009). Psychological resilience and post deployment social support protect against traumatic stress and depressive symptoms in soldiers returning from Operations Enduring Freedom and Iraq Freedom. *Depression and Anxiety*, 1-7.
- Possemato, K., McKenzie, S., McDevitt-Murphy, M. E., Williams, J. L., & Ouimette, P. (2014). The relationship between post-deployment factors and PTSD severity in recent combat veterans. *Military Psychology*, *26*(1), 15-22.
- Ray, S., & Heaslip, K. (2011). Canadian military transitioning to civilian life: A discussion paper. *Journal of Psychiatric and Mental Health Nursing*, *18*(3), 198-204.

- Reber, A. S., & Reber E. S. (2001). *The Penguin Dictionary of Psychology* (3rd ed.). London: Penguin.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). Research methods for business and management. *Doing Research in Business and Management: An introduction to Process and Method*, doi:10.4135/9781446280416.
- Riggs, S. A., & Cusino, A. (2014). The dynamics of military deployment in the family system: What makes a parent fit for duty? *Family Court Review*, 52(3), 381-399.
- Sahlstein, E., Maguire, K. C., & Timmerman, L. (2009). Contradictions and praxis contextualized by wartime deployment: Wives' perspectives revealed through relational dialectics. *Communication Monographs*, 76, 421-442.
- Sareen, J., Stein, M. B., Thoresen, S., Belik, S. L., Zamorski, M., & Asmundson, G. J. G. (2010). Is peacekeeping peaceful? A systematic review. *Canadian Journal of Psychiatry*, 55(7), 464-472.
- Sayers, S. L., Farrow, V. A., Ross, J., & Oslin, D. W. (2009). Family problems among recently returned military veterans referred for a mental health evaluation. *Journal of Clinical Psychiatry*, 70, 163-170.
- Schlossberg, N.K. (1984). *Counselling adults in transition: Linking theory to practice*, (1<sup>st</sup> ed.). New York: Springer.
- Seelig, A. D., Jacobson, I. S., Smith, B., Hooper, T. I., Boyko, E. J., & Gackstetter, G.A. (2010). Sleep patterns before, during, and after deployment to Iraq and Afghanistan. *Sleep*, 33(12), 615-622.

- Shea, M. T., Reddy, M. K., Tyrka, A. R., & Sevin, E. (2013). Risk factors for post-deployment posttraumatic stress disorder in National Guard/Reserve service members. *Psychiatry Research, 210*, 1042–1048.
- Shek, D. (1992). Meaning in life and psychological well-being: an empirical study using the Chinese version of the purpose in life questionnaire. *Journal of Genetic Psychology, 153*(2), 185-190.
- Simms, L. J., Watson, D., & Doebbeling, B. N. (2002). Confirmatory factor analyses of posttraumatic stress symptoms in deployed and non-deployed veterans of the Gulf War. *Journal of Abnormal Psychology, 111*, 637–647.
- Sinclair, R. R., & Britt, T. W. (2013). Military resilience: Remaining questions and concluding comments. In R.R. Sinclair & T.W. Britt (Eds), *Building Psychological Resilience in Military Personnel: Theory and Practice*, 237-251, Washington, DC, US: American Psychological Association.
- Smith, B. N., Vaughn, R. A., Vogt, D., King, D. W., King, L. A., & Shipherd, J. C. (2013). Main and interactive effects of social support in predicting mental health symptoms in men and women following military stressor exposure. *Anxiety, Stress & Coping, 26*(1), 52-69.
- Schuetz, A. (1945). The homecomer. *American Journal of Sociology, 50*, 369–376.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*, (3rd ed.). Boston: Allyn and Bacon.

- Theiss, J. A., & Knobloch, L. K. (2011). Relational turbulence and the post-deployment transition: self, partner, and relationship focused turbulence. *Communication Research*, 20(10), 1-25.
- Thomas, J. L., Wilk, J. E., Riviere, L. A., McGurk, D., Castro, C. A., & Hoge, W. C. (2010). Prevalence of mental health problems and functional impairment among active component and National Guard Soldiers, 3 and 12 months following combat in Iraq. *Arch Gen Psychiatry*, 67(6), 614-623.
- Thompson, M., & Past, L. (2000). Psychometric assessment and refinement of the homecoming issues inventory of the Human Dimensions of Operations (HDO) project. *Defence R & D Canada*, 1-77.
- Vasterling, J. J., Proctor, S. P., Friedman, M. J., Hoge, C. W., Heren, T., King, L. A., & King, D.W. (2010). PTSD symptom increases in Iraq-deployed soldiers: Comparison with non-deployed soldiers and associations with baseline symptoms, Deployment experiences and post-deployment stress. *Journal of Traumatic Stress*, 23(1), 41–51.
- Verey, A., & Smith, P.K. (2012). Post-combat adjustment: understanding transition. *Journal of Aggression, Conflict and Peace Research*, 4(4), 226 – 236.
- Vormbrock, J. K. (1993). Attachment theory as applied to wartime and job-related marital separation. *Psychological Bulletin*, 144, 122-144.
- Waller, E. (1944). *The Veteran comes back*. New York: The Dryden Press.
- Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993). The PTSD Checklist (PCL): *Reliability, validity, and diagnostic utility*. Poster presented at the

- annual meeting of the International Society for Traumatic Stress Studies, San Antonio, TX.
- Weins, T. W., & Boss, P. (2006). Maintaining family resiliency before, during, and after military separation. *Military life: The psychology of serving in peace and combat*, 3, 13–38, Bridgeport, CT: Praeger Security International.
- Welsh, J. A., Olson, J., Perkins, D. F., Travis, W. J., & Ormsby, L. (2015). The role of natural support systems in the post-deployment adjustment of active duty Military Personnel. *Am J Community Psychol*, 56, 69–78.
- Wilcove, G. L. (2005). *Results of the Navy Quality of Life Survey* (NPRST-TN-05-4). Millington, TN: Bureau of Naval Personnel.
- Wilcox, S. I., Oh, H., Redmond, S. A, Chicas, J., Hassan, A. M, Lee P. J. & Ell, K. (2015). A scope of the problem: post-deployment reintegration challenges in a National Guard Unit. *Work*, 50(1), 73-83.
- Yosick, T., Bates, M., Moore, M., Crowe, C., Philips, J., & Davison, J. (2012). A review of post-deployment reintegration: evidence, challenges, and strategies for program development. *Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury*.
- Zamorski, M. A., Rusu, C., & Garber, B. G. (2014). Prevalence and correlates of mental health problems in Canadian Forces Personnel who deployed in support of the mission in Afghanistan: Findings from post-deployment screenings, 2009–2012. *The Canadian Journal of Psychiatry*, 59(6), 319-326.

Zapf, M. (2010). Social work and the environment: Understanding people and place. *Critical Social Work*, 11(3).

APPENDICES

APPENDIX I: ETHICAL CLEARANCE



UNIVERSITY OF GHANA  
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

*P. O. Box LG 74, Legon, Accra, Ghana*

My Ref. No.....

25<sup>th</sup> April, 2019

Mr. Nathaneal Nartey Agah  
Department of Psychology  
University of Ghana  
Legon

Dear Mr. Agah,

**ECH 037/18-19: THE RELATIONSHIP BETWEEN POST DEPLOYMENT TRANSITION,  
PSYCHOLOGICAL WELL-BEING AND FAMILY ADJUSTMENT AMONG MILITARY PERSONNEL  
IN GHANA.**

This is to advise you that the above reference study has been presented to the Ethics Committee for the Humanities for a full board review and the following actions taken subject to the conditions and explanation provided below:

Expiry Date: 25/04/20  
On Agenda for: Initial submission  
Date of Submission: 19/11/18  
ECH Action: Approved  
Reporting: Bi-Annually



Please accept my congratulations.

Yours Sincerely,

Prof. C. Charles Mate-Kole.  
ECH Vice Chair

Cc: Dr. Wiafe-Akenteng C. Brenya, Department of Psychology, University of Ghana.  
Dr. Atindanbila Samuel, Department of Psychology, University of Ghana.

Tel: +233-303933866

Email: [ech@ug.edu.gh](mailto:ech@ug.edu.gh)

**APPENDIX II: APPROVAL LETTER FROM STUDY INSTITUTION**



General Headquarters  
Personnel Administration  
Ghana Armed Forces  
BURMA CAMP  
Accra 776474

GHQ/6368/PS1

3 May 2019

Mr Nathanael Nartey Agah

Dear Sir

**REQUEST TO CONDUCT ACADEMIC RESEARCH**  
**MR NATHANAEL NARTEY AGAH**

I am to convey the approval of your request to conduct academic research on the topic "The Relationship between Post-Deployment Transition, Psychological Well-Being and Family Adjustment among Military Personnel in Ghana".

Additionally, I am to convey that you should be guided by military regulations which spell out information or materials whose unauthorized disclosure could be detrimental to the interest of the nation. Furthermore, I am to request that a copy of your finished research work should be forwarded to this Department for retention.

This is respectfully submitted, please.

Yours faithfully

A handwritten signature in blue ink, appearing to be "WN Northey", written over a circular stamp or seal.

**WN NORTEY**  
Colonel  
for Director General

**APPENDIX III: CONSENT FORM**

UNIVERSITY OF GHANA



Official Use  
only Protocol  
number

**Ethics Committee for Humanities (ECH)**

PROTOCOL CONSENT FORM

**Section A- BACKGROUND INFORMATION**

Title of Study:	The Relationship between Post Deployment Transition, Psychological Well-being and Family Adjustment among Military Personnel in Ghana.
Principal Investigator:	Mr. Nathanael Nartey Agah
Certified Protocol Number	

Section B- CONSENT TO PARTICIPATE IN RESEARCH

**General Information about Research**

The study intends to examine the impact that homecoming experience have on the psychological well-being of Ghanaian soldiers as well as how they adjust to family life.

Completion of questionnaire by participants will take a minimum of twenty minutes and a maximum of thirty minutes. The researcher will verbally seek the consent of participants to partake in the study after which they will be presented with this form to sign.

#### Benefits/ Risks of the study

There will be no direct benefits associated with the study. However, because some aspects of the questionnaire might require recollection of painful memories there might be some psychological stress involved. The researcher plan on dealing with this issue by way of one on one self-administration of questionnaire. The researcher will talk with each participant about the risk of recalling painful memories when answering some of the items on the questionnaire before the questionnaire is administered. A participant who will be willing to partake in the study afterwards, will be given the questionnaire. On the other hand, the researcher will respect the decision of those who refuse to partake in the study because they might not want to risk remembering past stressful events that the questionnaire might evoke. Participants will be encouraged to talk with a licensed psychologist after completing the questionnaire.

#### **Confidentiality**

Participants are not supposed to write their names or provide any information that can be used to identify them in order to ensure anonymity. To ensure confidentiality, the researcher will be the only person who will access to research records.

#### **Compensation**

Participants will not be enticed or coerced to partake in the study in any shape or form either through gifts or compensations.

#### **Withdrawal from Study**

Participants are at liberty to decide at any point in the study to withdraw from participating in the study without any consequences. In addition, timely information that are of relevance to participants with regards to their willingness to withdraw from or continue with the study will be given to legal representatives of participants.

### Contact for Additional Information

In case participants want answers to any questions about the study as well as communicate any casualty related to the study, the researcher can be contacted through the details below

Mr. Nathanael Nartey Agah

University of Ghana

Email: [agahnat68@gmail.com](mailto:agahnat68@gmail.com)

Tel: 0249809074

If you have any questions about your rights as a research participant in this study you may contact the Administrator of the Ethics Committee for Humanities, ISSER, University of Ghana at [ech@isser.edu.gh](mailto:ech@isser.edu.gh) / [ech@ug.edu.gh](mailto:ech@ug.edu.gh) or 00233- 303-933-866.

### PARTICIPANT AGREEMENT

"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and am willing to give consent for me, my child/ward to participate in this study. I will not have waived any of my rights by signing this consent form. Upon signing this consent form, I will receive a copy for my personal records."

---

Name of Participants

---

Signature or mark of participants Date

**If participants cannot read and or understand the form themselves, a witness must sign here:**

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Name of witness

---

Signature of witness /Mark Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

---

Name of Person Who Obtained Consent

---

Signature of Person Who Obtained Consent Date

#### APPENDIX IV: SURVEY QUESTIONNAIRE

Dear respondent, below are a number of questions/statements to which you are required to choose an option depending on your personal evaluation. Please complete the questionnaire by ticking (✓) a response to each of the question/statement from the corresponding options provided. The information you provide in this study will be used for academic purposes only.

You can choose not to take part in this study. However, if you wish to take part in this study, please sign your signature here: \_\_\_\_\_.

Please don't write your name anywhere on this paper.

#### SECTION A: DEMOGRAPHIC INFORMATION

*Please answer a few questions about yourself*

1. Age: ..... Years
2. Gender: Male  Female
3. Military Status: PVT  LCPL  CPL  SGT  S/SGT  WO2  WO1 .
4. Educational level: Degree  Diploma  WASSCE  Other
5. Years of Service: 1-10 years  10-20 years  20-30 years
6. Number of Children .....
7. Religion: Christianity  Islam  Other
8. Deployment Status: Post Deployed  Non-Deployed
9. Post Deployment duration: 1-3 months  3-6 months  6-9 months  9-12 months .

**SECTION B**

**INSTRUCTION.**

This section is for **POST DEPLOYED SOLDIERS only**. It explores a variety of issues about the transition back into family, work and society after your deployment. Using the following scale, please indicate how often each of the following **occurred since your return from your deployment by ticking the box that applies to you**

*1 = Never*

*2 = Rarely*

*3 = Sometimes*

*4 = Frequently*

*5 = Very Frequently*

	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Frequently</i>	<i>Very frequently</i>
1. You felt proud about having served overseas					
2. You felt like a stranger in a strange land					
3. You experience difficulties maintaining interest at home					
4. You felt your family was proud of you for serving overseas					
5. You became interested in political discussions about the future of the foreign country.					
6. You regretted having served overseas					
7. You experience marital or relationship problems					
8. You felt anger at the government					
9. You felt like 'dropping out' of society					
10. You separated or divorced from your partner					
11. You thought about returning to the foreign country to help in some other way than in uniform					

12. You experienced a period of adjustment getting back to your old self.					
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Frequently</i>	<i>Very frequently</i>
13. You were given a special privileges or treatment by people in the community because of your deployment service					
14. You felt like getting out of the military					
15. You felt resentment over the way you were treated by people					
16. You experienced a period of adjustment settling back with your family					
17. You spoke in a public setting about your experiences of the deployment					
18. You tried to tell someone about your deployment experiences					
19. People were not interested or avoided listening to your deployment experiences					
20. You experienced a period of adjustment getting back to your normal work routine					
21. You were given special privileges or treatment by authorities at work or in the government because of your deployment service					
22. You felt like 'dropping out' of family life					
23. You experienced difficulties maintaining your professionalism at work.					
24. You felt that you had changed for the better as a result of your service overseas.					

**SECTION C:**

**INSTRUCTION**

This section is for **ALL** participants. Below is a list of problems and complaints that military personnel sometimes have in response to a stressful military experience.

Please read each one carefully and tick the box that applies to you.

*1 = Not at all*

*2 = A little bit*

*3 = Moderately*

*4 = Quite a bit*

*5 = Extremely*

	<i>Not At All</i>	<i>A little bit</i>	<i>Moderately</i>	<i>Quite a bit</i>	<i>Extremely</i>
1.Repeated, disturbing <i>memories, thoughts, or images</i> of a stressful military experience?					
2.Repeated, disturbing <i>dreams</i> of a stressful experience?					
3.Suddenly <i>acting or feeling</i> as if a stressful military experience <i>were happening again</i> (as if you were reliving it)					
4.Feeling <i>very upset</i> when <i>something reminded</i> you of a stressful military experience?					
5.Having <i>physical reactions</i> (e.g., heart pounding, trouble breathing, or sweating) when <i>something reminded</i> you of a stressful military experience?					

	<i>Not At All</i>	<i>A little bit</i>	<i>Moderately</i>	<i>Quite a bit</i>	<i>Extremely</i>
6.Avoid <i>thinking about</i> or <i>talking about</i> a stressful military experience or avoid <i>having feelings</i> related to it?					
7.Avoid <i>activities</i> or <i>talking about</i> a stressful military experience or avoid <i>having feelings</i> related to it?					
8.Trouble <i>remembering important parts</i> of a stressful military experience?					
9.Loss of <i>interest</i> in things that you used to enjoy?					
10.Feeling <i>distant</i> or <i>cut off</i> from other people?					
11.Feeling <i>emotionally numb</i> or being unable to have loving feelings for those close to you?					
12.Feeling as if your <i>future</i> will somehow be <i>cut short</i> ?					
13.Trouble <i>falling</i> or <i>staying</i> asleep?					
14.Feeling <i>irritable</i> or having <i>angry outbursts</i> ?					
15.Having <i>difficulty</i> concentrating?					
16.Being “ <i>super alert</i> ” or watchful on guard?					
17.Feeling <i>jumpy</i> or easily startled?					

**SECTION D:**

**INSTRUCTIONS**

**FOR ALL PARTICIPANTS.** This section measures adjustment to family life. Please indicate your answer by ticking the box that applies to you.

--

*1 = Completely Dissatisfied*

*2 = Dissatisfied*

*3 = Somewhat Dissatisfied*

*4 = Neutral*

*5 = Somewhat satisfied*

*6 = Satisfied*

*7 = Completely satisfied*

	<i>Completely Dissatisfied</i>	<i>Dissatisfied</i>	<i>Somewhat Dissatisfied</i>	<i>Neutral</i>	<i>Somewhat Satisfied</i>	<i>Satisfied</i>	<i>Completely Satisfied</i>
<b><i>Relation with spouse or partner</i></b>							
1. The love and understanding you receive in your relationship							
2. The communication within the relationship							
3. The way conflicts are resolved with your partner							
4. Your partner's support of your military career							

	<i>Completely Dissatisfied</i>	<i>Dissatisfied</i>	<i>Somewhat Dissatisfied</i>	<i>Neutral</i>	<i>Somewhat Satisfied</i>	<i>Satisfied</i>	<i>Completely Satisfied</i>
5.The compatibility of interests between you and your partner							
6.The level of respect in the relationship							
7.The physical aspect of your relationship							
8.The time away from home							
<b><i>Relationship with Children</i></b>							
9.The amount of time you have with your children							
10.The quality of time you spend with your children							
11.The love and understanding between you and your children							
12.The time spent away from home							
13.The care and attention your children receive while you are at Work							

	<i>Completely Dissatisfied</i>	<i>Dissatisfied</i>	<i>Somewhat Dissatisfied</i>	<i>Neutral</i>	<i>Somewhat Satisfied</i>	<i>Satisfied</i>	<i>Completely Satisfied</i>
14.The educational value of your children's activities							
15.The level of respect between you and your children							
16.The way conflicts are resolved with your children							
17.How well your children act when you tell them to do something							

**SECTION E:**

**INSTRUCTION**

This section should be answered by **POST DEPLOYED SOLDIERS only**. The statements below refer to social support after deployment. Please indicate how much you agree or disagree with each statement by ticking the box that applies to you.

*1 = Strongly disagree*

*2 = Somewhat disagree*

*3 = Neither agree nor disagree*

*4 = Somewhat agree*

*5 = Strongly agree*

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Strongly Agree</i>
1. The reception I received when I returned from my deployment made me feel appreciated for my efforts					
2. Family members and friends made me feel at home when I returned					
3. When I returned, people made me feel proud to have served my country overseas					

4. I am carefully listened to and understood by family members or Friends					
5. Among my family or relatives, there is someone who makes me feel better when I am feeling down					
6. I have problems that I can't discuss with family or friends.					
7. Among my friends or relatives, there is someone I go to when I need advice.					

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Strongly Agree</i>
8. People at home just don't understand what I have been through overseas					
9. There are people to whom I can talk about my deployment experiences.					
10. The people I work with respect the fact that I am a service member.					
11. My supervisor understands when I time off to take care of personal matters.					

12. My friends or relatives would lend money if I needed it					
13. My friends or relatives would help move my belongings if I needed to					
14. When I am unable to attend to daily chores, there is someone will help me with these tasks.					
15. When I am ill, friends or members will help out until I am well.					

*Thank you.*

**APPENDIX V: RELIABILITY OF VARIABLES AND CORRELATIONAL MATRIX**

Scale: Post Deployment Transition

Case Processing Summary

		N	%
Cases	Valid	91	67.9

Excluded	43	32.1
Total	134	100.0

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

#### Reliability Statistics

Cronbach's Alpha	N of Items
.904	24

#### Scale: Psychological Well-being

##### Case Processing Summary

		N	%
Cases	Valid	134	100.0
	Excluded	0	.0
	Total	134	100.0

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

#### Reliability Statistics

Cronbach's Alpha	N of Items
.930	17

#### Scale: Family Relationship

##### Case Processing Summary

		N	%
Cases	Valid	134	100.0

Excluded	0	.0
Total	134	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.975	17

Scale: Post Deployment Social Support

Case Processing Summary

		N	%
Cases	Valid	92	68.7
	Excluded	42	31.3
	Total	134	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.804	15

**Correlations**

		PDT	PWB	FR	PDSS
PDT	Pearson Correlation	1	.695**	-.457**	-.526**
	Sig. (1-tailed)		.000	.000	.000
	N	91	91	91	91

PWB	Pearson	.695**	1	-.427**	-.587**
	Correlation				
	Sig. (1-tailed)	.000		.000	.000
	N	91	134	134	92
FR	Pearson	-.457**	-.427**	1	.597**
	Correlation				
	Sig. (1-tailed)	.000	.000		.000
	N	91	134	134	92
PDSS	Pearson	-.526**	-.587**	.597**	1
	Correlation				
	Sig. (1-tailed)	.000	.000	.000	
	N	91	92	92	92

\*\* . Correlation is significant at the 0.01 level (1-tailed).

## APPENDIX VI: REGRESSION OUTPUT

### MODERATION

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.695 <sup>a</sup>	.483	.477	10.48185	.483	83.198	1	89	.000
2	.742 <sup>b</sup>	.551	.541	9.82427	.068	13.313	1	88	.000
3	.747 <sup>c</sup>	.558	.542	9.80956	.006	1.264	1	87	.264

a. Predictors: (Constant), TOTALPDT

b. Predictors: (Constant), TOTALPDT, TOTALPDSS

c. Predictors: (Constant), TOTALPDT, TOTALPDSS, CPDTPDSS

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9140.936	1	9140.936	83.198	.000 <sup>b</sup>
	Residual	9778.361	89	109.869		
	Total	18919.297	90			
2	Regression	10425.868	2	5212.934	54.011	.000 <sup>c</sup>
	Residual	8493.428	88	96.516		
	Total	18919.297	90			
3	Regression	10547.509	3	3515.836	36.537	.000 <sup>d</sup>
	Residual	8371.788	87	96.227		
	Total	18919.297	90			

a. Dependent Variable: TOTALPWB

b. Predictors: (Constant), TOTALPDT

c. Predictors: (Constant), TOTALPDT, TOTALPDSS

d. Predictors: (Constant), TOTALPDT, TOTALPDSS, CPDTXCPDSS

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	6.266	4.928		1.271	.207	-3.527	16.058
	TOTALPD T	.651	.071	.695	9.121	.000	.509	.793
2	(Constant)	37.363	9.694		3.854	.000	18.098	56.629
	TOTALPD T	.500	.079	.534	6.359	.000	.344	.656
	TOTALPD SS	-.406	.111	-.306	-3.649	.000	-.628	-.185
3	(Constant)	37.163	9.681		3.839	.000	17.920	56.405
	TOTALPD T	.494	.079	.528	6.278	.000	.338	.650
	TOTALPD SS	-.384	.113	-.290	-3.406	.001	-.609	-.160
	CPDTXCP DSS	.006	.005	.083	1.124	.264	-.005	.017

a. Dependent Variable: TOTALPWB