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The effects of military-connected parental absence on the behavioural and academic functioning of children: a literature review

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Abstract

Purpose – *Military-connected students experience a high rate of parental absence due to their parents' military obligations. Military work-related parental absences can affect school-aged children's emotional and behavioural health and overall academic functioning. The paper aims to discuss this issue.*

Design/methodology/approach – *The current review identified research studies that explored the effects of military-connected parental absence on school-aged children. Specifically, quantitative and qualitative research studies that examine the impact of military parental absences on dependent variables related to internalising and externalising behaviours and academic functioning were of interest. In all, 26 studies were identified for inclusion in the review.*

Findings – *Overall, military-connected students who experience a parental absence due to military service are more likely to exhibit an increase in problem behaviours and a decrease in academic functioning compared to civilian peers or military-connected peers who were not experiencing parental absence.*

Originality/value – *The current review elucidates parental absence within the military context, highlighting key factors that may contribute to increased and decreased behavioural and academic functioning of military-connected students. Results from the review in relation to risk and protective factors for military-connected students, future research and school programming directions are discussed.*

Keywords *Literature review, Academic functioning, Behavioural functioning, Military families, Military-connected students, Parental absence*

Paper type *Literature review*

Introduction

Parental absence occurs in a number of contexts (e.g. divorce, incarceration and civilian and military occupations) and can influence children in a myriad of ways. Each family member and family unit can react differently to the absence of a parent depending on factors such as the reason for the absence, child temperament, familial structure and parental well-being. However, many families experience difficulties with separation and draw from common resources within their community. Recent evidence suggests that employment which involves long separations from family is particularly concerning for healthy family functioning because the separations result in ongoing challenges during the absence and upon reunification, particularly with regard to role confusion (Orthner and Rose, 2009; Zvonkovic *et al.*, 2005). In other words, parents coming and leaving and the constant role shifts of family members can upset family balance. Once out of balance, individual family members and the family as a whole can experience a high degree of stress.

The Global War on Terror (GWOT), which commenced in 2001, includes Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). OIF and OEF substantially increased

military operational tempo and, subsequently, the need for military Service Members to be away from their families on numerous occasions and for long periods of time. Due to increases in Service Member deployments, understanding the effects of parental absence due to military separations for children, youth and families is important. A large portion of the existing research on parental absence centres on divorce, legal separation and incarceration. While research in these contexts may provide some insight into the potential range of adjustment outcomes in children when a parent is absent for short or extended periods of time, it does not investigate the unique factors related to military life. Thus, military family-specific contextual factors need to be examined to inform programming and policy directed towards these families.

Changing demographics and deployment cycles in the US armed forces

Over the last 20 years, the military has required significant sacrifices from children, youth, military spouses and families. This demand on families contrasts greatly with previous conflicts in which the majority of individuals sent to war in combat roles were single, male draftees without dependents (Tanielian and Jaycox, 2008). A primarily single male force was the norm until the Gulf War in the early 1990s. During this conflict, a large number of married Service Members deployed and left spouses and children behind. Following the 11th September, attack in New York, Service Members faced increasingly lengthy combat deployments and more female Service Members were deployed than ever before (Department of Defense, 2010). In OIF and OEF, 47 per cent of active duty parents with children had deployed at least once, and 63 per cent of Reserve Component Service Members with children had been deployed (Office of the Deputy Assistant Secretary of Defense, 2012). National Guard and Reserve members have played an unprecedented role in the GWOT, and comprise a large percentage of combat-deployed individuals. Because National Guard and Reserve members and their families are typically geographically isolated, rather than located on or near a military base or community, many families have to cope with the deployment of a family member without formal supports or resources.

All branches of the US military deploy their Service Members for various reasons during war and peacetime. There are two primary types of deployments that military Service Members experience during their careers. Normative/routine deployments are non-combat related. These can include temporary duty assignments and extended training exercises. Combat/combat support deployments are made to "hot spots" across the globe where fighting takes place (Department of Defense, 2010). One should note that each of the Service Branches has differing deployment schedules.

The Marine Corps, which is considered the quick reaction force of the military, is highly deployable. It has multiple Marine Expeditionary Units (MEUs). MEUs train for six months before being deployed on a Navy ship to conduct a range of missions (US Marine Corps, 2013). Navy families consistently face separation from their Service Members due to ship or submarine duty. According to *Sea Legs: A Handbook for Navy Life and Services* (2013), a significant component of the Navy lifestyle is family separation. Navy family separation may be due to training exercises, overseas deployments, ship duty or Individual Augmentee deployments (Naval Services FamilyLine, 2013). The Army, which is the largest fighting force in the US military, deploys soldiers for an average of 12 months, which is longer than any other branch. The Army, like the Marine Corps, continuously trains (or drills) to keep a ready force. As a result, soldiers and Marines are likely to experience more absences relative to the other Service Branches, although, this is somewhat dependent upon their job assignment or military operational specialty (MOS). The Air Force deploys its Service Members less often than their counterparts; however, they still may deploy for lengthy periods of time depending on their MOS. Regardless of branch, a Service Member will inevitably spend time away from his or her family numerous times over a typical 20-year career.

In alignment with the changing demographics of the US military from a force of largely single males to individuals with spouses and children, it is not surprising that, as of 2012, 44 per cent of Department of Defense active duty Military personnel were parents – 37 per cent married and 7 per cent single. Further, 2.8 per cent of the identified married parents were in dual military marriage, which indicates that both parents were active duty Service Members who could be

absent from the home at the same time. Service Members are parents to almost two million military children nationwide (Office of the Deputy Assistant Secretary of Defense, 2012). At some point in time, these children and youth will experience parental absence due to combat and non-combat deployments.

Why parental absence matters in child health and well-being

Parental absence can have a number of effects on overall family dynamics and these are grounded in several theories. Theories focusing on family stress (McCubbin and Boss, 1980; Robinson, 1997) and ambiguous loss (Boss, 2004, 2007) posit that deployment or absence as a stressor is compounded by other normative or developmental stressors that family members experience. These theories indicate that families are negatively affects because family roles change and already-established family boundaries become ambiguous (Huebner *et al.*, 2007). Family attachment theory discusses family dynamics as it relates to the differences in parent-child attachment relationships and the multiple family relationships that exist within specific contexts. During parental absence, this may cause relationship strains between various members of the family (Riggs and Riggs, 2011).

From ecological theory, children are embedded in multiple contexts (e.g. family, school and neighbourhood) that influence each other (Bronfenbrenner, 1977). Thus, children experience the effects of parental absence in the home, school and social environments. Children may experience a disruption to family routines or a change in the family dynamic during prolonged parental absences. They may respond by exhibiting internalising (e.g. anxiety, worry, fearfulness and shyness) or externalising behaviours (e.g. acting out, anger, aggression and risky behaviours), any one of which can potentially impede academic success (Rimm-Kaufman and Pianta, 2000), psychosocial health (Maholmes, 2012) and overall well-being (Andres and Moelker, 2010).

Method

We conducted a comprehensive literature review on military-connected parental absence and its effects on children. It was conducted with a focus on factors that could inform the identification of already existing programmes or the development of ones that have the potential to bolster child and family health during military-related separations.

A systematic database search was conducted to identify articles that examined the effect of parental absence on children. The search specifically focused on behavioural and academic outcomes and on programmes or services that have been effective for children who are facing a military work-related parental absence. The electronic databases searched were ProQuest, including PsychArticles, PsychINFO and ProQuest Social Sciences Premium Collection. Search terms used included: "parental absence, child effects, military"; "parental absence, child outcomes, military"; "parental absence, children, military"; "parental deployment, child effects"; "parental deployment, child outcomes"; "parental deployment, children"; and "parental absence, military". The initial search resulted in 389 articles prior to the application of inclusion criteria.

After the initial search, articles were reviewed and selected for inclusion if they met the following criteria:

- qualitative or quantitative data were collected that specifically targeted the impact of parental absence (excluding death) on children;

- participants in the study were school-age (i.e. ages three to 21 or grades K-12) or were caregivers (parents, teachers or administrators) of school-age children;

- participants were connected to the US Armed Forces;

- the article was published in a peer-reviewed journal; and

- the article was published in English.

After applying the inclusion criteria to the initial 389 articles, 26 were identified for inclusion in the literature review. A brief summary of each study is included in Table I.

Data extraction and analysis

Once all the relevant research had been identified, two authors independently coded each article based on the three main outcome variables of: first, internalising behaviours; second, externalising behaviours and finally, academic outcomes. Then the coders identified any discrepancies in coding that were discussed with the research team until 100 per cent agreement was obtained. After the outcome variables had been coded, the research team identified four main data sources from the articles: (first, parent reports; second, child self-reports; third, school personnel reports; and finally, record reviews. The type of outcome and data source for each study are reported in Table I. All data were analysed for similarities and differences, between studies, of child outcomes throughout the data sources. In addition, considerations were noted on the type of data reported (i.e. qualitative or quantitative) and whether the study used samples from non-combat and/or combat-related parental absences.

Results

Effects on internalising behaviours

Of the 26 studies, results from 19 found that military work-related parental absence was associated with an increase in child internalising behaviours (Aranda *et al.*, 2011; Cederbaum *et al.*, 2014; Chandra *et al.*, 2010a, b; Flake *et al.*, 2009; Hillenbrand, 1976; Houston *et al.*, 2009; Huebner, Mancini, Wilcox, Grass and Grass, 2007; Jensen *et al.*, 1996, 1989; Kelley, 1994; Kelley *et al.*, 2001; Lester *et al.*, 2010; Mmari *et al.*, 2009; Pedersen, 1966; Reed *et al.*, 2011; Waliski *et al.*, 2012). Internalising behaviours are a broad class of emotional difficulties that include depression, separation anxiety, general over-anxiety, fearfulness and withdrawal (Amato, 2001; Amato and Keith, 1991; Stadelmann *et al.*, 2010). Internalising behaviours were

Table I Studies used in review by type of outcome

Author	Year	Parent report Ext	Int	Aca	Self-report Ext	Int	Aca	School report Ext	Int	Aca	Record review Ext	Int	Aca	Type
Applewhite and Mays	1996		X											Survey
Aranda *et al.*	2011	X	X	X	X	X	X							Survey
Barker and Berry	2009	X												Survey
Cederbaum *et al.*	2014					X								Survey
Chandra *et al.*	2010b	X	X	X	X	X	X							Interview and survey
Chandra *et al.*	2010a								X					Focus groups and interview
Engel *et al.*	2010												X	Record Review
Flake *et al.*	2009	X	X											Survey
Gilreath *et al.*	2013				X									Survey
Gorman *et al.*	2010										X	X		Record Review
Hillenbrand	1976							X	X					Survey
Houston *et al.*	2009				X	X								Interview
Huebner *et al.*	2009				X	X								Focus group
Jensen *et al.*	1989					X								Survey
Jensen *et al.*	1996					X								Survey
Kelley	1994	X	X											Survey
Kelley *et al.*	2001	X	X											Survey
Lester *et al.*	2010					X								Survey
Levai *et al.*	1995										X	X		Record review
Lyle	2006												X	Record review
Mansfield *et al.*	2011										X	X		Record review
Millegan *et al.*	2013										X	X		Record review
Mmari *et al.*	2009		X			X	X	X	X					Focus groups
Pedersen	1966				X	X								Survey
Reed *et al.*	2011				X	X								Survey
Waliski *et al.*	2012		X											Focus group

Note: Ext, Externalising Behaviours; Int, Internalising Behaviours; Aca, Academic Outcomes; X, represents whether or not a specific outcome was reported by each article

identified by self-report, parent report, school personnel report across surveys, interviews and focus groups. Results are described according to the data source (i.e. self-report, parent report or school personnel report).

Parent report. Parent reports of child internalising behaviours indicate an increase in problem behaviours during a military work-related parental absence (Aranda *et al.*, 2011; Chandra *et al.*, 2010b; Flake *et al.*, 2009; Kelley, 1994; Kelley *et al.*, 2001; Mmari *et al.*, 2009; Waliski *et al.*, 2012). For example, in a study that had (*n* = 101) parents complete survey data on child behaviour during a recent 15-month deployment, 39 per cent of the children in the sample were identified as high-risk for internalising problems based on the Pediatric Symptom Checklist (PSC) (Flake *et al.*, 2009). Navy children experiencing maternal non-combat-related absences were found to have higher levels of internalising behaviours relative to their peers with non-deployed mothers and a civilian control group (Kelley *et al.*, 2001). Another survey study found that parents reported 22.6 per cent of children were considered at-risk for significant psychosocial difficulties when a parent was deployed compared to 9.4 per cent of children without a deployed parent (Aranda *et al.*, 2011). In a focus group study, parents described an increase in adolescent's emotional stress and anxiety due to military work-related parental absence (Mmari *et al.*, 2009). Mothers of young children reported similar concerns during focus group discussions. In particular, mothers noted their young children mimicked their emotional well-being; thus, if mothers cried, their young children would cry as well (Waliski *et al.*, 2012).

Child self-reports. Military children and youth also reported significantly more internalising behaviours when their parents were deployed (Aranda *et al.*, 2011; Cederbaum *et al.*, 2014; Chandra *et al.*, 2010b; Houston *et al.*, 2009; Huebner *et al.*, 2007; Jensen *et al.*, 1989, 1996; Lester *et al.*, 2010; Mmari *et al.*, 2009; Pedersen, 1966; Reed *et al.*, 2011). For example, when compared to the national average, both boys and girls experiencing parental deployments reported significantly more emotional difficulties on the Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001), which included concerns related to emotional symptoms and peer problems (Chandra *et al.*, 2010b). Two additional self-report studies found that male and female high school students with deployed parents were more likely to exhibit internalising behaviours than peers without a deployed military parent, and these behaviours included increases in depressed moods and suicidal ideation (Cederbaum *et al.*, 2014; Reed *et al.*, 2011). Similar results were identified in focus groups' discussions in which adolescents self-identified internalising behaviours, such as loss of interests, sadness and sleeping problems (Huebner *et al.*, 2007) and increased stress and anxiety (Mmari *et al.*, 2009).

School personnel reports. Information obtained from school personnel was consistent with data from parent and child self-reports. Teachers observed increases in internalising behaviours during military work-related parental absences. Teachers who engaged in focus groups and semi-structured interviews reported that students across all ages (5-18) demonstrated more anxiety during parental deployments than when parents were at home (Chandra *et al.*, 2010a). School personnel participating in a focus group study indicated that they noted increases in adolescent emotional stress and anxiety during military work-related parental absence (Mmari *et al.*, 2009).

Effects on externalising behaviours

The majority of studies examining the relationship between externalising behaviours and deployment-related absence found an association (Aranda *et al.*, 2011; Barker and Berry, 2009; Chandra *et al.*, 2010b; Flake *et al.*, 2009; Gilreath *et al.*, 2013; Huebner *et al.*, 2007; Kelley, 1994; Mmari *et al.*, 2009; Pedersen, 1996; Reed *et al.*, 2011). Externalising behaviours are a broad class of emotional difficulties with accompanying outwardly directed behaviours, including defiance, impulsivity, disruptiveness and over-activity (Achenbach and Edelbrock, 1978). Within the parental-absence literature, externalising behaviours also include reports of more serious behaviours such as acting out, delinquency, fighting and engaging in disruptive and/or risky behaviour (Demuth and Brown, 2004). One study, prior to the 2001 terrorist attacks, found, in a sample of 383 children, there were no differences in externalising behaviours between children of

deployed and non-deployed parents when comparing longitudinal and cross-sectional data (Jensen et al., 1996).

Parent report. One study compared the effects of combat and non-combat absences (Kelley, 1994). This study found that combat-related deployments were more distressing to children, youth and families compared to deployments that were not combat related (Kelley, 1994). This finding was largely due to anxiety about misinformation and rumours regarding the deployment situation and concerns about the Service Member's health, potential for sustaining injury and returning from the deployment with Post-Traumatic Stress Disorder. Non-combat deployments are typically seen as carrying less risk. Another study reported that Navy children who had non-combat-deployed mothers did not experience increases in externalising behaviours when compared to children of non-deployed mothers or a civilian control group (Kelley et al., 2001).

Results from studies focused on combat deployment indicate a positive relationship between parental absence and externalising behaviours utilising both qualitative and quantitative data (Aranda et al., 2011; Barker and Berry, 2009; Chandra et al., 2010b; Flake et al., 2009). Aranda et al. (2011) found that parents and youth reported increases in children's externalising psychosocial behaviours when a parent was deployed. Further, twice as many children with deployed parents scored at the at-risk range on the PSC (Jellinek et al., 1988), a scale measuring emotional and behavioural problems, compared to children without a deployed family (Aranda et al., 2011). Similarly, Barker and Berry (2009) found that when children's behaviours were measured at pre- and post-deployment, externalising behaviour problems at post-deployment significantly increased.

Child self-reports. Within focus group settings, male and female adolescents reported that they were more likely to be argumentative and yell at parents when a parent was deployed (Huebner et al., 2007). Further, female adolescents described increases in promiscuity and non-suicidal self-injury (e.g. cutting) during parent deployments (Chandra et al., 2010b). Younger children also reported externalising reactions to deployment, such as anger and fighting with others (Houston et al., 2009). Survey studies were consistent, which indicates an association between externalising behaviours and deployment (Aranda et al., 2011; Gilreath et al., 2013; Pedersen, 1996; Reed et al., 2011). Students with a deployed parent who completed the PSC (Jellinek et al., 1988) endorsed significantly more externalising symptoms than those without a deployed parent (Aranda et al., 2011). A survey of male and female high school students found an increase in the number of parent deployments was associated with a higher likelihood of lifetime and current drug use (Gilreath et al., 2013). Further, data from a 2008 survey (Washington State Healthy Youth Survey) found that, among male and female adolescents, those with deployed parents were more likely to engage in binge drinking or drug use than their civilian peers (Reed et al., 2011).

School personnel reports. School personnel participating in focus groups indicated that military-connected youth who were experiencing deployment tended to repress emotions, which resulted in behaviour problems. Specifically, school personnel described that externalising behaviour problems within the school setting has been more common since recent deployments (Mmari et al., 2009). There was also some indication in this study that, since the wars in Iraq and Afghanistan, there is a greater awareness of who the military-connected students are in the classroom, which was seen as a positive occurrence (Mmari et al., 2009).

General psychiatric concerns

As described above, a positive association has been found between parental absences and increased internalising and externalising behaviours. This relationship has also been demonstrated in studies using record review data, such as mental health visits, diagnostic records and hospitalisations (Gorman et al., 2010; Levai et al., 1995; Mansfield et al., 2011; Millegan et al., 2013). For example, in a large scale retrospective review of medical records of 642,397 military-dependent children aged 3-8 years, Gorman et al. (2010) found that when a parent was deployed, outpatient and behavioural health visits increased by 11 per cent. Further, diagnoses related to child behavioural disorders and stress disorders increased substantially (19 and 18 per cent, respectively) during times of parental absence due to military service. Serious mental health problems may also be more common for youth when their Service Members are

deployed. One study of 2,533 military children and youth found that psychiatric hospitalisation increased by 10 per cent among children whose military parent was recently deployed compared to those whose parent remained at home (Millegan *et al.*, 2013). The authors concluded that deployment was associated with a substantial increase in serious internalising and externalising behavioural problems. The vast majority (60 per cent) of inpatient pediatric psychiatric admissions among Navy families were from those in which a parent was deployed (Levai *et al.*, 1995). Interestingly, 60 per cent of admissions were found to have occurred even though only 20-25 per cent of Service Members were deployed at any one time. In this study, it is not clear which behaviours or diagnoses accounted for these inpatient admissions.

Effects on academic functioning

A large body of research has found that child and youth social-emotional functioning is significantly related to academic performance, particularly among children with internalising, externalising and other emotional challenges (Becker and Luthar, 2002; Graziano *et al.*, 2007). Given the evidence that suggests children whose parents are absent due to the military are at-risk for behavioural concerns, we need to understand the link between military-related absence and academic performance. However, studies related to academic functioning and parental deployment are limited.

Parent self-report. Although normative data were not available in the article, of the parents who completed rating scales about their children's behaviour related to deployment, 14 per cent indicated concerns related to school, including decreased grades and school interest and increased teacher conflict (Flake *et al.*, 2009).

Child self-reports. In a survey of 72 military-connected youth, students with a deployed parent reported significantly more school problems than children without a deployed parent (Aranda *et al.*, 2011). These problems included having trouble with teachers, less interest in school and experiencing drops in grades. In addition, children were more likely to report school problems on the PSC self-report than their parents (Aranda *et al.*, 2011).

School personnel reports. In a qualitative focus group study, school personnel observed that students with deployed parents had significant difficulties in school (Chandra *et al.*, 2010b). Teachers reported problems, such as anxiety, worry, failure to complete schoolwork and emotional neediness. Staff indicated that they believed changes in school performance were due to resulting changes taking place at home. Home front changes included students taking on additional responsibilities and enacting roles normally performed by the absent parent, such as helping the at-home parent with their own emotional difficulties (Mmari *et al.*, 2009).

Record review. Other studies have found that the relationship between parent deployment and academic performance is more nuanced (Engel *et al.*, 2010; Lyle, 2006). Specifically, timing and duration of deployment are important when examining its impact on children's academic outcomes. For example, student scores on standardised tests were negatively correlated with Army personnel data that included the length of deployment in months (Engel *et al.*, 2010; Lyle, 2006). Results revealed that standardised test scores declined as the duration of the parental deployment increased. However, these associations were small in magnitude and diminished after parents returned from deployment. After the parent returned from deployment, standardised test scores increased, which indicates the achievement gap may only be temporary during deployment due to situational, familial and behavioural factors (Engel *et al.*, 2010; Lyle, 2006).

Discussion

Military-connected children face an ever-changing household environment due to their parents' obligations to the US Armed Forces. Service Members are often away from their home due to military-related job responsibilities and this situation effects the overall functioning of the family and subsequently their children. The purpose of the current review was to explore the effects of parental absence on behavioural and academic functioning for school-age military-connected children.

The relationship between parental absence and children and youth outcomes is complicated. Generally speaking, combat deployments are associated with some child and youth psychosocial problems, such as internalising and externalising behaviours. For some children and youth, combat deployment also appears to at least have a transient negative impact on academic performance. Given the limited research, conclusions are tenuous regarding the effects of non-combat deployment-related parental absence on child outcomes; however, children of non-combat-deployed parents appear to mainly exhibit internalising behaviours (Kelley et al., 2001). Unfortunately, the existing research lacks the clarity and consistency to make generalisations regarding behavioural and academic outcomes of children experiencing non-combat parental absences. One reason that makes it difficult to draw firm conclusions regarding the relationship between non-combat parental absence and child and youth functioning is that there are likely mediating/moderating factors that influence this relationship. Below, we highlight some of these factors and make suggestions regarding how to enhance protective and decrease risk factors in the military context.

Protective and risk factors associated with parental absence outcomes

The review of literature related to military work-related parental absence indicated that children who are separated from their parents are at a higher-risk for negative outcomes than their peers who live with both parents on a daily basis; however, many factors have an impact on how well a child will respond to parental absence. Sheppard et al. (2010) noted that the impact of deployment is "embedded in a complex set of influences" (p. 602). Similar to civilian research regarding parental absence, situational factors (e.g. parental support, peer relationships, parental well-being and teacher support) play an important role in outcomes (Espino et al., 2002; Zvonkovic et al., 2005). Several moderators and mediators (risk and protective factors) are at play and appear to account for inconsistent research findings. These factors are summarised below.

Relocation. The lack of consistent evidence of changes in academic outcomes due to deployment may be explained by the fact that the school environment remains relatively stable in comparison to the home environment (Chandra et al., 2010b). In addition, it may not be the parental absence itself that correlates with declines in school performance but other factors. For example, deployments can result in relocation above and beyond the routine relocations within the military, which may lead to academic problems and cause difficulties with adaptation and peer acceptance (Fitzsimons and Krause-Parello, 2009). Many spouses and children relocate to their hometowns during deployment, which forces them to change schools and develop new support networks (Hosek et al., 2006). Relocation, therefore, may be an additional risk factor with implications for children of deployed parents.

In order to assist military families with transitioning between schools and communities, each branch of the military has developed the School Liaison Officer (SLO) programme (Aronson et al., 2011; Aronson and Perkins, 2013). The main goals of the SLOs are to provide linkages between military installations and local schools, districts and community supports to assist military-connected students and their families during relocations, to educate the local community partners on the needs of military-connected children and to identify and remediate barriers to military-connected children's education (i.e. relocation; Department of Defense Education Activity, 2014). The SLO programme may help to alleviate some of the negative outcomes associated with relocations due to deployments.

Peer support for children and parents. Having an opportunity for peer support may buffer against the potential negative effect of deployment on academic performance. For example, a qualitative study that focused on specific risk factors for adolescents found that many described their teachers as discouraging them from talking about deployment and the youth indicated feeling disconnected from their non-military peers (Mmari et al., 2009). The issue of social isolation and silent suffering may be particularly salient for children of Reserve and National Guard members who may be geographically isolated from their military peers. Isolation may manifest itself in lack of peer understanding and support in the school environment. Social isolation is problematic for children and youth given that participation in school (Cohen, 1992) and extracurricular activities has been found to have a protective effect regarding student success socially and academically (Strobino and Salvaterra, 2000). Further, living on base or in large military neighbourhoods may

serve as a protective factor because spouses and children have access to a large network of individuals also experiencing parental absence as a result of deployment (Chandra *et al.*, 2010a, b; Chandra *et al.*, 2010b; Huebner *et al.*, 2009). Because parent well-being is associated with child well-being (National Scientific Council on the Developing Child, 2008), parents with stronger social support networks typically demonstrate better mental health and well-being and this ultimately has a positive impact on their children, which may prevent internalising behaviours (Chandra *et al.*, 2010b).

Children with parents in the National Guard who are separated from traditional military-base supports also may feel a negative association with military absence. They have no one to relate to and no school-based supports. Children of parents who are surrounded by traditional base supports have peers with similar experiences during military absences and children whose parents are working away to increase financial support at home have a stronger sense of support and may understand the value of the parental absence (Drummet *et al.*, 2003; MacDermid-Wadsworth, 2010).

Within the school system, many schools that are highly affected by military-connected youth have started "student to student" or "meet and greet" programmes to assist youth with making connections within their new school (Mmari *et al.*, 2010). However, National Guard and Reserve students may be offered less school-based supports. The Military Child Education Coalition offers training on how community leaders and stakeholders can offer support to these geographically isolated students and their families (MCEC, 2014). The training helps community leaders identify community and military resources and supports to incorporate into an action plan model with the goal of increasing the resilience of the military families in their communities (MCEC, 2014).

Child age. Evidence suggests that absence due to deployment affects children across all developmental periods. Chandra and colleague (2010a, b) noted that externalising behaviours (e.g. fighting and drinking) increased with age, while anxiety and other internalising behaviours subsided. However, evidence suggests that internalising behaviours increase as children age (Lester *et al.*, 2010). Deployment during early childhood showed small associations with academic outcomes, middle childhood had small to medium associations with academic outcomes, and no associations were found for the academic outcomes of adolescents. Further, Hillenbrand (1976) found that boys who experienced military work-related parental absence earlier in life demonstrated greater aggressiveness, irritability, depression and impulsiveness.

The past decade has produced many developmentally appropriate psycho-educational programmes to prevent potential negative outcomes due to military parental absence (Guzman, 2014). The programmes include web sites such as Military HOMEFRONT (http://militaryhomefront. dod.mil) and Military One Source (http://militaryonesource.com); students can find tools for coping with parental absence at these sites. For younger children a multi-media series was developed by Sesame Street called the Talk, Listen and Connect series, which supports military families who have young children during stressful military life events (e.g. deployments, relocations: Sesame Street, 2014). Providing children with resources that target each stage of development may better prevent negative outcomes mediated by a child's age; however, more research is needed to determine the effects that psycho-educational programmes have on military-connected children.

Deployment length. Deployment length may also be an influential factor in the association between parental absence and externalising behaviours (Jensen with Chandra, 2010). The cumulative length of deployment has been associated with a variety of increased behaviour problems, such as maladjustment, externalising behaviours and depressive symptoms in children (Hillenbrand, 1976; Pedersen, 1966; Lester *et al*., 2010). Further, a study of 2,533 children who were hospitalised for a mental or behavioural health disorder in 2009 found that the odds of hospitalisation increased with the length of a parent's deployment (Millegan *et al.*, 2013). The deployment cycle is also associated with unique stressors (Esposito-Smythers *et al.*, 2011); however, the deployment cycle was not considered as a global risk factor in the study because it is only associated with combat-related deployments, whereas the current review focused on all military work-related parental absences.

Professionals working with military families in schools and communities should be aware of how often and how long the military parent is spending away from the home. Tracking military-connected students who are enrolled in schools may assist school counsellors and school social workers to identify students and families who may need assistance (Garner *et al.*, 2014). Increasing practitioner's awareness, through military culture training, of the potential negative outcomes for military families who experience multiple long deployments may increase the likelihood that mechanisms to alleviate these negative outcomes will be incorporated (Garner *et al.*, 2014; Guzman, 2014).

Parental well-being. Much of the existing literature on parental absence links the at-home parent's mental health and well-being to child well-being (Applewhite and Mays, 1996; Chandra *et al.*, 2010b; Jensen *et al*., 1989; Kelley, 1994; Pedersen, 1966; Waliski *et al.*, 2012). Therefore, parental well-being and mental health may serve as a protective factor since children's outcomes are deeply tied to parental health. Family functioning may play a role in the at-home parents well-being. For instance, families who have a more balanced (e.g. cohesion and flexibility) profile have higher communication skills and overall satisfaction than families with a more unbalanced profile (Oshri *et al.*, 2015). If the primary caregiver maintains his or her mental well-being, his or her children are less likely to experience negative outcomes. Conversely, if the parent's well-being suffers, the child has a greater chance of experiencing internalising and externalising behaviours (Demuth and Brown, 2004; Haine *et al.*, 2003).

Increasing the overall well-being of the non-military parent during parental absence has implications for the success and well-being of his or her children. Since 2004, Military and Family Life Counselors (MFLC) have been imbedded in military installations, schools and child and youth services in order to give military families more access to behavioural health services (MHN Government Services, 2014). The MFLC provides non-medical counselling around the stresses of military life, including deployments and parental absence. The counselling is free to military families and is kept confidential to increase the likelihood that families will seek the services (Military One Source, nd). Services like the MLFC may help to increase the overall well-being of the parent, which may increase the well-being of the child.

School support. Schools employing teachers and professionals who have been specifically trained to work with military children and their unique issues may offer an additional layer of protection. These professionals help to maintain routines and provide specific supports for children during times of parental absence (Harrison and Vannest, 2008; Horton, 2005). In a qualitative study, Bradshaw, Sudhinaraset *et al.* (2010) found that parents interviewed in focus groups noted the importance of child-teacher relationships and teacher knowledge of military-specific stressors for children (i.e. deployment cycle, transitions and relocations) during the deployment cycle. However, these potential protective factors have not been examined empirically.

Although no school-based programmes have been evaluated, an installation- or community-based programme was identified that addresses family and child resilience during periods of deployment; this is the Families Overcoming Under Stress (FOCUS) programme. FOCUS was developed to build family resilience by targeting family communication and parenting efficacy. Lester *et al.* (2012) and Saltzmann *et al.* (2011) suggested that the FOCUS programme, consisting of eight modules based on a strengths approach, could improve parent response to stress during absence and deployment, which reduces risk factors that can lead to negative family and child outcomes. However, FOCUS was developed for implementation in a community-based setting, thus, barriers to implementation (e.g. school buy-in, appropriate facilitators, time and space for implementation, adaptations to the programme) within a school may exist. Further, FOCUS targets parent interactions which are difficult to address in school-based interventions that often target either students or school personnel. FOCUS should be adapted to target students and school personnel and be delivered within the school setting in order to evaluate the programme efficacy.

Conclusion

This review suggests that the absence of military parents can be difficult for some children, youth and families. Military-dependent children demonstrate increased internalising and externalising behaviours and decreased academic outcomes during a parental absence. Due to these

outcomes, school-based personnel who educate military dependents must be well-trained in the identification of, and intervention for, potential emotional, behavioural and academic concerns related to parental absence. However, the generalisability of the available data are limited given the over-reliance on self-report information and qualitative evidence from interviews and focus groups. Few studies provide objective data regarding outcomes for children experiencing a military work-related parental absence. Further limitations include inconsistent controls for socioeconomic status, Service member rank, age of parents, additional family supports or other factors associated with family functioning. Therefore, additional, quantitative studies controlling for moderating and mediating factors are suggested in order to provide recommendations for future research and programme development.

The aim of the current review was to examine behavioural and academic outcomes associated with military work-related parental absence and to further identify risk and resiliency factors in order to consider supports and services that can be implemented and evaluated within the school setting to address the challenges associated with parental absences. The current review adds a unique perspective of synthesising the research on military parental absence, including combat-related and non-combat parental absence. Military parents are absent from the home for many military-related reasons (e.g. extended training, missile station duty, ship duty, combat). This examination focused on military-related parental absence through the context of military life and how schools and other community organisations may assist military children and their families with the military parent absence.

While prior research has focused on the effects of deployment on children and the ways in which practitioners and policymakers can help alleviate potential adverse effects, future research should concentrate on evaluating current services that are already in place for military-connected children. A few services to support military-connected children and youth during parental absences, such as Military HOMEFRONT and Military One Source, were identified; however, little to no research has been conducted to evaluate the effectiveness or feasibility of their use by school personnel.

Currently, there are no empirically evaluated school-based programmes that target children who are experiencing military work-related parental absence or that focus on training school personnel who provide services daily. However, within the risk and resilience framework, there are standardised evidence-based programmes related to building character, managing stress, improving coping skills and enhancing parent-child communication/interactions and peer relationships that could be adapted to include components related to the military child and, specifically, military work-related parental absence. It is recommended resiliency programmes be adapted for the unique set of stressors associated with military life, including parental absence, and be evaluated for effectiveness within the underserved military population.

Implications for policy and practice

- The study discusses current community-based and school-based programming and clarifies protective and risk factors associated with military parental absence.

- There is a lack of empirically evaluated school-based programmes targeting military-connected students.

- School-based personnel must be well-trained in the identification of, and intervention for, potential emotional, behavioural and academic concerns related to military parental absence.

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