



# The Impact of Deployment on the Well-Being of Military Children: A Preliminary Review

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Defence R&D Canada  
Director General Military Personnel Research & Analysis

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**Director General Military Personnel Research & Analysis**

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## Abstract

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Military families experience a number of life stressors, such as frequent geographical moves, recurring periods of separation, geographic isolation from extended family support systems, and the potential of the military member being deployed into a hostile environment. Children in military families experience the same developmental and motivational processes as their civilian counterparts. However, military children also experience unusual developmental pressures placed on them due to the unique demands of military life, such as parental absence. Indeed, the deployment of a parent is one of the most widely documented stressors for military families and is a defining aspect of military life. Yet, minimal research has specifically examined the impact of parental deployment on the children of Canadian Forces (CF) personnel. This paper addresses this significant gap in the research by exploring the theoretical developments in the literature; discussing the five stages in the emotional cycle of deployment; examining the current research on the impact of deployment on the children; categorizing the risk and protective factors identified in the literature; presenting a conceptual framework of the key factors that was developed based on the review of the research; and providing recommendations for future research directions.

## Résumé

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Les familles de militaires sont soumises à certains facteurs de stress tels que les déménagements fréquents, les périodes de séparation récurrentes, l'isolement géographique de la famille élargie susceptible de fournir du soutien et la possibilité que le militaire doive prendre part à une mission dans un environnement hostile. Les enfants des familles de militaires passent par les mêmes processus de développement et de motivation que leurs homologues civils. Cependant, les enfants de militaires subissent des pressions de développement inhabituelles en raison des exigences propres à la vie militaire, notamment l'absence d'un parent. En effet, le départ en mission d'un parent est l'un des facteurs de stress pour la famille les plus documentés, et il s'agit d'un aspect déterminant de la vie militaire. Pourtant, très peu de recherches portent précisément sur les répercussions du départ en mission d'un parent membre des Forces canadiennes (FC) sur les enfants de celui-ci. Le présent document vise à remédier à cette importante lacune en examinant les développements théoriques que l'on trouve dans la documentation, en abordant les cinq étapes du cycle émotionnel du déploiement, en traitant des recherches actuelles portant sur les répercussions du déploiement sur les enfants, en classant les facteurs de risque et de protection découverts dans la documentation, en présentant un cadre conceptuel des facteurs clés élaboré en fonction de l'examen des recherches et en formulant des recommandations quant à l'orientation des prochaines recherches.

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## Executive summary

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### **The Impact of Deployment on the Well-Being of Military Children: A Preliminary Review:**

**Julie Coulthard; DGMPRA TM 2011-005; Defence R&D Canada – DGMPRA; February 2011.**

Military families experience a number of life stressors, such as frequent geographical moves, recurring periods of separation, geographic isolation from extended family support systems, and the potential of the military member being deployed into a hostile environment. Children in military families experience the same developmental and motivational processes as their civilian counterparts. However, military children also experience unusual developmental pressures placed on them due to the unique demands of military life, such as parental absence. Indeed, the deployment of a parent is one of the most widely documented stressors for military families and is a defining aspect of military life. Yet, minimal research has specifically examined the impact of parental deployment on the children of Canadian Forces (CF) personnel. This paper addresses this significant gap in the research by exploring the theoretical developments in the literature; discussing the five stages in the emotional cycle of deployment; examining the current research on the impact of deployment on the children; categorizing the risk and protective factors identified in the literature; presenting a conceptual framework of the key factors that was developed based on the review of the research; and providing recommendations for future research directions.

Although much of the research on the impact of deployment on military children has been largely atheoretical, there are a few theoretical perspectives that have emerged in the literature and which help to inform and lend insights into the subject area. There are three perspectives in particular found to be relevant to discussions regarding the impact of deployment on children, including:

- a. Attachment Theory (Kelly et al. 2001; Schaetti, 2002; Medway *et al*, 1995);
- b. ABC – X Model of Family Stress (Black, 1993; Booth *et al*. 2007); and
- c. the Contextual Family Stress Model (Weins and Boss, 2006).

This paper begins the discussion of the impact of deployment on the children with an overview of each of these theoretical perspectives.

The discussion then turns to the cycle of deployment. There are understood to be five stages in the emotional cycle of deployments lasting longer than six months, each with a different coping requirement:

- a. pre-deployment;
- b. deployment;
- c. sustainment;
- d. redeployment; and
- e. post-deployment.

Each deployment stage is characterized by a time frame and a different set of challenges for the family. In order for the family and the children to successfully manage the separation of the service personnel, it is thus imperative that all members master the coping requirements for each stage of the cycle. While the model has not yet been empirically tested, this complex cycle is considered a useful tool in gaining an understanding of the unique challenges posed during each stage and in recognizing that each stage is distinct, requiring separate strategies in order to successfully manage the separation experience.

Following this overview, the current literature on the impact of deployment on the children is then reviewed and the key studies presented. Little investigation has been conducted that examines the impact of deployment on the children of CF personnel specifically; rather, much of the knowledge in the area has been drawn from research conducted in the United States (U.S.). Research has shown that military-induced parental absences have variable effects on the children of military personnel. Some of the child outcomes that have been linked in the research to such separations include higher levels of internalizing behaviour, including greater depression and anxiety (Levai *et al.* 1995; Jensen *et al.* 1989; Jensen *et al.* 1996; Kelley *et al.* 2001; Jensen *et al.* 1996; Orthner and Rose, 2005), a decrease in academic performance (Hiew, 1992; Orthner and Rose, 2005; Huebner and Mancini, 2005), experiencing intense feelings of sadness, loneliness, abandonment and anger (Amen *et al.* 1988; Huebner and Mancini, 2005; Orthner and Rose, 2005; Rosen and Teitlebaum, 1993); as well as acting out and the manifestation of externalizing behaviours (Kelley, 1994; Orthner and Rose, 2005; Huebner and Mancini, 2005; Chartrand *et al.* 2008). The current research has generally focused primarily on Regular Force families that are comprised of a traditional family structure. However, in recent years, researchers have also begun to consider the impact of maternal deployment on children and to include Reserve families in their discussions and the contributions to the literature in these areas will be detailed in the paper.

Based on the review of the literature, it is evident that there are certain factors that may place the children and their families at either greater or lesser risk of experiencing negative effects as a consequence of a deployment experience. This paper identifies these factors and separates them into two distinct categories – protective and risk factors. Protective factors refer to key variables that may decrease the likelihood or risk that the child may exhibit a negative outcome. Two key family resources that function as protective factors during the deployment of a parent that are discussed include:

- a. active coping strategies; and
- b. the presence of social support networks.

On the other hand, there are also multiple aspects that can function as a risk factor during the deployment. Risk factors refer to anything that may increase the likelihood that the child will exhibit negative outcomes. Three key risk factors are identified, including:

- a. Reserve families;
- b. young and inexperienced families; and
- c. families with a pile-up of stressors and additional challenges.

Also discussed are two additional key factors for consideration, namely the type of deployment and the at-home parent well-being.

Further, while progress has been made in studying the effect that parental deployment has on the children, it is evident that additional conceptual clarification and methodological rigour can greatly benefit this area of research. As such, a conceptual model has been developed based upon the prior review of the literature in which a number of factors were determined to be associated with deployment and its impact on the children. Drawing from the earlier theoretical contributions and conceptual developments in the literature, this paper presents an explanatory framework that summarizes the relationships of key variables and identifies the relevant constructs.

Given the scarcity of knowledge with respect to how CF children fare as a consequence of the deployment of a parent, it is strongly recommended that further research be conducted. Specifically, it is recommended that future research be conducted that employs a longitudinal research design, capturing the well-being of the children at three key stages of the deployment period (before, during, and after) in order to better assess the impact of the separation experience on the children. Additionally, as the research in this area generally lacks a clearly defined and comprehensive measurement of child well-being, an index is proposed that is contended to provide a systematic assessment tool that can serve as a baseline in examinations of the impact of deployment on CF children. It is further recommended that data on the children be collected from multiple informants; in particular, from the at-home parents as well as the children themselves, in order to greatly improve the quality of analysis. It is also suggested that such research take into consideration both the potentially differential effects for children of both Regular and Reserve families and include both children of female CF personnel as well as male CF personnel.

In conclusion, the relationship between military children and organizational outcomes is complex and has not been studied extensively. However, there is evidence that indicates that satisfaction with military life for both parents, including the service member and the non-service member, is related to their perceptions as to whether the military is a positive environment in which to raise their children. Overall, it is clear that the issues and well-being of military children have indirect linkages to the organizational outcomes of the military. As such, it is therefore important that the military seek to foster a positive and family-friendly climate in the organization and provide support to military families in order to help them successfully adapt and meet the demands of military life. It is clearly in the best interests of the military institution to actively seek to promote and foster positive separation adjustments among the children of deployed military parents.

# Sommaire

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## The Impact of Deployment on the Well-Being of Military Children: A Preliminary Review:

Julie Coulthard; DGMPRA TM 2011-005; R & D pour la défense Canada – DRASPM; Février 2011.

Les familles de militaires sont soumises à certains facteurs de stress tels que les déménagements fréquents, les périodes de séparation récurrentes, l'isolement géographique de la famille élargie susceptible de fournir du soutien et la possibilité que le militaire doive prendre part à une mission dans un environnement hostile. Les enfants des familles de militaires passent par les mêmes processus de développement et de motivation que leurs homologues civils. Cependant, les enfants de militaires subissent des pressions de développement inhabituelles en raison des exigences propres à la vie militaire, notamment l'absence d'un parent. En effet, le départ en mission d'un parent est l'un des facteurs de stress pour la famille les plus documentés, et il s'agit d'un aspect déterminant de la vie militaire. Pourtant, très peu de recherches portent précisément sur les répercussions du départ en mission d'un parent membre des Forces canadiennes (FC) sur les enfants de celui-ci. Le présent document vise à remédier à cette importante lacune en examinant les développements théoriques que l'on trouve dans la documentation, en abordant les cinq étapes du cycle émotionnel du déploiement, en traitant des recherches actuelles portant sur les répercussions du déploiement sur les enfants, en classant les facteurs de risque et de protection découverts dans la documentation, en présentant un cadre conceptuel des facteurs clés élaboré en fonction de l'examen des recherches et en formulant des recommandations quant à l'orientation des prochaines recherches.

Bien que la plupart des recherches effectuées sur les répercussions du déploiement sur les enfants des militaires aient été en grande partie athéoriques, quelques idées théoriques ont fait leur apparition dans la documentation et contribuent à faire connaître le sujet. Trois idées en particulier se sont révélées pertinentes relativement aux discussions portant sur les répercussions du déploiement sur les enfants, notamment la théorie de l'attachement (Kelly *et coll.*, 2001; Schaetti, 2002; Medway *et coll.*, 1995), le modèle ABC – X du stress familial (Black, 1993; Booth *et coll.*, 2007) et le modèle de stress familial contextuel (Weins et Boss, 2006). Le présent document traite d'abord des répercussions du déploiement sur les enfants en donnant un aperçu de ces idées théoriques.

Il sera ensuite question du cycle du déploiement. Le cycle émotionnel du déploiement s'échelonne sur plus de six mois et comporte cinq étapes :

- a. période préparatoire au déploiement;
- b. déploiement, soutien;
- c. redéploiement; et
- d. période postdéploiement.

À chaque étape est associée une exigence d'adaptation différente. Chaque étape du cycle du déploiement comporte des délais et un ensemble distinct de défis pour la famille. Aussi, pour que les membres de la famille du militaire soient en mesure de bien gérer la séparation, il est essentiel que chacun maîtrise les exigences d'adaptation associées à chaque étape du cycle. Le modèle n'a pas encore fait l'objet d'un examen empirique, mais ce cycle complexe est déjà considéré comme un outil utile pour la compréhension des défis particuliers propres à chaque étape, du caractère distinct de chaque étape et de la nécessité d'adopter des stratégies différentes pour arriver à bien gérer la séparation.

Après ce survol, il sera question de la documentation existante relativement aux répercussions du déploiement sur les enfants ainsi que des principales études réalisées. Peu d'études ont été réalisées quant aux répercussions du déploiement sur les enfants des membres des FC en particulier. Nos connaissances dans ce domaine sont surtout attribuables aux recherches menées aux États-Unis. Des recherches ont démontré que les absences parentales attribuables à la vie militaire ont des effets variables sur les enfants des militaires. En effet, on a pu établir des liens entre la séparation et certains problèmes qui touchent les enfants de militaires, notamment des niveaux plus élevés d'intériorisation, y compris une dépression et une anxiété accrues (Levai *et coll.*, 1995; Jensen *et coll.*, 1989; Jensen *et coll.*, 1996; Kelley *et coll.*, 2001; Jensen *et coll.*, 1996; Orthner et Rose, 2005), une diminution du rendement scolaire (Hiew, 1992; Orthner et Rose, 2005; Huebner et Mancini, 2005), d'intenses sentiments de tristesse, de solitude, d'abandon et de colère (Amen *et coll.*, 1988; Huebner et Mancini, 2005; Orthner et Rose, 2005; Rosen et Teitlebaum, 1993), ainsi que le passage à l'acte et la manifestation de comportements d'extériorisation (Kelley, 1994; Orthner et Rose, 2005; Huebner et Mancini, 2005; Chartrand *et coll.*, 2008). De manière générale, les recherches actuelles sont surtout axées sur les familles des membres de la Force régulière ayant une structure familiale traditionnelle. Ces dernières années toutefois, des chercheurs ont commencé à s'intéresser aux répercussions sur les enfants du départ en mission de la mère de même qu'aux familles des réservistes. Le présent document traitera en détail des apports à la documentation dans ces domaines.

Si l'on tient compte de la documentation, il semble évident que certains facteurs peuvent accroître ou diminuer les risques que le déploiement ait des répercussions négatives sur les membres de la famille du militaire. Ces facteurs, qui figurent dans le présent document, sont classés en deux catégories :

- a. les facteurs de protection; et
- b. les facteurs de risque.

Les facteurs de protection sont les principales variables susceptibles de diminuer la probabilité que le déploiement ait des effets négatifs sur l'enfant. Les stratégies actives d'adaptation et l'existence de réseaux de soutien social sont deux ressources clés qui constituent des facteurs de protection pour les familles des membres des FC qui prennent part à un déploiement et dont il sera question dans le présent document. Il existe par contre plusieurs aspects qui constituent des facteurs de risque pendant le déploiement. Les facteurs de risque sont les variables susceptibles d'augmenter la probabilité que le déploiement ait des effets négatifs sur l'enfant. Il sera question de trois facteurs de risque :

- a. famille d'un réserviste;
- b. famille jeune et inexpérimentée;
- c. famille aux prises avec une accumulation de facteurs de stress et des difficultés supplémentaires.

Il sera aussi question de deux autres facteurs à prendre en considération, soit le type de déploiement et le bien-être du parent resté à la maison.

En outre, bien que des progrès aient été réalisés quant à l'étude des effets du départ en mission d'un parent sur ses enfants, une clarification additionnelle des concepts et une plus grande rigueur sur le plan de la méthodologie pourraient évidemment s'avérer très bénéfiques pour ce domaine de recherche. Aussi, on a élaboré un modèle théorique à partir de l'examen préalable de la documentation, qui a permis d'établir un lien entre certains facteurs associés au déploiement et les répercussions de ce dernier sur les enfants. Dans le présent document figure un cadre explicatif résumant les relations associées aux variables clés et faisant état des concepts pertinents, cadre élaboré à partir des contributions théoriques susmentionnées et des développements conceptuels réalisés dans la documentation.

Étant donné le peu de connaissances que nous avons de la manière dont les enfants des membres des FC gèrent le départ en mission de ces derniers, il est fortement recommandé de mener des recherches plus approfondies. Plus particulièrement, on recommande que les prochaines recherches soient menées selon un modèle de recherche longitudinal, portant sur le bien-être des enfants à trois étapes clés de la période de déploiement (avant, pendant et après) afin de mieux évaluer les conséquences de la séparation sur les enfants. De plus, puisqu'il y a généralement une absence de mesures clairement définies et complètes du bien-être des enfants dans les recherches réalisées dans ce domaine, on fournit un index qui offre un outil d'évaluation systématique pouvant servir de base à l'examen des répercussions du déploiement sur les enfants des militaires. Par ailleurs, on recommande que les données sur les enfants soient recueillies auprès de plusieurs personnes, particulièrement des parents à la maison et des enfants, afin d'améliorer grandement la qualité de l'analyse. On suggère également que ces recherches tiennent compte des effets potentiellement différentiels qu'a le déploiement sur les enfants de membres de la Force régulière et de la Force de réserve, et comprennent des enfants des militaires tant de sexe masculin que de sexe féminin.

Pour terminer, les liens existant entre les enfants de militaires et le rendement organisationnel sont complexes et n'ont pas fait l'objet d'études approfondies. Toutefois, il apparaît clairement que la satisfaction des deux parents (le parent militaire et le parent civil) par rapport à la vie militaire est liée à leur perception des FC, à savoir s'il s'agit d'un bon milieu pour élever leurs enfants. Globalement, il est clair que les difficultés et le bien-être des enfants des membres des FC ont des liens indirects avec le rendement organisationnel. Il est donc important que l'on trouve des moyens de faire des FC un milieu positif favorable à la famille et d'offrir du soutien aux familles de militaires pour qu'elles parviennent à s'adapter aux exigences de la vie militaire. Il est manifestement dans l'intérêt de l'institution militaire de s'employer activement à promouvoir et à favoriser une bonne adaptation à la séparation chez les enfants de militaires prenant part à un déploiement.

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# 1 Introduction

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## 1.1 Background

Military families experience a number of life stressors, such as frequent geographical moves, recurring periods of separation, geographic isolation from extended family support systems, and the potential of the military member being deployed into a hostile environment. Although such stressors may be adequately managed when dealt with separately, many military families are confronted with them aggregately, resulting in a stressor pileup (Black, 1993). For example, tremendous strain can be placed on the family system when a member is separated for a duty-related assignment. If families are unable to successfully manage the period of separation, it will undermine the ability of the service members to function effectively in their roles. Thus, it is in the interests of both the families and the military institution to ensure that the families are able to cope with the stress of routine separations (Van Breda, 1999).

Military separations exist on a broad spectrum, ranging from scheduled training exercises or missions, planned peacekeeping rotations, non-combat missions that are unplanned (e.g. in response to a natural disaster), overseas tour of duty, and combat. The duration of separations can range from a period of several weeks to more than one year (Weins and Boss, 2006). The level of ambiguity and difficulty surrounding the absence and presence of the service member may vary depending on the type of deployment (peacekeeping mission versus combat), the length of the deployment (short-term versus long-term versus undetermined), and the context of the family unit (the strengths and resources available) (Weins and Boss, 2006).

Research based on the U.S. context<sup>1</sup> has shown that military-induced parental absences have variable effects on the children of military personnel. Some of the child outcomes that have been linked in the research to such separations include a higher levels of internalizing behaviour, including greater depression and anxiety (Levai et al. 1995; Jensen *et al.* 1989; Jensen *et al.* 1996; Kelley *et al.* 2001; Jensen *et al.* 1996; Orthner and Rose, 2005), a decrease in academic performance (Hiew, 1992; Orthner and Rose, 2005; Huebner and Mancini, 2005), experiencing intense feelings of sadness, loneliness, abandonment and anger (Amen *et al.* 1988; Huebner and Mancini, 2005; Orthner and Rose, 2005; Rosen and Teitlebaum, 1993); as well as acting out and the manifestation of externalizing behaviours (Kelley, 1994; Orthner and Rose, 2005; Huebner and Mancini, 2005; Chartrand *et al.* 2008). Generally speaking, these effects have also been found to be relatively temporary, often subsiding after the post-deployment period (Orthner and Rose, 2005; Kelley 2004; Watanabe and Jensen, 2000). However, although significant attention has been focused on the impact of military life and deployment on the spouse and on the family as a whole, less consideration has been specifically directed toward the child component of the military family unit (Jensen, 1999).

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<sup>1</sup> It should be noted that, given the significant lack of research that has been conducted in Canada, the vast majority of research to be discussed is based on work conducted in the U.S.

## 1.2 Overview of Military Children

The term “Military Family Syndrome” is a concept that was introduced by LaGrone (1978) after he noted an unusually high proportion of behavioural disorders in children referred to a military children’s mental health clinic. This concept has subsequently been used to negatively characterize military children as being out of control with submissive, depressed mothers and strict, authoritarian fathers. Since this time, researchers have been concerned about high incidence of psychopathology in the children of military parents, with some arguing that these children manifest greater behavioural problems than children in civilian families (Kelley *et al.* 2001; Ryan-Wenger, 2001). However, the basis for the development of this conceptualization of military children emerged from research that was inadequately executed with poorly drawn samples, rather than from rigorous scientific study (Jensen, 1999). In fact, more recent U.S. research has indicated that, rather than faring more poorly than their civilian counterparts, military children may be higher functioning as their levels of conduct, behaviour, and emotional disorders may actually be lower than among civilian children populations. Further, research based on epidemiologic methods has also confirmed that the levels of psychopathology in military children are at or below levels reported in studies of the civilian children population. Overall, there is no conclusive evidence that supports this notion of a “military family syndrome” or which indicates that there are significantly increased levels of psychopathology in the children of military families. That said, such work does not negate the possibility that military children may be systematically exposed to a range of risk factors and related stressors, such as the deployment of a parent, which may decrease the state of their well-being (Jensen, 1999; Watanabe and Jensen, 2000; Palmer, 2008; Booth *et al.* 2007).

Children in military families experience the same developmental and motivational processes as their civilian counterparts. However, military children also experience unusual developmental pressures placed on them due to the unique demands of military life, such as parental absence and frequent geographic relocations. Such demands from the military environment thereby influence each developmental stage of the child and may be disruptive to normal childhood development (Watanabe and Jensen, 2000). The unusual demands of military life may pose a challenge to the adaptation and coping of these children (Jensen, 1999) and the degree to which children experience these stressors, and the impact it has on their well-being, varies depending on certain factors that will be explored in this paper (Kelley *et al.* 2001).

## 1.3 Organizational Outcomes

In considering the children specifically, the relationship between military children and organizational outcomes is complex and has not been studied extensively. However, there is evidence that indicates that satisfaction with military life for both parents, including the service member and the non-service member, is related to their perceptions as to whether the military is a positive environment in which to raise their children. For example, while there are many factors that influence how a spouse thinks and feels about the military, research suggests that military spouses who perceive the military to be a good environment in which to raise children are more likely to support the military careers of the service member. Research has further indicated that member intention to re-enlist is significantly impacted by the spouse. As such, how the children adapt to military life and the perception regarding the response of the military to the needs of the

children is not just important to the families themselves but also to secure the ability of the military to retain military personnel and their families (Ender, 2006; Booth *et al.* 2007).

Research has also shown that service members who had higher levels of pre-deployment family concerns also reported greater difficulties in their ability to perform operational tasks during a deployment (McCreary *et al.* 2003). In addition, research has also found that children from military families have traditionally been a significant population from which to recruit future personnel as military children have been found to join at much higher rates than their civilian counterparts. Overall, it is clear that the issues and well-being of military children have indirect linkages to the organizational outcomes of the military. As such, it is therefore imperative that the military seek to foster a positive and family-friendly climate in the organization and provide support to military families in order to help them successfully adapt and meet the demands of military life. It is clearly in the best interests of the military to actively seek to promote and foster positive separation adjustments among the children of deployed military parents (Orthner and Rose, 2005; Booth *et al.* 2007).

## **1.4 Aim**

This aim of this report is to:

- a. Explore the theoretical developments in the literature;
- b. Discuss the five stages of the emotional cycle of deployment;
- c. Examine the current research on the impact of parental deployment on the children;
- d. Categorize the risk and protective factors identified in the literature;
- e. Present a conceptual framework of the key factors identified; and
- f. Review future research directions and provide recommendations for further research that will better inform the CF as to how the children of their personnel fare during a deployment.

## 2 Theoretical Developments

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Although much of the research on the impact of parental deployment has been largely atheoretical, there are a few theoretical perspectives that have emerged in the literature and which help to inform and lend insights into the subject area. There are three perspectives in particular found to be relevant to discussions of the impact of deployment on children, including:

- a. Attachment Theory (Kelly *et al.* 2001; Schaetti, 2002; Medway *et al.* 1995);
- b. ABC – X Model of Family Stress (Black, 1993; Booth *et al.* 2007); and
- c. the Contextual Family Stress Model (Weins and Boss, 2006).

Each will be briefly discussed in turn in the following section.

### 2.1 Attachment Theory

Attachment theory is one theoretical approach that appears to have major implications for the study of periodic parental separation. In its original form, attachment theory was conceived of as a relationship between an infant and his or her primary caregiver and is still typically conceptualized in this manner; however, it can also be expanded to include children of all ages (Schaetti, 2002; Medway *et al.* 1995). At the core of this theory is the notion that humans are motivated to maintain a balance between exploring the world in order to learn on the one hand while, on the other, staying in close proximity to safety, personified for an infant by his or her primary caregiver. Broadly speaking, attachment theory conveys the relationship between two or more individuals that enables each person to locate and attain this balance. Throughout the life course, an individual's attachment system may be directed to a variety of individuals and the quality of these relationships is directly correlated to the way in which the caregiver responds to the signals of the infant and child (Schaetti, 2002; Kelley *et al.* 2001).

According to key attachment theorist Bowlby, these attachment figures serve as a secure foundation through which the child feels safe to explore and master their environment. This confidence, or lack thereof, in the availability of attachment figures is slowly acquired throughout infancy and childhood (Kelley *et al.* 2001; Medway *et al.* 1995). For example, when the caregiver responds in a consistent manner with warmth and sensitivity, a "secure" attachment relationship is understood to develop as the infant and child learns that care is available when needed and that he or she is valuable. On the other hand, when the response of the caregiver is inconsistent and/or inappropriate, an "insecure" attachment develops as the infant and child learns that care is not available when needed and develops feelings of unworthiness (Schaetti, 2002).

Central to the development of a secure attachment is the notion of continuity – continuity of the attachment figure, continuity of the quality of care provided, and continuity of the broader home environment. The literature asserts that potentially problematic for the development of a secure attachment style is discontinuity, such as the deployment of a parent (Schaetti, 2002). Attachment theory posits that the presence of a warm, sensitive caregiver who is available and responsive to the needs of the child and who can provide comfort in times of distress is crucial to the healthy development of the child. However, during a deployment, the military parent is unable to fulfil his or her role as a primary attachment figure to the child (Kelley, 2002).

Each stage of child development presents new tasks for the child to master. As such, depending on the age and developmental stage of the child, responses to specific stressors may differ. For example, it is maintained that the first few years of a child's life are crucial for the formation of attachment and the development of confidence that the environment around the child is safe and predictable. Therefore, a separation from a parent in the first two years of life may be particularly detrimental to the child (Paden and Prezor, 1993). The research indicates that the attachment patterns of infants are predictive of social competence and self-reliance among preschoolers, of healthy functioning in adolescence, and of psychological adjustment in adulthood (Schaetti, 2002). Based on his observations, Bowlby suspected that the experience of childhood separation from a parent may be connected to the development of psychopathology later in life. He believed that conditions such as anxiety, aggressive behaviours, and phobias may be rooted in the despair and detachment reactions of children to parental separation (Applewhite and Mays, 1996).

## 2.2 ABC – X Model of Family Stress

Based on his study of families' responses to war, war separation and eventual reunion following World War II (WWII), Hill (1958) developed an ABC – X model of family stress. In this model, A = the event or stressor, B = the resources or strengths that the family has at the time of the event or stressor, C = the meaning or the perception that the family attaches to the event or stressor (A), and X = the levels of stress experienced, referring to the interaction of factors A, B, and C and the individual outcomes. This model has comprised the theoretical framework for many studies on parental deployment (Black, 1993).

Applying this framework to military-induced separations, the most observable stressor (A) would be the deployment of the parent.<sup>2</sup> In terms of the existing resources (B), this would include factors such as access to formal and informal social support networks, effective coping mechanisms, remaining at-home parent psychopathology, etc. According to the model, the perception or attitude (C) of significance is the one held toward the deployment of the parent (A). For example, research has shown that the adjustment of the children to the deployment of a parent is related to parental perceptions regarding whether the military is a positive environment in which to raise children (Booth *et al.* 2007). The individual outcomes (X) represents a series of possible effects that may result as a consequence of the deployment, including the children's

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<sup>2</sup> It should also be noted that there are a number of additional normative stressors that children and adolescents experience, such as fitting in with the peer group. The combination of this unusual stressor in conjunction with the normative stressors of childhood may lead to a pile-up effect (Huebner and Mancini, 2005).

emotional and behavioural state, academic performance, and their social interactions and relationships with others (Huebner and Mancini, 2005). Given that factor A cannot be altered in a deployment, it is therefore contended that any intervention or support should be directed toward factors B and C (Black, 1993).

## 2.3 The Contextual Family Stress Model

This contextual framework of family stress management is predicated on the assumption that families exist and operate within multiple and diverse contexts. While the contextual experiences of military families are similar to civilian families in many ways, they are also unique due to the demands of military life. It is therefore imperative that the contexts of military families be understood in order to best develop effective strategies and approaches that will support them. The following discussion will present descriptions of each contextual factor, both internal and external, that is contended to thereby enable for more appropriate prevention or intervention strategies to be developed (Weins and Boss, 2006).

### 2.3.1 The External Context of the Family

The family's external context is generally outside the control of the family and will influence the perception of the family regarding a deployment and subsequently affect their management of stressors. These factors will influence, either positively or negatively, what service personnel and their families bring with them in their experience of a deployment. The external context is comprised of four factors, including:

- a. history;
- b. economics;
- c. development; and
- d. culture.

The **historical context** of the family, particularly past stressful events, has much potential in determining the manner in which the family manages current and future stressors. It is thus very useful to ascertain the climate in which past stressors have occurred, how past stressors were managed, and the current status of stress levels due to the military separation, in order to gain insight into how the family can better manage the present separation.

The **economic context** of the family is a function of societal and communal economies. How the family responds to a deployment will be influenced by the state of the economy. The experience of the family's stress due to this economic context will shape the ability of the family to manage the stress of separation.

The **developmental context** is the stage of life for both the family and for each individual member. Similar to civilian families, military families experience events such as births, deaths, marriages, divorces, career changes, and other significant transitions throughout the life course. All of these will influence how the family perceives the separation and may mediate the ability of the family to manage stress. Such developmental transitions are an inherent part of life but can also heighten the level of stress and lead to additional challenges for families during a deployment.

The **cultural context** refers to the incongruity between the mainstream culture and that of the military culture which may result in some families experiencing heightened stress. It also takes into account that the culture of the family may differ for those military families coming from minority or immigrant families and communities. This context provides great insight into the response of the family to the separation and understanding this factor thereby enables for more appropriate and meaningful interventions to be employed for all families (Weins and Boss, 2006).

### 2.3.2 The Internal Context of the Family

According to this framework, there are three factors that comprise the internal context of the family:

- a. the family's structure (i.e., rigid versus flexible roles);
- b. its psychology (i.e., use of denial versus acceptance and problem solving); and
- c. its philosophy (i.e., beliefs and values).

This context defines the inner life of the family and provides much insight into how families may utilize particular coping strategies and mechanisms.

The **structural context** is comprised of the form and function of family boundaries, rules, and role assignments. When there is ambiguity regarding the structural context of the family, such as that which may occur during a deployment, it can lead to additional stress. This stress will be especially heightened if family members have difficulty in tolerating the ambiguity of a member who is psychologically present but yet physically absent during a deployment.

The **psychological context** refers to the perception, appraisal, definition, and/or assessment of a stressful event, such as a deployment. The way in which the family perceives the event will thereby determine their ability to develop suitable coping mechanisms and effectively manage the separation. For example, if families are ambivalent in their support of the mission or feel abandoned by the service member, it may have a negative impact on how they perceive and experience the separation.

The **philosophical context** of the family comprises its values and belief system and acknowledges that there may be instances where there is incongruity between the military subculture and that of the larger culture in which the family is immersed, leading to a strain for the family when caught between two dominant forces (Weins and Boss, 2006).

In summary, the Contextual Family Stress Model highlights the factors that may influence the perception of the military family toward the deployment and the ability of the family to effectively cope with and manage the separation. These contextual factors are argued to strongly influence whether a military family will be vulnerable to the stress of the experience or whether the family is able to be resilient under this pressure (Weins and Boss, 2006). Examining these contextual factors is contended to enable for a greater understanding of why some families may experience and respond to a deployment differently from other families and may account for differences in the extent to which a family is successful in gaining access to available resources and in employing effective coping mechanisms (Weins and Boss, 2006).

### 3 The Cycle of Deployment

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#### 3.1 Overview

There are understood to be five stages in the emotional cycle of deployments lasting longer than six months, each with a different coping requirement:

- a. pre-deployment;
- b. deployment;
- c. sustainment;
- d. redeployment; and
- e. post-deployment (See Figure 1).

Each deployment stage is characterized by a time frame and a different set of challenges for the family. In order for the family and the children to successfully manage the separation of the service personnel, it is thus imperative that all members master the coping requirements for each stage of the cycle (Weins and Boss, 2006; Chandra *et al.* 2008; Fitzsimons and Krause-Parello, 2009; Lincoln *et al.* 2008; Pincus *et al.* 2005). While the model has not yet been empirically tested (Chandra *et al.* 2008), this cycle is considered a useful tool in gaining an understanding of the unique challenges posed during each stage and in recognizing that each stage is distinct, requiring separate strategies in order to successfully manage the separation experience (Chartrand, 2009; Chandra *et al.* 2008).

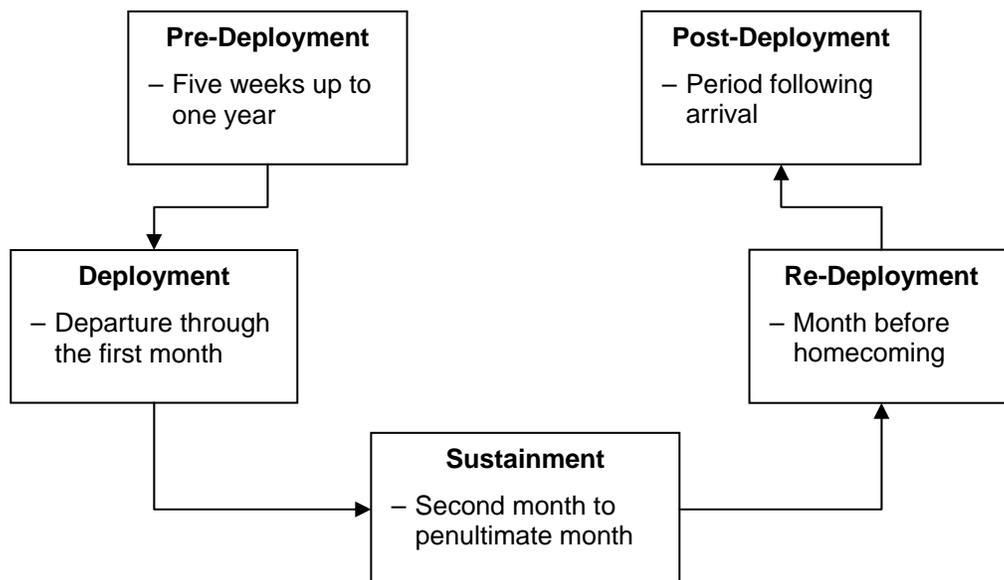


Figure 1: The Cycle of Deployment

### 3.1.1 Pre-Deployment

The pre-deployment stage begins with the notice of deployment. The time frame before deployment varies and is estimated to last anywhere from five weeks to more than a year, depending on the length of time the service member is given notification. During this stage, families may experience heightened levels of stress (Fitzsimons and Krause-Parello, 2009; Bell and Schumm, 2000; Pincus *et al.* 2005) as service members mobilize for the deployment and begin the task of organizing their resources and preparing for the upcoming mission. Indeed, the period of time before the service member is deployed can be a particularly difficult time for the family as the service member needs to spend time preparing, both psychologically and physically, for the upcoming mission while the family may want to spend more time with the service member before departure, resulting in the service member struggling to manage the competing needs (Weins and Boss, 2006; Huebner and Mancini, 2005; Amen *et al.* 1988; Chandra *et al.* 2008).

As this stage, families have to work to address several key factors that will become salient during the deployment, such as issues related to spousal employment, financial concerns, childcare, and social support (Huebner and Mancini, 2005). The specific emotional challenges for the children and their caregivers may include the heightened anticipation of loss, mental/physical distress, need to get affairs in order, disruption and ambiguity in the home, and the increased absence of the service member (Fitzsimons and Krause-Parello, 2009; Chandra *et al.* 2008).

One theme that emerged in Huebner and Mancini's (2005) analysis of military adolescents impacted by the deployment of a parent was a change in the relationship with the military parent prior to his/her departure. The adolescents in the study indicated that they made a conscious effort to distance themselves from their military parent and started acting out toward the parent as they felt angry that the parent was going to be leaving. The researchers found that the overall feelings and interpretation that adolescents had toward the deployment of their parent was a key element in ultimately understanding their response. In examining the feelings of the children upon learning of the upcoming deployment of their parent, a variety of responses were found. A common response noted was the feeling of loss, particularly with respect to the absence of the parent on a daily basis, such as helping the child with homework. Feelings of ambiguity were also noted as the adolescents reported that they were unsure when or even if they would see their deployed parent again. Adolescents also reported that they felt conflicting feelings of being both angry and proud. Some common overall responses included feeling nervous, worried, confused, angry, lonely, sad, afraid and shocked, with few adolescents using positive terms to describe their feelings. Found to help with the adjustment of the adolescents was open and direct communication between the military parent and the child regarding the deployment and a strong show of support from the parent (Huebner and Mancini, 2005).

### **3.1.2 Deployment**

The deployment stage begins from the onset of the actual deployment through the first month of separation. For both children and their caregivers, it may result in a range of mixed emotions including feelings of relief, anxiety, anger, sadness, loneliness, disorientation and abandonment. They may experience changes in sleeping patterns and decreased feelings of security. It is a period of great disruption and change in the home as the family begins to adapt to the new structure and reality (Fitzsimons and Krause-Parello, 2009; Pincus *et al.* 2005; Chandra *et al.* 2008).

### **3.1.3 Sustainment**

This stage occurs during the first month of deployment through the penultimate month of deployment. During this period, new routines are established and sources of support are developed as the family settles into life without the service member. It may result in the at-home parent and the children experiencing feelings of increased confidence, independence and control. Stress may contribute to changes in the children's affect and behaviour, in their academic performance, and in their interactions with others (Fitzsimons and Krause-Parello, 2009; Pincus *et al.* 2005; Amen *et al.* 1988; Chandra *et al.* 2008).

It is during this stage that the family begins to make the necessary changes that reflect the absence of a parent and adjusts and adapts to the new family system. The remaining at-home parent is now operating as a single parent and likely has sole responsibility for managing the household and caring for the children. The financial situation of the family may have been altered and the remaining at-home parent may have been required to take on a new job or to change jobs. The children may experience feelings of isolation, may have fears about the safety of the deployed parent and may be subjected to inconsistent parenting or changes in the family schedule, responsibilities and rules (Huebner and Mancini, 2005).

### **3.1.4 Re-Deployment**

The redeployment stage occurs the month before the service member is scheduled to return home. In this stage, children and their caregivers may experience intense feelings of anticipation, excitement, and apprehension. They may also have difficulty making decisions as they wait for the deployed parent to come back (Fitzsimons and Krause-Parello, 2009; Chandra *et al.* 2008).

### **3.1.5 Post Deployment**

The post-deployment stage occurs when the deployed parent arrives home (Fitzsimons and Krause-Parello, 2009). While this period is clearly a happy time for the family, it is not without its own set of challenges (Huebner and Mancini, 2005) as this period after the separation can be as difficult and stressful as the pre-deployment and deployment stages (Weins and Boss, 2006; Paden and Prezor, 1993; Palmer, 2008; Amen *et al.* 1988). Interestingly, the literature has noted that the period of reunion and the reintegration of the service member back into the family can sometimes actually be more difficult than the separation (Weins and Boss, 2006). For example, according to Flake *et al.* (2009), three out of every four families reported the first three months after the service member has come home as the most stressful part of a deployment.

The majority of military families successfully manage new ways to maintain family life during the period of separation. However, while such effective adaptations can make the separation less stressful for the family, it may also cause the reunion to be more stressful (Weins and Boss, 2006). During the deployment period, the family has developed and adapted to new structures and routines as they have learned to function without the military member for several months or even years. The return of the service member to the family after such an absence may upset the balance that has been achieved and often requires for further changes and adjustments be made as each member adapts to their new reality (Huebner and Mancini, 2005).

The reaction of the children to the homecoming of their deployed parent can vary and the re-integration of the parent back into the family can be challenging. It may be difficult for the child to obey and respond to discipline administered by the returning military parent, and they may struggle to adapt to the changes in routine and family dynamics. During the post-deployment period, each member is required to re-negotiate their place within the family and new boundaries and expectations need to be established (Huebner and Mancini, 2005). Contended to be some of the ways that will minimize the difficulties surrounding reintegration is for families to be flexible and resilient, increase their tolerance for change and ambiguity, keep the service member psychologically present in the family through continued communication, and be adaptive to changes in family dynamics after the separation (Weins and Boss, 2006).

In one study on youth and deployment in military families, it was observed that, out of the 107 adolescents who participated in the in-depth semi-structured focus group interviews, almost half (42) of the adolescents experienced difficulties with the reunion and reintegration of their deployed parent back into the family. Some of the difficulties discussed included the resulting change in routines and responsibilities during the deployment period, which the returning parent was either not aware of or which he/she expected to be the same as prior to the deployment. Many adolescents also mentioned having become more attached to their at-home parent and having difficulty adjusting to new family dynamics. Additionally, adolescents also discussed how they had matured significantly during the deployment period but felt that their returning military parent either did not recognize or appreciate these changes, leaving the adolescent confused (Huebner *et al.* 2007).

## 4 Military Parent-Child Separation Research

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### 4.1 Overview

Military deployments and duty-related separations are one of the most widely documented and recognized stressors for military families and are a defining aspect of military life (Weins and Boss, 2006). Not only do the children face the possibility of a prolonged separation and possible loss of a parent when the service member is deployed but the children and their families are also likely to experience considerable transformations and disruptions in the daily organization and management of family life (Mmari *et al.* 2009). Further, the quality of parent-child interactions may also be negatively impacted during the separation period as children will likely experience significantly less contact with one parent and the remaining at-home parent may have a diminished well-being during this period of heightened stress (Palmer, 2008).

The literature from the U.S. suggests that absences of a parent that are less than a year in duration are associated with temporary behavioural and emotional symptoms in family members. More persistent effects may be posed by absences of greater length, frequency or under combat or wartime conditions (Watanabe and Jensen, 2000; Weins and Boss, 2006; Booth *et al.* 2007; Jensen, 1999). For example, Rohall *et al.* (1999) found that families of service members who deployed for seven months reported higher family adjustment than families of service members who deployed for 19 months. That is not to say that the deployment of a parent will have only a negative impact on the children; there are some positive effects on child development during the period of parental absence that have been noted in the literature. For example, there are increased opportunities for individual responsibility and independence, fewer normative constraints resulting in a more enjoyable home life, greater participation in the functioning of the family and, particularly for adolescents, increased self-confidence (Ender, 2006; Paden and Prezor, 1993).

Research from the U.S. has shown that military-induced parental absences have variable effects on the children of military personnel. Some of the child outcomes that have been linked in the research to such separations include higher levels of internalizing behaviour, including greater depression and anxiety (Levai *et al.* 1995; Jensen *et al.* 1989; Jensen *et al.* 1996; Kelley *et al.* 2001; Jensen *et al.* 1996; Orthner and Rose, 2005), a decrease in academic performance (Hiew, 1992; Orthner and Rose, 2005; Huebner and Mancini, 2005), experiencing intense feelings of sadness, loneliness, abandonment and anger (Amen *et al.* 1988; Huebner and Mancini, 2005; Orthner and Rose, 2005; Rosen and Teitlebaum, 1993); as well as acting out and the manifestation of externalizing behaviours (Kelley, 1994; Orthner and Rose, 2005; Huebner and Mancini, 2005; Chartrand *et al.* 2008).

Much of the research from the U.S. that has examined the impact of a deployment on the children has focused primarily on Regular Force families that are comprised of a traditional family structure. However, in recent years, researchers have also begun to consider the impact of maternal deployment on children and to include Reserve families in their discussions. The following section will provide an overview of the key research from the U.S. that has been conducted in each of these realms.

## 4.2 Regular Force Military Families

Analyzing the 2004-2005 U.S. Survey of Army Families (SAF), Orthner and Rose (2005) investigated the adjustment of children to the deployment of their military parent. According to the perspective of the remaining at-home parent, approximately half (49%) of the children were considered to have coped either well or very well with the separation of the parent. In contrast, one in five children was considered to have had either a poor or very poor adjustment to the deployment.<sup>3</sup> In examining the most commonly identified problems among the children, it was found that “fear of what could happen to the parent” (37%) and “sadness” (35%) was the most widespread for all the children. Further, it was found that aggressive behaviour is particularly problematic for children aged 3 to 10 and continued to be a problem for one in five adolescents. Depression was reported for approximately one in four children of school age, while academic difficulties were found to occur for about one in five children of school age. However, while these children were found to experience difficulties during the separation of their military parent, upon reunion, the children were found to adjust rather quickly (Orthner and Rose, 2005).

In examining the relationship between maternal adjustment and children’s behaviours in a deployment, Kelley (1994) collected data from 61 mothers of children aged 5 to 13 whose husbands completed a six month Navy deployment<sup>4</sup>. The participants responded at three time periods: pre-deployment (approximately four weeks prior to the deployment); mid-deployment (approximately 12 to 16 weeks after the deployment began); and post-deployment (three to four weeks after the deployment ended). Children of fathers who experienced a peacetime deployment were reported to exhibit greater internalizing and externalizing behaviour prior to the deployment, however, this behaviour was found to decrease over time. The findings of this study indicated that relatively short (i.e. six months or less) paternal absence under routine, peacetime conditions are associated with temporary emotional and behavioural difficulties in the children. Contended to have potentially accounted for improved child behaviour in this group were the development of regular routines, the re-establishment of mother-child patterns of communication, reduced disruption at mid-deployment as compared to pre-deployment, and the return of the father (Kelley, 1994a; Kelley, 1994b).

Huebner and Mancini (2005) investigated the deployment experiences of adolescents in military families. Their study included 107 adolescents ranging from 12 to 18 years of age who participated in focus group sessions. They found that adolescences with deployed parents manifested many negative outcomes. For example, the school performance of many adolescents was reported to have declined. Additionally, adolescents reported that they tended to hide their emotions and withdraw, that they lashed out in anger and showed greater disrespect, that they were required to act older, that they experienced depression and worried often about their deployed parent.

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<sup>3</sup> An additional 31% of the children were rated as neither coping well nor coping poorly by the remaining parent.

<sup>4</sup> This sample included both husbands who experienced a six-month deployment to the Mediterranean prior to the Persian Gulf War (i.e., peacetime deployment) and husbands who left on a routine deployment to the Mediterranean but were rerouted to the Persian Gulf or Red Sea in response to Iraq’s invasion of Kuwait two weeks later (i.e., wartime deployment).

In their study examining the effect of military deployment on the behaviour of young children aged one and a half to five years of age, Chartrand *et al.* (2008) conducted a cross-sectional survey of the parents and childcare providers of 169 families. They separated the children in the sample into two distinct groups: those with a deployed active duty parent (deployed group), and those without a deployed active duty parent (non-deployed group) during the period of data collection. Their analyses indicated that children with a deployed parent between the ages of three to five exhibited greater behavioural symptoms than children without a deployed parent, independent of the non-deployed parent's symptoms of stress and depression. Additionally, they also observed that children between the ages of one and a half to three years old reacted differently to deployment than children between the ages of three to five. More specifically, they found that the children with the highest reported behavioural problems were those aged 3 to five years with a deployed parent while, on the other hand, the children aged one a half to three with a deployed parent had lower externalizing scores.

Rosen and Teitelbaum (1993) examined the response of children to the deployment of their military parent during Operation Desert Storm (ODS). They obtained psychological profiles on 1,061 children based on reporting from their remaining at-home parent. It was found that, while certain symptoms such as sadness or sleeping problems were prevalent among the children, very few parents considered their children's problems serious enough to warrant counselling. For those children that did receive counselling during ODS, the strongest predictor was a previous history of being in counselling for emotional problems, indicating that children who developed serious problems during ODS had a history of serious problems. Of note was the observation that a prime factor predicting symptoms among children is the symptom levels of other members in the family, namely the mother and other siblings. While the authors caution that such findings should not be interpreted as causally related to symptoms because all variables were measured simultaneously and the data are therefore correlational, it does support prior research which suggests that there is a relationship between parental psychopathology and the number of psychiatric symptoms reported for children.

In their study examining the effects of ODS on military children and their parents, Jensen *et al.* (1996) compared the children and families with and without a deployed parent prior to and during ODS. They administered self- and parent-report instruments regarding child and family functioning and life stressors to 383 children and their remaining at-home parents. Their results indicated that, along with their parents, children of deployed members experienced elevated self-reported symptoms of depression. In addition, these families reported significantly more intervening stressors in the past year as compared with the children and families of non-deployed personnel. These differences remained, even after the researchers statistically controlled for baseline levels of these measures prior to deployment, as well as controlling for potentially intervening variables such as the age of the children and military rank of the parent. Further, compared to families without a deployed member, families of deployed personnel reported significantly more intervening stressors. However, deployment per se was rarely found to provoke pathological levels of symptoms in otherwise healthy children.

Generally speaking, the factors that shaped the differential outcomes among children of deployed parents did not differ from the variables affecting the outcomes of children of non-deployed parents, such as family stressors, parental psychopathology, and the presence or absence of community and family supports. That said, boys and younger children were observed to be particularly vulnerable to deployment effects. Overall, the researchers contend that the difficulties of the children during the deployment can be best understood as a family problem in that the children of deployed personnel with increased symptoms also have caretaking parents with increased symptoms, as well as increased levels of family stress. That is not to say, however, that the caretaking parents cause increased symptoms in their children during the deployment of the parent but rather that the functioning of the remaining parent and the children are closely intertwined. As such, as the differences in outcome among children of deployed personnel were found to be related to family stressors and levels of parental psychopathology, it is maintained that, for assistance to be most effective, it is important to provide assistance to the whole family and by addressing the family's multiple needs.

Levai *et al.* (1995) conducted a study designed to assess whether prolonged parental absence was associated with a marker of psychiatric morbidity – the admission of a child to a psychiatric hospital. In their sample of 118 Navy children, data was collected separately for children (aged four to 12) and adolescents (aged 13 to 17) and divided into three family categories:

- a. the child lives with both parents (intact family);
- b. the child lives with a natural and a step-parent (blended family); or
- c. the child lives with a single parent.

They found that 60 percent of their Navy children and adolescent psychiatric admissions were from deploying families. The results of their study indicated that the loss of a parent through a military deployment is a significant factor in the lives of children admitted to a psychiatric hospital.

While they maintain that having a parent in the Navy is not a significant risk factor for admission for those vulnerable families, it may be that the deployment precipitates a crisis that ultimately results in the child's admission. In particular, they found that children from single parent or blended households with a deployed parent were at greatest risk for psychiatric hospitalization.

In order to help the children cope with the deployment of their military parent, the National Military Family Association developed Operation Purple Camp (OPC), a summer camp program that children with a deployed parent can attend free of charge. During a pilot study of the program, Chandra *et al.* (2008, 2010) surveyed participating families to gain a better understanding of the children's experiences with deployment. They assessed the children at three time points:

- a. baseline (before the camp);
- b. at the end of camp; and
- c. three months following the end of camp.

The children's caregivers were also surveyed at baseline and three months after the end of camp. It was found that, while the OPC caregivers reported good physical health, their mental health was poorer than the general adult population. Further, the children reported that the deployment(s) of their military parent had influenced and somewhat altered the typical behaviour of their at-home caregiver. In terms of the children's well-being, the caregivers of the children of deployed parents reported higher levels of child emotional and behaviour difficulties than those reported by parents/caregivers in the general population.

Much of the research examining the effects of parental absence on military children has been drawn from families where the parent is deployed or engaged in a combat mission; less is known about the effects of father absence under more routine conditions. In order to address this gap, Jensen *et al.* (1989) conducted a study examining the effects of father absence on the psychological development of 213 military children who had experienced an absent parent for one or more months during the past 12 months. The researchers employed multiple measures and gathered data on the children from several informants, including their mothers, fathers and their teacher. The sample was then divided into groups for comparative purposes: families whose fathers were away for more than one month in the previous year and families whose fathers had not been away for more than one month. The results indicated that children with fathers who had been absent for one or more months in the past year experienced significantly higher self-reported depression and anxiety; however, these symptoms were not apparent to the parents or the teachers. Additionally, the effects were not demonstrated when maternal psychiatric symptoms and inter-current family stressors were controlled. Therefore, it is possible that, independent of intervening family stressors or maternal psychopathology, father absence under routine conditions for relatively brief periods may exert no significant effects in relatively healthy samples of children. Future research is required to further parse out the effects of parental deployment on the children.

### 4.3 Maternal Separation

The majority of prior research examining the effects of a deployment on children has primarily focused on traditional families in which the father was the sole military member. However, as women now comprise a significant proportion of active-duty personnel and thus are also subject to the same demands of military life, it is important that the research reflect the evolving nature of military families and take into consideration the effect of deployment of the mother on military children (Kelley *et al.* 2001; Applewhite and Mays, 1996). The following section will detail the research that has been conducted to date.

The objective of the study by Kelley *et al.* (2001) was to compare the behaviour of children of enlisted Navy mothers with the behaviour of children of civilian families. Enlisted active-duty Navy mothers completed measures of child internalizing and externalizing behaviour before<sup>5</sup> and after<sup>6</sup> a deployment. In order to include a non-deploying comparison group of military children, Navy mothers assigned to shore duty also completed the same measures at similar time intervals

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<sup>5</sup> Pre-deployment data was collected from the Navy mothers approximately 3 to 6 prior to deployment.

<sup>6</sup> Post-deployment data was collected from the Navy mothers approximately 3 to 6 weeks after deployment.

as the mothers of civilian children. Child care providers of military children also completed the same measure as the Navy mothers.<sup>7</sup> In total, the sample included 52 Navy mothers in the deployment group, 75 Navy mothers in the non-deployment group, and 32 civilian mothers.<sup>8</sup> In comparing children with Navy mothers with those of civilian mothers, it was found that children with Navy mothers had slightly higher levels of externalizing behaviour than the comparison sample of children with civilian mothers. The mean levels of internalizing behaviour did not differ between groups. In comparing children of deployed and non-deployed Navy mothers, it was found that children with mothers who had experienced a deployment manifested higher levels of internalizing behaviour than children with mothers who had been assigned to shore duty during the same period. In terms of the children's externalizing behaviour, the researchers found that the child care providers reported that the children with deployed mothers manifested slightly higher levels of external behaviour, however, this was not found to be reported by the Navy mothers. In explaining this disparity, the authors speculated that child care providers may have had greater opportunities to observe child-child interactions than the mothers or that children with deployed mothers may be exhibiting better behaviour at home. Overall, the researchers conclude that, while periodic extended separations from the mother may result in a small number of children exhibiting child behaviour that is clinically significant, their findings suggest that the majority of young children with Navy mothers manifest levels of internalizing and externalizing behaviour that is within normal limits during separation (Kelley *et al.* 2001).

As part of a larger longitudinal study, Kelley (2002) interviewed 154 enlisted active-duty Navy mothers and their children, collecting data on measures of child behaviour, maternal separation anxiety, and mother-child attachment prior to and following a deployment. The child caregivers completed the same measure of child behaviour as the mothers at similar intervals. The sample was divided into two groups: the deployment group (n=71) and the non-deploying control group (n=83). Mothers in the deployment group were facing a scheduled deployment in the next 60 days and mothers in the non-deployment group were assigned to shore duty and were not anticipating a deployment in the next 12 months. The findings indicated that young children with deployed mothers were vulnerable to experiencing anxiety and sadness, and approximately 12 percent of young children may experience clinical levels of internalizing behaviour. Further, there was no evidence for the younger children that their behaviour improved over time during the deployment period, suggesting that the developmental levels of young children may preclude their ability to understand time or explanations regarding their mothers' return or future deployments.

In studying the effects of war-induced maternal separation on the adjustment of the children, Pierce *et al.* (1998) examined a sample of 263 Air Force mothers two years after the Gulf War. The goal of their retrospective study was to identify the factors that were the most predictive of the children's adjustment problems during the mother's service in the war and to assess the factors that were predictive of children's adjustment problems two years later. They found that the children of the mothers deployed during Desert Shield and Desert Storm were put at risk for various adjustment problems. These risks were found to be more pronounced when the mother

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<sup>7</sup> The study did not include data from the child care providers of the children of civilian mothers.

<sup>8</sup> Analysis based on data collected from the child care providers who completed the measure at both intervals at the same time as the Navy mothers who also completed the measure. Thus, data was available on 98 of 127 Navy children whose mothers completed the measure twice.

was deployed in the theatre of war, when she experienced difficulties in providing care for her children at home, and when her deployment resulted in significant changes and disruption for her children. Especially predictive of the children experiencing adjustment problems was the poor mental health of the mother and her struggle in providing care for the children. However, the findings of their study indicated that the adjustment problems of the children during the deployment period were not associated with adjustment problems two years later. As such, the authors conclude that the adjustment problems of the children were salient but with the negative effects relatively short-lived. It is contended that efforts to reduce the disruptions in the lives of the children would likely ameliorate the negative impact of the separation from the military parent on the well-being of the children. In addition, as the mental health of the mother is negatively impacted by the parental strain resulting from feelings of guilt and responsibility for inadequate child care arrangements, which subsequently had an adverse affect on the well-being of the children, it is important that additional support is necessary for these families.

Whether the children of military mothers are more adversely affected by a separation event as compared to children of military fathers is unclear due to a scarcity of research in the area and a lack of comparative samples. However, Applewhite and Mays (1996) conducted a study that compared the psychosocial functioning of children who have experienced extended maternal separation with that exhibited by children who have experienced paternal separation. Based on data collected from 55 active-duty mothers and 55 active-duty fathers, the researchers found that children who experienced an extended maternal separation had not been more adversely affected by the experience than children who had been separated from their fathers. This study suggests that, while it is important to also specifically consider the potential differing effect that the deployment of a mother may have as opposed to a father, it is likely that earlier findings from studies drawn from samples of children with deployed military fathers may be generalized to all children of deploying military parents, independent of their gender.

#### **4.4 Reserve Families**

The vast majority of current research on the impact of deployment on children has largely focused on Regular Force families; less research has been conducted that concentrates specifically on Reserve Families. While it can largely be inferred that much of the work that has been done on Regular Force families and the knowledge acquired can also apply to Reserve Force families, there are important differences between the two groups that must be acknowledged and which may make the effects of parental separation particularly pronounced for children in Reserve families (Harrison and Vannest, 2008).

First, active-duty Regular Force personnel are those who have chosen the military as a career. Along with their families, they tend to live on or near a military base, are deeply embedded in military culture, and have immediate access to military support systems and services (Lemmon and Chartrand, 2009; Chandra *et al*, 2008). Additionally, Regular Force military families tend to relocate every few years due to occupational requirements and for career progression while Reserve families typically do not. As such, many Regular Force military families tend to develop effective coping strategies and become highly adaptable to change, thereby enabling them to become better prepared for a deployment (Watanabe and Jensen, 2000). In contrast, Reserve force personnel live and work in civilian communities and, as they tend not to live near military installations, do not have immediate access to military support systems and are not as immersed

in military culture (Lemmon and Chartrand, 2009; Chandra *et al.*, 2008). Generally speaking, as Reservists have traditionally held a part-time commitment to the military, their families may have never identified themselves as being a “military family” and may have never sought out military support systems and resources (Huebner and Mancini, 2005).

Further, while Regular Force military families routinely experience parental absence for training, temporary duty, and overseas deployments, Reserve Force families generally do not (Watanabe and Jensen, 2000; Flake *et al.* 2009). Thus, when Reservists are called into active duty or volunteer for deployment, they are required, along with their families, to deal with changes related to income and childcare. Their children are subject to becoming “suddenly military” when a parent is deployed. They may be the only children in their schools or communities who have a military parent and are unlikely to have experienced extensive separations from the parent in the past. They may not have access to the same support mechanisms and networks available to children of Regular force personnel and may not have developed a strong sense of being part of a military family (Lemmon and Chartrand, 2009; Chandra *et al.* 2008). As such, the families and children of deployed Reservists often face heightened feelings of social isolation due to Reserve units coming from a variety of areas and communities. In contrast to Regular Force members who frequently live in a military community and are thereby surrounded by other military families, Reserve Force families often live in a community that has no military affiliation. As such, while children from Regular Force members often receive emotional support during the deployment as they are surrounded by others with similar life experiences, children of deployed Reservists may be part of the only family experiencing a military deployment in their school or community. This may then contribute to the children being more socially isolated during this time because of an inability for their peers and others in the community to understand their reality and experiences (Harrison and Vannest, 2008).

Reservists have reported that increased deployments would make it difficult for them to maintain civilian employment, would strain family relationships, and would make the recruitment and retention of reservists difficult (Kelley, 2002). Overall, although Regular Force families are accustomed to the military lifestyle and its demands, for Reserve Force families the deployment or separation of the parent is a sudden and significant lifestyle change and the lack of previous experience with such change increases their vulnerability to experiencing negative effects due to the deployment of a parent (Harrison and Vannest, 2008; Watanabe and Jensen, 2000).

## 5 Identifying Risk and Protective Factors

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Based on the review of the literature, it is evident that there are certain factors that may place the children and their families at either greater or lesser risk of experiencing negative effects as a consequence of a deployment. These factors have been identified and separated into two distinct categories – protective and risk factors; both will be explored in the following section.

### 5.1 Protective Factors

Protective factors refer to key variables that may decrease the likelihood or risk that the child may exhibit a negative outcome. In order to assess the factors which promote positive coping and adaptation to deployment, it is important to examine the organizational and family assets that have the potential to enhance the resilience of children and help them cope during the separation period. Such assets serve to buffer the experience for the children and include strengths within the family as well as within the military. The argument presented is that families who fully utilize the assets available to them will be better able to successfully manage the separation and sustain their resilience during the tenure of separation (Orthner and Rose, 2005; Weins and Boss, 2005). Two key family resources that function as protective factors during the deployment of a parent that will be discussed in this section include:

- a. active coping strategies; and
- b. the presence of social support networks.

#### 5.1.1 Active Coping Strategies<sup>9</sup>

Military families routinely experience parental absence for training, temporary duty, and overseas deployments. Further, they tend to relocate every few years, leaving one established community to start over again in another. As such, many military families develop active coping strategies and become highly adaptable to change, thereby enabling them to become better prepared for an extended deployment (Watanabe and Jensen, 2000; Weins and Boss, 2006). The presence of effective coping strategies is argued to buffer the family unit and subsequently serve to insulate the children from the negative effects of the separation experience. Overall, research has shown that families that adopt active coping strategies, such as by making efforts to maintain communication with the service member, developing a higher internal locus of control<sup>10</sup>, sustaining sources of internal resilience, and engaging the broader community in providing assistance when needed, are able to manage the separation more effectively than

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<sup>9</sup> For the purposes of this paper, active coping is defined as “the process of taking active steps to try to remove or circumvent the stressor or to ameliorate its effects. Active coping includes initiating direct action, increasing one's efforts, and trying to execute a coping attempt in stepwise fashion” (Carver *et al.* 1989: 268).

<sup>10</sup> Refers to the extent to which an individual believes that events and outcomes result primarily from their own behaviour and actions (Weins and Boss, 2006).

families that lack effective coping strategies (Weins and Boss, 2006; Orthner and Rose, 2005; Blount and Curry, 1992; Rohall *et al.* 1999)

### **5.1.2 Presence of Social Support Networks**

Researchers examining the effects of deployment on military children have postulated that the presence of strong social and community support networks buffer the negative effects on children and adolescents (Jensen and Shaw, 1996; Flake *et al.* 2009; Blount and Curry, 1992). Huebner and Mancini (2005) maintain that informal support, such as that provided by family, friends, and others in the community can be an invaluable resource in helping adolescents cope with the deployment of a military parent. In addition, they also place emphasis on the value of the benefits of formal support systems, such as that which originates within agencies and organizations, in helping the children to adjust during the separation period. In their study on the importance of organizational supports in the adjustment of families to Army life, Rohall *et al.* (1999) found that, while increasing the number of family separations appeared to impede the ability of the family to adjust to Army life, other factors such as personal attributes and personal and organizational supports helped to buffer stress related to the separation. Hiew (1992) further found that children who engaged in more social support seeking behaviour to cope with father absence were less likely to display acting-out behaviours in school. Overall, it has been shown that the availability of social and organizational supports available to the family will impact the ability of the family to cope with difficulties related to the separation of the service member (Rohall *et al.* 1999).

## **5.2 Risk Factors**

On the other hand, there are also multiple aspects that can function as a risk factor during the deployment. Risk factors refer to anything that may increase the likelihood that the child will exhibit negative outcomes; the variable that is positively related to a negative outcome. In this section, the focus is on three key risk factors identified in the research:

- a. Reserve families;
- b. young and inexperienced families; and
- c. families with a pile-up of stressors and additional challenges.

### **5.2.1 Reserve Families**

As previously discussed, there are important differences that make Reserve families unique in the military and which may place them at greater risk for heightened vulnerability to negative effects during a deployment of the service member. As they are less likely to be embedded in military culture and identify themselves as a “military family”, they may have less involvement with the organization and a reduced access to the available resources and information (Weins and Boss, 2006; Lemmon and Chartrand, 2009). Reserve families are also less likely to have prior experience with routine separations and other unique aspects of military life that have been found to increase the strength and resiliency of Regular Force families. As such, these families may therefore be confronted with becoming “suddenly military” upon the deployment of a parent,

resulting in greater disruption and instability for these families (Chandra *et al.* 2008; Huebner and Mancini, 2005; Watanabe and Jensen, 2000; Flake *et al.* 2009).

## **5.2.2 Young and Inexperienced Families**

Families that are younger and more inexperienced with military life are considered to be more vulnerable and at risk for greater levels of distress and poor coping during the separation; this is found to be particularly evident when they have not yet experienced a prior military separation or when they are new to the military system (Weins and Boss, 2006; Booth *et al.*, 2007; Rohall *et al.* 1999; Bell and Schumm, 2000; Flake *et al.* 2009). Additionally, younger spouses and those in a lower pay grade are considered to be at greater risk for poor coping and adaptability during the separation of the service member. Young spouses are considered to be at higher risk as they may lack the life experiences required to develop the necessary coping and resilience and are also less familiar with the military system and are new to military life. Families with service members in lower pay grades are considered to be at greater risk, in part because this is where the youngest members and those newest to the military tend to be found, and also because they are likely to have the least financial stability, which has been identified as a key stressor for military families (Blount and Curry, 1992).

## **5.2.3 Families with a Pile-up of Stressors and Additional Challenges**

A third risk factor includes the presence of a prior pile-up of stressors, meaning that the normal life stressors have become compounded in their intensity due to the absence of the service member from the family, such as a sick child or pressing need for household repairs. On their own, these stressors may not be significant enough to result in considerable distress but an accumulation may create a pile-up of stressors that poses a significant risk to the family experiencing a deployment. The presence of additional challenges, in addition to the stress of deployment, can thus place families at significant risk. Some examples of simultaneous challenges can include: being part of a single parent household; having a family member that is dealing with long-term illness; difficult family relationships; pregnancy; dealing with chronic illness; prior family history of poor adaptability; high levels of family conflict; and poor communication between members. While these challenges may be successfully managed on a day to day basis, they may become increasingly difficult to manage when a military separation is added to the family (Weins and Boss, 2006; Booth *et al.* 2007; Blount and Curry, 1992).

## **5.3 Additional Factors for Consideration**

### **5.3.1 Type of Development**

Two types of military-induced separation and duty-related absences have been described in much of the research on military families. The first type of military-induced separation occurs when a service member is involved in a routine or scheduled mission that has a clear duration and location. Generally, this type of deployment is non-combat related, such as a peacekeeping mission or a training exercise. The second type of deployment occurs when a service member is involved in an “unexpected” mission that is generally combat-related and involves some level

of significant danger. This type of deployment tends to have an unknown duration or location (Weins and Boss, 2006).

The discussion by McCubbin and Figley (1983) of “normative” and “catastrophic” life stressors provides insight into understanding these two types of military-induced separations. A routine deployment or duty-related separation would be considered to be a “normative” life stressor when the family has the time to prepare for the separation period, when there is minimal ambiguity regarding the length and type of separation, and where emotional distress is experienced but is temporary. Under these conditions, the family’s emotional distress is due to the initial normative military separation, generally lasts for a clearly defined time with the remainder of the separation period relatively calm. Often, the family is able to grow in confidence and adaptation during this time. However, on the other hand, military separation that is the result of a crisis, such as a war, where there is high ambiguity regarding the length of separation and the location of the service member, is considered to be a “catastrophic” life stressor. Under these circumstances, the family has little or no time to prepare for the separation and the greater uncertainty and significant level of danger usually results in higher levels of emotional distress that lasts throughout the separation period (Weins and Boss, 2006; Peebles-Kleiger and Kleiger, 1994).

Not surprisingly, research has found that these different types of deployments have been found to have varying effects on the families. More difficulties have been found to occur with sudden and longer deployments and with non-routine deployments (i.e. combat mission) as compared to more routine deployments (i.e. peacekeeping mission) and those that fall under the “catastrophic” life stressor as opposed to the “normative” life stressor (Weins and Boss, 2006; Rohall *et al.* 1999; Kelley, 2002). For example, the goal of the study by Flake *et al.* (2009) was to describe the psychosocial profile of school age children during parental deployment and to identify predictors of children at “high risk” for psychosocial morbidity during wartime deployment. There were a total of 166 parents with a child aged 5 to 12 years with a deployed parent who completed standardized psychosocial health and stress measures. It was found that one in every three children was identified as being at risk for psychosocial morbidity during a wartime deployment. Research has further indicated that, if expected and predictable, many families will learn to adapt to frequent separations. Studies have also indicated that the first few deployments are especially disruptive to families but, after a few separation experiences, family members become better able to manage the separation. This appears to occur only to a point, however, as family adjustment has been shown to decline after subsequent deployments. The literature therefore suggests that, while families develop the ability to adapt to this aspect of the military lifestyle, they eventually come to dislike it (Rohall *et al.* 1999).

### **5.3.2 “At-Home” Parent Well-being**

Research has shown that the behavioural responses and emotional state of the children is closely connected to the well-being and psychopathology of the at-home parent during a deployment (Watanabe and Jensen, 2000; Harrison and Vannest, 2008; Paden and Prezor, 1993; Riggs, 1990; Huebner and Mancini, 2005; Medway *et al.* 1995; Palmer, 2008; Flake *et al.* 2009). Palmer (2008) developed a theoretical pathway, proposing that the effects of military life on child psychosocial and academic outcomes may follow an indirect pathway involving parental stress and psychopathology. As such, a key factor for military children is the parent-child interactions. In this theoretical pathway, the implication is that the indirect effects of the military environment, namely the effects upon the parents, may better account for the outcome of the child than the

direct effects of military life on the child. In this perspective, the parent-child interactions thereby serve as a possible mechanism by which military risk and resilience factors impact the children of military parents.

It has been contended that the effect of father-absence and reunion on the children may be partially mediated by the response of the mother (Watanabe and Jensen, 2000; Paden and Prezor, 1993).<sup>11</sup> Parents and children influence each other in both positive and negative ways as parents can model both positive and negative behaviours which will be subsequently reflected by the children. With the deployment of a parent, the remaining parent is left to shoulder the primary burden of caring for the children and the household (Huebner and Mancini, 2005). A study assessing the adjustment of Army children to parental deployment found that the ability of the children to cope with the separation was closely tied to the ability of the remaining at-home parent's ability to cope, with parents who coped well found to be twice as likely to report that their children also coped well with the deployment (Orthner and Rose, 2005). Medway *et al.* (1995) conducted two studies examining the effects of war separation due to ODS on Reserve and National Guard families. Study One was conducted just following the cessation of fighting and was based on 117 women with husbands deployed during ODS, of which 87 had children while Study Two was conducted six months after reunion and was based on 154 women with husbands deployed during ODS, of which 96 had children. In both studies, the findings indicated that, while the disruption caused by the separation of the father had a negative impact on the behaviour of the children, the strongest predictor of child behaviour problems was maternal distress over separation.

Huebner and Mancini (2005) found that many adolescents reported changes in their mother's behaviour and emotions, with many displaying signs that are consistent with depression, such as being more emotional, more sleeping, and being absent-minded and preoccupied. Further, adolescents described their mother as being quicker to anger and stressed out. There was a split between adolescents who reported being able to spend greater time with their mothers as a result of the deployment and those who reported being able to spend less time with their mothers due to her increased responsibilities. Interestingly, the adolescents who reported spending more time with their mothers also reported greater satisfaction with their relationship. Flake *et al.* (2009) found that the most significant predictor of child psychosocial functioning during wartime deployment was parental stress. The association of parenting stress with child problematic behaviour is highly consistent with extant research whereby parental wellness is the single most predictive factor of child wellness.

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<sup>11</sup> It should be noted that it can be inferred, based on the review of the literature, that this would also hold true for the separation of a military mother and the at-home caregiver of the children (either the father or an alternate guardian for the children).

Military children with a deployed parent who display increased psychological or behavioural symptoms are likely to have remaining at-home parents with their own increased symptoms, in addition to greater family stress levels. That is not to say, however, that the remaining at-home parents cause or are responsible for the children's increased symptoms during the deployment of the service member, rather, it is a reflection of how closely intertwined the functioning of the child and the functioning of the parent is during the separation period (Watanabe and Jensen, 2000; Harrison and Vannest, 2008). Thus, parental absence is understood to be the precipitating factor and not necessarily the source of stress for the family and child. Rather, the source of stress is the resultant change in family structure and dynamic which occurs at the time of separation and again upon reunion (Riggs, 1990).

## 6 Theoretical Framework

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### 6.1 Overview

While progress has been made in studying the effect of parental deployment on children, it is evident that additional conceptual clarification and methodological rigour can greatly benefit this area of research. As such, a conceptual model has been developed based upon the prior review of the literature in which a number of factors were determined to be associated with a deployment and its impact on the children. Drawing from the earlier theoretical contributions and conceptual developments in the literature, it is an explanatory framework that summarizes the relationships of key variables and identifies the relevant constructs. As indicated in the model, shown in Figure 2, the event and/or stressor is the deployment of the parent, which includes characteristics such as the type of separation (i.e. normative vs. catastrophic); the length of the separation; and the structure of the family unit (i.e. traditional vs. non-traditional). For example, as discussed in Chapter 5, research has shown that different types of military-induced separations have been found to have varying effects on the families, with more difficulties observed with non-routine separations (such as combat missions) as compared to more routine separations. In terms of the length of separation, research has also indicated that greater difficulties occur with longer deployments and in non-traditional families.

The model also depicts two factors contended to either alleviate **Protective Factors** or heighten **Risk Factors** the negative effects of the deployment on the children. As the relationship between these constructs has not been entirely parsed out in the research, the extent to which they moderate the negative impact on the children has not been conclusively determined. However, based on the literature and prior research findings, it is hypothesized that these factors play an instrumental role in determining the extent to which the children experience greater or lesser negative effects as a consequence of the deployment of a parent.

First identified in the construct are the **Risk Factors**, referring to aspects that can function as a risk factor during the event and/or stressor and which may increase the likelihood that the child will exhibit negative outcomes. As discussed in Chapter 5, there are three key risk factors identified in the research, including:

- a. reserve families;
- b. young and inexperienced families; and
- c. families with a pile-up of stressors and additional challenges.

Research suggests that children from these families may be at greater risk for experiencing negative effects during the separation period. For example, Reserve families are less likely to be embedded in military culture, identify themselves as a “military family”, and may have reduced access to the supports and resources available. Further, these families have less prior experience with routine separations and other aspects of military life shown to increase the strength and resiliency of Regular Force families. As such, the deployment of a Reserve parent may have a greater impact on their children, who may then be more likely to exhibit heightened negative

effects. Also, children from families that are more inexperienced and younger and who have a pile-up of stressors (such as long-term illness of a family member) are argued to be at greater risk of experiencing poor outcomes.

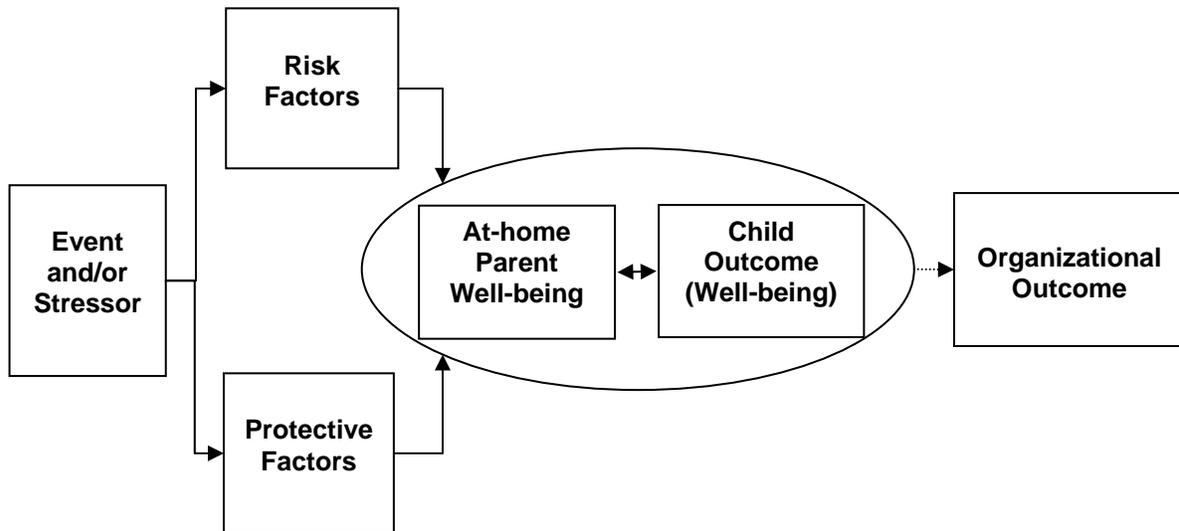


Figure 2: Theoretical Framework

On the other hand, the **Protective Factors** refer to those aspects that can function as a protective factor during the event and/or stressor and which may decrease the likelihood that the child will exhibit negative outcomes. As discussed in Chapter 5, there are two key protective factors identified in the research, including:

- a. active coping strategies; and
- b. the presence of social support networks.

Research suggests that children from families that employ both positive coping strategies and which have strong social support from both informal and formal sources may be at less risk for experiencing negative effects during the separation period. As such, it is postulated that the presence of these factors likely has a positive effect on the children, thereby decreasing their likelihood of exhibiting negative effects as a consequence of the deployment of a parent.

The next construct identified in the model is that of the **At-home Parent Well-being**, and refers to the emotional and mental health state of the current guardian of the child during the deployment of the parent. As discussed in Chapter 5, research has shown that the well-being of the children's guardian during the separation period is closely connected to the behavioural responses and emotional state of the children. As this relationship may serve to have either a positive or negative impact upon the well-being of child, depending on how the at-home parent is faring during the separation, it is therefore postulated that this factor may also play a key role in determining the extent to which the event and/or stressor, along with the presence of either the risk or protective factors, has an impact upon the military child. It is further conceptualized

that a reciprocal relationship may exist between the well-being of the at-home parent through a two-way mutually reinforcing relationship, as depicted by the double-facing arrows. For example, a child who responds poorly to the parent's deployment may serve to decrease the well-being of the at-home parent, which may then lead to a further decrease in the well-being of the child.

The model also identifies the impact of a deployment on the child and recognizes that there are both individual and organizational consequences. In terms of the individual consequences, namely the impact upon the military child (**Child Outcome**), the research has clearly indicated that there are variable effects on a child during a deployment and which may result in the child exhibiting negative outcomes such as internalizing behaviour, (such as sadness, anger, fear, etc.), externalizing behaviour (such as fighting, acting out, etc.), and a decline in academic performance. With respect to the **Organizational Outcomes**, research has indicated that the successful adaptation of children to military life and child well-being is strongly related to member retention and operational effectiveness during a military mission. As such, in this conceptualization, it is contended that both the well-being of the at-home parent and the issues and well-being of military children (**Child Outcome**) as a consequence of the event and/or stressor has an indirect linkage to the organizational outcomes of the military.

## 7 Future Research Recommendations

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Despite the gains that have been made in research over the past few decades, we still lack the capacity to identify the military children at greatest risk for negative outcomes as a consequence of the deployment of a parent. Further, we have little knowledge regarding what types of interventions and/or supports would best help these children and their families better adapt to the deployment of a parent (Jensen, 1999). Also, given that the vast majority of the current research is primarily based on research conducted within the U.S. and the significant lack of research conducted within Canada in this area, we are limited only to inferring that much of the knowledge acquired in the area with respect to American military children can also be generalized to children from CF families. Overall, there are many gaps in the current research that need to be addressed and it is clear that future research is necessary in order to better understand the effects of the separation experience on CF children so that more effective strategies and resources can be developed and directed. In order to address the lack of knowledge and understanding regarding the impact of a deployment on the children of CF members, it is strongly recommended that further research be conducted that addresses these gaps.

### 7.1 Longitudinal Research Design

Although the deployment of a military parent may be a finite experience for children, such separations may also occur repeatedly throughout the course of a military career (Fitzsimons and Krause-Parello, 2009) and yet, the cumulative effects of such separations are largely unknown. As such, the long-term effects of being a military child subjected to multiple deployments needs to be examined in further depth.<sup>12</sup> Thus, there is a need for longitudinal research that spans the deployment cycle and which investigates the impact of several deployments on the children in order to fully ascertain the role of military deployments on the development and well-being of military children (Flake *et al.* 2009). Given the structure of military communities, there is a greater opportunity to monitor the children and their families over time, thereby developing a more comprehensive understanding of the risk factors related to a deployment. In conducting such studies, it would thus be possible to further determine how the accumulation, timing and sequencing of risk factors are related to the overall impact on the children and to their well-being (Jensen, 1999). Thus, it is recommended that a longitudinal study be conducted whereby data are collected on the well-being of children of CF personnel during three key points of the separation period, including:

- a. prior to deployment;
- b. mid-point of the deployment; and
- c. post-deployment of the CF parent.

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<sup>12</sup> Suggestions for potential research strategies include: focusing on obtaining a larger sample of older children who, by virtue of having been a military child for a longer period of time, are more likely to have experienced multiple deployments of a parent; continue to follow up with former study participants to determine whether they have experienced another deployment; and specifically identify the criteria for participation as past experience with deployments in advertising and recruitment efforts.

By employing a longitudinal research design that captures data on the children at each point in time, greater insight and understanding can be attained as to what specific challenges are being faced by the children and their families during each stage of a deployment.

## **7.2 The Inclusion of Multiple Informants**

Concerns have been identified regarding the possibility that there may be methodological issues and biases present in the research examining the impact of deployment on the children. This concern is due to the fact that much of the research that has examined the impact and well-being of the children has been generally based on reports drawn from samples and information acquired solely from the parents, as opposed to obtaining data directly from the children themselves. For example, Rosen *et al.* (1993) found that the symptoms of the children were correlated with that of their parents, indicating the presence of a reporting bias whereby the parents who were more distressed may have been more likely to report problems with their children on the survey. In addition, in their study of the effects of the military father absence on children during more routine conditions, Jensen *et al.* (1989) found that the children whose fathers had been away for one month or more in the previous year self-reported experiencing significantly higher depression and anxiety than was reported by their parents and teachers. This finding is generally consistent with additional reports that children may be a better source of information about their internalizing symptoms than adult observers. As such, future research efforts should account for the possibility of such reporting biases and attempt to obtain information from the children themselves (Chandra *et al.* 2008). Any adequate study examining the effects of deployment on children should therefore include information that is obtained from both the perspective of the parents and the children themselves as it is difficult to ascertain how objective parental reports are in these circumstances. Additionally, such studies should include measures of the parents' own responses to the deployment as they likely play a key role in mediating child responses (Jensen *et al.* 1996). Therefore, it is recommended that future research examining the effects of deployment on CF children also include multiple informants to increase validity of the data and improve the quality of analysis. In particular, it is proposed that both the at-home parent and the children themselves be included when gathering data on the child's well-being and when assessing the impact of parental separation on the children of CF personnel.

## **7.3 Measuring the Well-Being of Canadian Forces Children**

As child well-being is the outcome variable of interest, clearly defining the concept of "well-being" is necessary in order to appropriately test the effects of deployment on the children of CF personnel. The welfare of military children was found to be an area of concern in the literature, with several studies examining the impact that the deployment of a parent has on the well-being of the children. However, although much of the literature acknowledges the importance of the children's well-being during the deployment, these assessments have generally been limited in their scope and in terms of providing a comprehensive measurement of overall well-being. As such, a need for a systematic and clearly defined assessment of the well-being of CF children experiencing the separation of their military parent was identified.

In order to further explore the matter of the well-being of the children of CF personnel, it was therefore necessary to examine extant literature to help better identify whether there were any significant dimensions that have been included by other researchers when assessing child well-being. There were three additional studies in particular that provided much insight into measurements of child well-being, all of which employed similar approaches. The first study tested the effects of non-resident father involvement on child well-being based on the development of five indices. The first index was the 'Behavioural Problems Index (BPI)',<sup>13</sup> and measured the incidence of behavioural problems in children based on maternal reports of the children. The second index was 'Self-Perception Profile for Children – Scholastic Competence' and was based on a self-report questionnaire of items measuring the child's perceived competence in the academic skills domain. The third index was 'Self-Perception Profile for Children – Global Self-Worth' and was based on a self-report questionnaire measuring the child's sense of self-worth. The fourth measurement, 'Peabody Individual Achievement Test – Mathematics' was a test completed by the children that measured their mathematical ability. The final measurement was the 'Peabody Individual Achievement Test – Reading Recognition' and measured the ability of children in oral reading (King, 1994). The second study examined whether children were better off when they remain in two-parent families characterized by marital conflict or whether they were better off when their parents dissolve their marital relationship. The focus again in examining the well-being of the children was on the behavioural response of the children and also included the BPI in measuring the dependent variable of child well-being (Jekielek, 1998).

The third study investigated whether conflict between parents may explain why children in stepfather households were doing worse than children in traditional, two-parent households and no better than children in single mother households. They included eight child outcome variables to test their hypothesis, with all measures based on the reports of the parents. The variables included: two measures of academic achievement (measured with single indicators and based on the relative class rank or grade point average, depending on the age of the child); one measure of behaviour problems at school (comprised by assessing whether the parent was asked to meet with members at the school due to behavioural problems, whether the child has been suspended or expelled or had dropped out of school); four measures reflecting various psychological dimensions of child welfare (assessed by the frequency in which the child exhibited various behaviours, including externalizing behaviour, internalizing behaviour, sociability, and initiative); and one overall measure of child well-being (Hanson *et al.* 1996).

Based on the review of the prominent indicators measuring child well-being in the literature, it was evident that there are some fairly standard and consistent measurements employed in assessing well-being among children and these are reflected in this discussion. Although all of these indicators are clearly evident in the literature examining the impact of deployment on children, most studies do not assess these four key dimensions as comprehensively by including all of them in analyses of well-being in a single study.

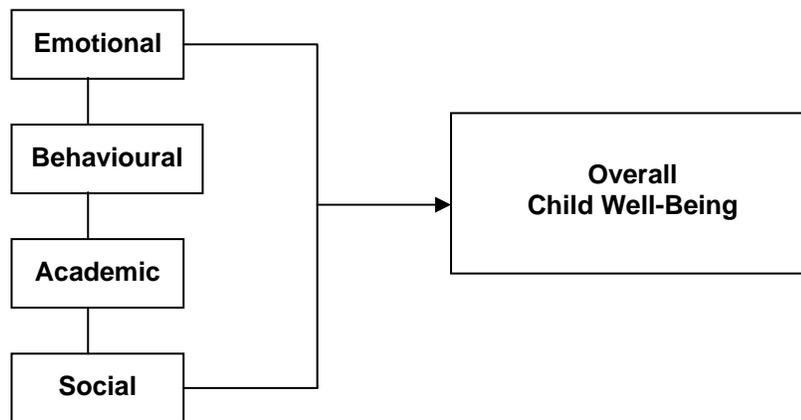
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<sup>13</sup> The BPI incorporates 31 items that measure a variety of child behaviour problems the child may have exhibited in the past three months (King, 1994; Jekielek, 1998).

Based on the review of the prominent indicators assessing child well-being in the extant literature, it is therefore contended that the well-being of CF children experiencing the deployment of a parent should be assessed based on four indicators:

- a. Emotional;
- b. Behavioural;
- c. Academic; and
- d. Social (Refer to Figure 3).

The first indicator of overall well-being, Emotional, would assess the emotional state of the child and measure the degree to which the child can be characterized as experiencing emotional difficulties or whether the child was well-adjusted and expressively healthy. The second indicator, Behavioural, would assess the degree to which the child engaged in fighting, displayed aggression, acted out, got into trouble, has been expelled or suspended from school, talked back and refused to listen or follow directions. The third indicator, Academic, would measure the school performance of the children and assess whether the children were able to effectively grasp the material and succeed in an academic environment. The fourth and final indicator, Social, would examine assessments pertaining to the ability of the child to successfully socialize with peers, teachers, and members of the community, develop friendships, and on the quality of the relationships of the child with family members, such as the parents or siblings.



*Figure 3: Index of Child Well-Being*

Although all of these indicators are clearly evident in the literature, the majority of previous studies have not, for the most part, assessed the four key dimensions of well-being simultaneously. As stated above, researchers have tended to consider one or more dimensions of well-being, as opposed to conducting a comprehensive examination of the overall well-being of the children in a single study. Thus, in order to address this gap in the literature, the above index was developed for use in future evaluations into the impact the deployment of a parent has on the well-being of children of CF personnel. Use of this well-being index will therefore enable an analysis of the children's well-being to be conducted across multiple dimensions,

thereby providing a systematic measurement tool that can serve as a baseline for assessing the overall well-being of the children of CF personnel impacted by a deployment.

## **7.4 Age of Children**

The earlier review of the literature suggested that the age of the child may be an important consideration when conducting research on children impacted by the deployment of a military parent. For example, Orther and Rose (2005) found that aggressive behaviour was particularly problematic for children aged 3 to 10 and continued to be a problem for one in five adolescents. Depression was reported for approximately one in four children of school age, while academic difficulties were found to occur for about one in five children of school age. Chartrand *et al.* (2008) observed that children between the ages of one and a half to three years old reacted differently to deployment than children between the ages of three to five. More specifically, they found that the children with the highest reported behavioural problems were those aged 3 to five years with a deployed parent while, on the other hand, the children aged one a half to three with a deployed parent had lower externalizing scores. Thus, as it is likely that the effect of the protective and risk factors may vary for children of different age groups, with younger children possibly responding differently to the deployment of the parent as compared to older children, as indicated in the literature, it is thus recommended that future research take into account the different age groups and developmental stages of the children.

## **7.5 Maternal vs. Paternal Deployment**

It is important that research be conducted which parses out whether there are differential effects for the deployment of a mother as compared to the father. As previously stated, the majority of prior research on parental separation has generally focused on traditional families whereby the father was the service member. However, as women now comprise a significant proportion of service personnel in the CF and are thus subject to the same demands of military life, including military-induced separations from family, it is therefore imperative that the research reflects the changing dynamic of the CF. As such, it is important that future research consider the potential impact that the deployment may have on the families of female CF personnel in addition to those families of male CF personnel, as well as consider dual-enlisted families in the CF.

## **7.6 Regular Force vs. Reserve Force Families**

It is also important for a distinction to be made with respect to the differences between the families of Regular Forces and those of Reserve Force CF personnel. Again, the literature indicated that there may be differential effects between the two groups and their families during a deployment. As such, it is therefore important that specific attention also be paid to the families and children of both Regular and Reserve Force CF members regarding the impact that deployment has on their children.

## **7.7 Recommendations**

In conclusion, it is recommended that future research on the impact that the deployment of a parent has on the well-being of children be conducted within the DGMPPRA research program and that it employ the index developed in this paper when assessing the effects of that experience on the children. Not only would such research address a critical gap in the literature, and do so from a Canadian perspective, but it is expected to directly benefit the CF and DND by providing greater insight into how the children of CF personnel are impacted by the deployment of a parent. Further, by identifying those children who are at greater risk of exhibiting negative effects as a consequence of the separation, more effective strategies and resources can be directed towards those children and families most vulnerable during the deployment experience. As research has shown that there are clear linkages between the well-being of military children and key organizational outcomes, such as retention and operational effectiveness, it is important that greater consideration be given to how the children of CF personnel are impacted as a result of the deployment of a parent.

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Military families experience a number of life stressors, such as frequent geographical moves, recurring periods of separation, geographic isolation from extended family support systems, and the potential of the military member being deployed into a hostile environment. Children in military families experience the same developmental and motivational processes as their civilian counterparts. However, military children also experience unusual developmental pressures placed on them due to the unique demands of military life, such as parental absence. Indeed, the deployment of a parent is one of the most widely documented stressors for military families and is a defining aspect of military life. Yet, minimal research has specifically examined the impact of parental deployment on the children of Canadian Forces (CF) personnel. This paper addresses this significant gap in the research by exploring the theoretical developments in the literature; discussing the five stages in the emotional cycle of deployment; examining the current research on the impact of deployment on the children; categorizing the risk and protective factors identified in the literature; presenting a conceptual framework of the key factors that was developed based on the review of the research; and providing recommendations for future research directions.

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Military-induced Parental Separation; Deployment; Cycle of Deployment; Child Well-Being; Military Children; Military Families



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