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ORIGINAL PAPER

Do Youth Development Programs Matter? An Examination of Transitions and Well-Being Among Military Youth

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Abstract The current correlational study examines the association between internal and external military family contextual factors (e.g., parental rank, having multiple military parents, school changes, living more than 30 min from a military installation, parental deployment, relationship provisions) and military youth well-being outcomes (i.e., depressive symptoms, anxiety, self-efficacy) in a sample of children of active duty military members (i.e., military youth). Data from 749 military youth, ages 11–14, were analyzed using structural equation modeling. The model explained a reasonable amount of the variation in the outcomes of interest (r-square statistics for depressive symptoms, anxiety, and self-efficacy were .151, .018, and .086, respectively). Results indicated that military youth who reported more social provisions experienced fewer depressive symptoms and more self-efficacy. Youth who reported certain military risk factors (i.e., parental rank; living farther from the military installation; multiple school changes) were associated with decreased well-being (i.e., more depressive symptoms and anxiety and less self-efficacy). However, findings suggest that participation in military programs may serve a moderating or buffering factor for these youth.

Keywords Adolescents · Military · Youth programs · Relationship provisions · Youth well-being · Family stress

Introduction

Adolescence is a challenging life stage for most individuals because of the various physical, social, and emotional changes and transitions that are normative during this time period. In addition to these "normative" risk factors that are part of the adolescent life stage, the presence of additional risk factors or vulnerabilities, both internal and external to the family, may lead to additional negative consequences for their developmental outcomes. For instance, youth in military families (hereafter, military youth) often experience additional stressors unique to their military culture (i.e., parental deployment, frequent relocations), which may increase their vulnerability. However, being challenged and facing challenges are very different. Despite facing these stressors and challenges, military youth have been found to be resilient and, overall, report high levels of well-being (Card et al. 2011). Although resilient, military youth may still experience consequences related to external military factors such as parental deployment, multiple relocations, and internal factors unique to the work-family environment of military families. Additionally, exposure to multiple stressors may be of specific concern to interventionists and public health researchers who research and provide services to the nearly 2 million military dependents in the United States (Davis et al. 2012; Department of Defense 2012). Among adolescents, depressive symptoms, anxiety, and self-efficacy are some of the developmental outcomes most clearly linked to experiences of stress and vulnerability.

In the face of multiple stressors, transition, and change related to military life, relationship provisions may provide a protective barrier against negative outcomes related to these challenges and stressors (Bowen and Martin 2011). Relationships may include informal networks including

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friends and family members as well as formal systems such as programs specifically for military youth (Mancini and Bowen 2013). Such programs are supported by the military to provide additional relationship provisions for military youth in order to increase resilience to adversity (Mancini and Bowen 2009). Relationship provisions have been found to be associated with psychological well-being (Mancini et al. 2015). However, there is still some question around how relationships function in the lives of youth. Additionally, the role of program participation in military youth's psychological well-being (i.e., depressive symptoms, anxiety, and self-efficacy) is also unclear.

Depressive symptomology among adolescents is often studied as a predictor of negative outcomes (e.g., physical health outcomes, suicide risk; Keenan-Miller et al. 2007) and as an outcome itself (e.g., Glied and Pine 2002). Assessing adolescent depressive symptoms is particularly important because it is often a key "warning indicator" of other negative outcomes, such as social impairment, poor academic functioning, poor family functioning, and later substance abuse (O'Neil et al. 2011; Ramsawh et al. 2011). Recently, the risk of depressive symptoms among military youth has also been of interest (e.g., Lucier-Greer et al. 2014a, b). Empirical and theoretical work has emphasized the risk of depressive symptoms among these youth due to the stressors faced by military families (e.g., deployment, frequent relocations, geographical distance from the military installation) and other factors that play a role in military youth's lives (i.e., parent military rank; Lester et al. 2010; Lucier-Greer et al. 2014a). Similarly, military youth may also be more at-risk for anxiety, especially during military transitional periods, such as deployment or relocation (Huebner and Mancini 2005). Adolescent anxiety often co-occurs with other internalizing and externalizing symptoms, such as depression (Johnson and Greenberg 2013; Queen et al. 2013) and emotion dysregulation (Bender et al. 2012). Additionally, adolescent anxiety places youth at increased risk for anxiety in adulthood (Duchesne et al. 2008).

On the other hand, adolescent self-efficacy is a key determinant of positive youth outcomes, including social functioning and positive academic performance (Robrecht et al. 2008). Self-efficacy is defined as individuals' perception of their ability to rely on themselves to master situations or psychological and social functioning and has been identified as a major determinant of human action (Bandura 1997) because individuals are unlikely to perform a task unless they feel they are able to accomplish it (Bandura 2001). Additionally, low self-efficacy has been associated with higher levels of depressive symptoms and poor academic functioning (Lucier-Greer et al. 2014b). Furthermore, stressors stemming from the military context, particularly having multiple military parents, have been found to be associated with lower levels of self-efficacy (Lucier-Greer et al. 2014b).

There is reason to believe that certain family and military factors may serve to influence adolescent well-being in a more positive way. For young adolescents, family, peers, and friendships have been found to be important contributors to mental well-being (e.g., Young et al. 2005). Specifically, the way youth view the purpose or function of these relationships may have an even more beneficial effect on well-being, meaning that youth who feel that their close relationships serve a positive function in their young lives may be less likely to experience depressive symptoms. Additionally, certain protective factors, such as programming specifically for military youth, may serve as a buffer against depressive symptoms (Lucier-Greer et al. 2015).

Military life is a unique work-family context in which military youth grow and develop. The *contextual model of family stress* (Boss 2002) suggests that family stress is best understood when it is considered within the particular context, in this case, military life. Although this framework focuses on *family stress*, it can also be applied to individuals within the family as well as the family system. Stress that the family experiences and its impact on family functioning also impacts the outcomes of each individual family member and has been shown to impact the well-being of youth in the family (Sheidow et al. 2014). Military families face various risk factors that are generally family-related, such as parental deployment, rank, school changes, living outside the continental United States (OCONUS), and living more than 30 min from the military installation. In the current study, we use this model to examine individual factors within the family context. While military life is often associated with various stressors, it also provides many resources to its personnel and their families, including military youth. Some of these resources include formal resources, such as programming for military youth, which has been a key spending expenditure by the military as they attempt to ease the potential burden of military stress on other family members.

The contextual model of family stress describes two levels of influence surrounding the individuals and their families including their *external context* and *internal context* (Boss 2002). According to Boss (2002), both should be accounted for when examining how families and their members manage stress. The *external context* includes the family's economical, historical, cultural, and community contexts. *Internal context* generally includes the psychological, structural, and philosophical aspects of the family (see Fig. 1).

Military-specific responsibilities that are outside of the family's control (i.e., external factors) are likely to impact the family in various ways including location of assignment, transfer to another military installation (i.e., school

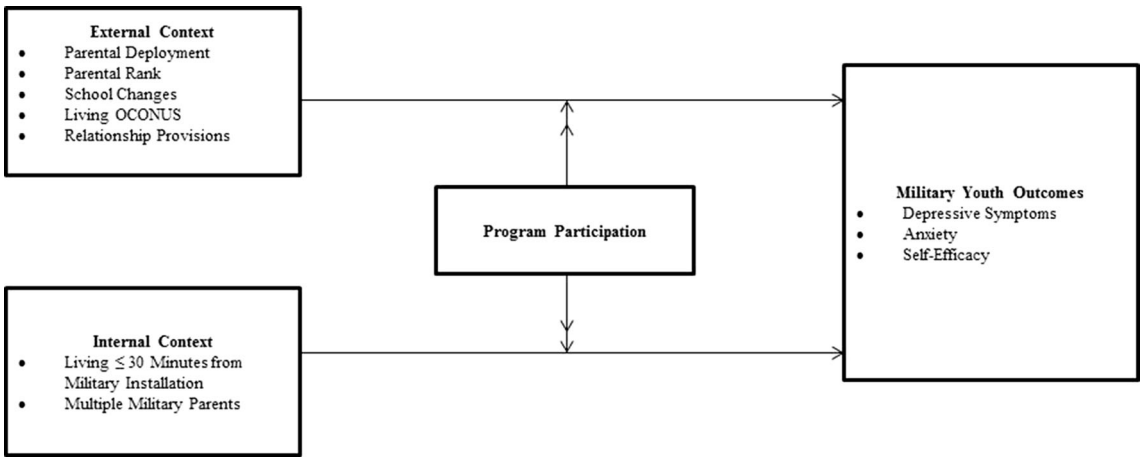

Fig. 1 Conceptual model

changes for military youth), deployment, and rank. Additionally, military families often have strong connections with other military families and have various other social support systems which may provide them with external resources that impact well-being (Mancini et al. 2015). We identified four external factors specifically related to living in a military family including *parental deployment*, *parental rank*, *school changes*, and *living OCONUS*. Additionally, we identified a fifth external factor, *relationship provisions*, which may serve as a protective factor against military-related stressors and may have a positive influence on military youth's developmental outcomes.

Parental deployment is a known risk factor affecting the well-being of military youth. Military youth identified living without the deployed parent as one of the greatest stressors they face (Chandra et al. 2011). Living without this deployed parent disrupts the normative development of a child and is associated with higher rates of suicidal thoughts (Amato 2000), anxiety symptoms, and other emotional and behavioral problems (Chandra et al. 2011; Coulthard 2011). More specifically, intense feelings of sadness, loneliness, abandonment, and anger have been associated with parental deployment—all of which are symptoms of depression (Coulthard 2011). Additionally, military youth whose parent is deployed may have feelings of worry for their parent's safety. Therefore, parental deployment may also be associated with the level of anxiety experienced by military youth. Lucier-Greer et al. (2014a) reported that military youth demonstrate less self-reliance, a core component of self-efficacy, in the absence of a military parent. Conversely, higher levels of self-reliance were reported when military youth participated in military-sponsored programs.

Parental rank has been examined in previous studies as a contextual factor that impacts the entire family, including military youth. While parental military employment provides economic stability for some families, families with active members in lower pay grades may be at-risk due to financial instability, which is often a significant stressor for military families (Coulthard 2011; Lucier-Greer et al. 2014a). In addition, military youth who have a parent with an enlisted pay grade experience more depressive symptoms than those of higher rank (Booth et al. 2007; Lucier-Greer 2014a). It may be that families with enlisted pay grade have fewer interpersonal ties and a lack of available social support (Booth et al. 2007; Lucier-Greer et al. 2014b).

Military families often relocate because of the frequent reassignment of the military parent, making *school changes* common for military youth. Reassignments often mean a new neighborhood, change in educational set-up, and establishing a new peer group (Kelley et al. 2003). Youth with frequent school changes are at risk for psychosocial maladjustment (Blaisure et al. 2012), vulnerability to drug use, academic problems, health risk behaviors, and having fewer close friends (Weber and Weber 2005). Connecting to new communities and peer groups can be challenging for military youth who often lose a sense of belonging (Lester and Flake 2013) and, in turn, may experience cumulative issues, such as poor mental health and less self-efficacy (Robrecht et al. 2008).

Living OCONUS is common among military families (Department of Defense 2012). Adolescents who live OCONUS may face isolating factors including physical distance from friends and family as well as language barriers. Lucier-Greer et al. (2014a) found that military youth who live outside of the United States were more likely to experience depressive symptoms and less likely to report being self-reliant.

The function of relationships in the lives of military youth has been referred to as *relationship provisions* (Mancini et al. 2015). Specifically, young adolescents who

feel connected to a group of significant people in their lives that they can count on for assistance, advice, reassurance, nurturance, and emotional closeness (Cutrona and Russell 1987) experience an increase in personal resources (Mancini et al. 2015) and well-being (Lucier-Greer et al. 2014a; Mancini et al. 2015). Larson (2011) suggested that establishing and maintaining positive social connections and institutions facilitated youth well-being and healthy development, specifically for youth in active duty military families. In fact, many comprehensive prevention and intervention programs are designed based on the idea that relationship provisions are beneficial for youth well-being in the context of adversity (Mancini et al. 2015). Similarly, the presence of healthy social connections promotes resilience among military youth who are experiencing the normative stressors of adolescence as well as stressors that are specific to their military culture (Lucier-Greer et al. 2014a). Furthermore, informal support provided by family, friends, and the community facilitates coping by reducing adolescents' risk of depressive symptoms and serving as a protective factor (Guibord et al. 2011) that increases their overall well-being (Eccles and Gootman 2002), especially during parental deployment (Huebner and Mancini 2005).

In addition to external factors, recent research indicates that military youth exposed to various risk factors inside the family (i.e., internal context) are more likely to develop mental health problems compared to those who are not (Lester and Flake 2013). Drawing on current research and relevant theory, we identified two stressors specifically related to living in a military family including *living 30 min or more from the military installation* and having *multiple military parents*.

Living 30 min or more from the military installation may limit available resources and the support of others who understand the culture of military life (Davis et al. 2012). The support that living near the military installation may provide can be important to military youth well-being and has been associated with fewer depressive symptoms and more self-efficacy (Robrecht et al. 2008). Additionally, youth who live 30 min or more from the military installation may be less likely to participate in activities on the installation due to excessive travel time.

Additionally, we identified *multiple military parent*s as an internal risk factor for military youth. Two-parent military families are increasingly common with one-tenth of active duty marriages being dual-military marriages (Department of Defense 2012). Much like any family with dual earning parents, families with multiple military parents may face myriad complexities related to childcare and child supervision due to added career responsibilities (Drummet et al. 2003).

Certain protective factors, such as programming specifically for military youth, may serve as a buffer against maladaptive youth outcomes (Lucier-Greer et al. 2015). Specifically, Child, Youth, and School Services (CYSS) include four categories of youth programming designed to help military youth well-being: (1) art, recreation, and leisure, (2) sports, fitness, and health, (3) life skills, citizenship, character development, & leadership, and (4) academic support, career development, mentoring, and intervention (Military One Source 2014). These programs generally serve as a place for military youth to gather in an environment where military life is normative, relationships are developed, and isolation is decreased (Lucier-Greer et al. 2014b). Programs are often relaxed and include fun events such as game nights, movie nights, celebrations of holidays, and festivals. Military youth participation in these programs has been implicated in positive outcomes for adolescents including increased mental health (Huebner and Mancini 2005), strong social connections and adaptive coping (Lucier-Greer et al. 2014b). The influence of family context and peer participation play a role in whether or not adolescents choose to participate in structured activities with many youth choosing to stop participation as they get older (Persson et al. 2007), meaning that program participation may be of more influence in early adolescence. Program participation during early adolescence may buffer against potential military-related stressors. In other words, when potential stressors are present, young adolescents who participate in military-sponsored activities or programs may not be as likely to experience negative mental health outcomes as youth with similar military related stressors who are not participating in programming.

The current study examines the association between internal and external military family factors (i.e., parental rank, parental deployment, multiple military parents, school changes, living 30 or more minutes from the military installation, and relationship provisions) and youth well-being outcomes including depressive symptoms, worry, and self-efficacy. Using the contextual model of family stress (Boss 2002), we examine the difference in these associations for youth who reported participation in military programs and those who did not. Informed by existing literature and this theoretical framework, we examine three hypotheses: (1) external and internal military-related stressors will be associated with higher levels of depressive symptoms and anxiety and lower levels of self-efficacy; (2) military youth reporting more relationship provisions will also report lower levels of depressive symptoms and anxiety and higher levels of self-efficacy than youth with lower levels of relationship provisions; and (3) participation in military programs will serve as a buffer that mitigates the detrimental impact of military-related stressors on the three youth well-being outcomes examined. That is, military youth who experience a military

stressor but also participate in programs will be less likely to experience depressive symptoms and anxiety but will report higher levels of self-efficacy than youth who experience the same stressor but do not participate in a program.

Method

Participants

Data were collected from 1036 youth at four US Army garrisons, one being outside the US in Europe. Participation was voluntary, and all participants signed assent forms. For those under age 18, parental consent was also obtained. Research criterion, approved by a university IRB, required that adolescents were between the ages of 11 and 18 and had at least one active duty military parent. Because the rate and purpose of program participation has been shown to vary greatly across adolescence with participation tending to decline during adolescence (Persson et al. 2007), the current study focuses exclusively on younger adolescents (ages 11–14).

Procedure

The study sample consisted of 749 youth ($M = 12.36$ years, $SD = 1.08$ years; 50.9 % male). Approximately one-fifth (18.4 %) had a parent currently deployed. Almost two thirds (65 %) changed schools two or more times in the last five years, and 71 % reported that their parent was enlisted. Almost half (44 %) lived outside the continental US (OCONUS), and about one-tenth (8.4 %) had two parents actively serving in the military. Approximately one-tenth (8.5 %) reported living more than 30 min from a military installation.

Measures

Relationship Provisions

The provision of resources gained from social relationships, including relationships with friends, family, and community members, were assessed using the 24-item Social Provisions Scale (SPS; Cutrona and Russell 1987). The scale captures six specific provisions of social relationships using four items to measure each provision, including reliable alliance (e.g., "There are people I can depend on to help me if I really need it"), attachment (e.g., "I have close relationships that provide me with a sense of emotional safety and wellbeing (for example, comfort, happiness, and safety)", guidance (e.g., "There is someone I could talk to about important decisions in my life"), social integration (e.g., "I feel part of a group of people who share my attitudes and beliefs"), reassurance of worth (e.g., "I have relationships where my abilities and skills are recognized"), and opportunity for nurturance (e.g., "There are people who depend on me for help"). Adolescents reported their agreement to each item on a 4-point scale from 1 (strongly disagree) to 4 (strongly agree). A sum score was computed with higher scores reflecting more provision of resources ($M = 79.87$, $SD = 9.45$). Internal reliability was high ($\alpha = .88$).

Risk Factors

Six individual risk factors related to the youths' military context were examined using dichotomized variables indicating the presence/absence (coded 1 and 0, respectively) of each stressor. These included, parental deployment (1 = *currently deployed to a combat area*), frequent school changes (1 = *more than two school changes in the past 5 years*), parental rank (1 = *enlisted*), number of military parents (1 = *two military parents*), living outside the continental United States (OCONUS), and distance from the military installation (1 = *over 30 min from the military installation*).

Dependent Measures of Adolescent Well-Being

Depressive Symptoms

Depressive symptoms were measured using the Center for Epidemiological Studies—Depression Scale for Children (Faulstich et al. 1986; Weissman et al. 1980). Participants rated how often during the previous week they experienced 20 depressive symptoms using a scale from "Not at all" (0) to "A lot" (3). Sample items include "I felt down and unhappy" and "It was hard to get started doing things." Items were summed ($M = 14.47$, $SD = 10.89$), and reliability was high ($\alpha = .89$).

Anxiety

Eight items from the Generalized Anxiety Subscale of the Revised Screen for Child Anxiety-Related Emotional Disorders (SCARED-R; Muris et al. 1999) were used to examine adolescents' anxiety. Youth indicated how they felt over the past 2 weeks on a 3-point scale from 1 (not like me) to 3 (a lot like me). Sample items include: "People tell me I worry too much" and "I worry about the future." Sum scores were computed with higher scores indicating greater anxiety ($M = 14.06$, $SD = 4.00$). The measure had good internal reliability ($\alpha = .83$).

Self-Efficacy

Adolescent self-efficacy was measured using the General Self-Efficacy Scale (Sherer et al. 1982). The scale includes 12 items on a 3-point scale and assesses youths' positive perceptions of their personal abilities. Youth are asked to rate how true a statement is about themselves from 1 (not like me) to 3 (a lot like me). Sample statements include: "When I make plans, I am certain I can make them work," "If something looks too complicated, I will not even bother to try it," and "I feel insecure (not sure) about my ability to do things" Items were summed with higher scores indicating greater self-efficacy ($M = 28.83$, $SD = 4.03$). Internal reliability was good ($\alpha = .75$).

Extracurricular Activity Participation

Adolescents reported their current participation in a variety of extracurricular programs and activities sponsored by the U.S. Army Child, Youth, and School Services (CYSS) during the past year. These programs and activities covered a broad range of topics including activities related to creative arts (e.g., art classes), life skills (e.g., babysitter training and community service activities), sports/fitness (e.g., team and individual sports), and academics (e.g., SAT prep). Participation was measured dichotomously. For example, participants who indicated participation in at least one program received a score of one. Participants who did not participate in any programs received a score of zero. Approximately two-thirds of the youth (67.4 %) participated in at least one CYSS program.

Demographic Characteristics

The current analyses also accounted for the impact of adolescents' sex and age on the outcomes examined. Respondents indicated if they were male (1) or female (2) and their current age ranging from "11 years old" (1) to "14 years old" (4).

Analytic Plan

A path analysis was conducted with full information maximum likelihood (FIML) which allows all available data to be utilized when estimating model parameters and standard errors, and is preferable to imputation or deletion methods (Enders 2001). Rates of attrition/missing data were minimal, averaging 2.6 % across the study variables. AMOS 20.0 was used to obtain estimates. First, the influence of relationship provisions and six military-related risk factors (enlisted rank, parental deployment, multiple military parents, multiple school changes, living OCONUS, and living more than 30 min from the military installation) on three indicators of youth well-being (depressive symptoms, anxiety, and self-efficacy) were assessed to examine main effects. Within the model, all exogenous variables were allowed to correlate. Correlations were also modeled between the three indicators of youth well-being. Next, the moderating, or buffering, role of program involvement was examined by conducting a multigroup analysis. One group consisted of youth who participated in at least one CYSS extracurricular program or activity (hereafter, program participants), while the other group consisted of youth who did not participate in any CYSS extracurricular programs or activities (hereafter, non-participants).

Constrained and unconstrained models were then tested comparing the two groups. In the unconstrained model, paths between the exogenous (relationship provisions and military-related risk factors) and endogenous (depressive symptoms, anxiety, and self-efficacy) variables were allowed to vary across the two groups. In the constrained model, path constraints were employed to restrain the coefficients to be equal across the two groups. Because the constrained and unconstrained models are nested, model fit can be compared to determine if the constrained or unconstrained model represents the overall best fitting model based on the Chi square statistic (accounting for differences in overall model fit across all paths simultaneously). Individual paths may be statistically significant even when the overall model fits similarly for both groups (Wickrama et al. 1995). Consequently, we also examined conduct pairwise tests to examine group differences in each parameter of interest. For instance, we examined whether or not the association between the relationship provisions and depressive symptoms of youth varies significantly depending on their program participation. Model fit was assessed using the χ^2/df ratio, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). A χ^2/df ratio below or around 3.0 is believed to indicate acceptable model fit (Carmines and McIver 1981). When the CFI is close to .95 and the RMSEA is less than .06, it is believed to indicate good model fit (Hu and Bentler 1999). Although the current study examined the variables using a large samples size, we chose not to use Type I error correction. Most Type I error corrections are overly strict when examining more than a few comparisons (Jaccard and Wan 1996). Due to the relatively large number of comparisons examined in this study, combined with the lack of research in this area (i.e., programs as a moderator of military factors impacting military youth outcomes), we felt it was important to avoid an overly strict correction that would make observing true differences difficult.

Results

Descriptive statistics and zero-order correlations for all variables are reported in Table 1. On average, youth experienced depressive symptoms "a little" ($M = 14.47$, $SD = 10.89$), and youth generally indicated that statements indicating anxiety were "a little like me" ($M = 14.51$, $SD = 4.15$). Overall, self-efficacy was fairly high with youth typically indicating these items were either "a little like me" or "a lot like me" ($M = 28.83$, $SD = 4.02$).

The main effect model examining the influence of relationship provisions and military-related risk factors on indicators of youth well-being indicated that relationship provisions and stressful military context was negatively related to youth outcomes after accounting for youth sex and age (see Table 2). More specifically, youth with greater relationship provisions experienced fewer depressive symptoms and more self-efficacy, on average, than youth with fewer relationship provisions ($\beta = -.277$, $p < .001$ and $\beta = .341$, $p < .001$, respectively). Having an enlisted rank parent, compared to an officer parent, was associated with more depressive symptoms and less self-efficacy ($\beta = .081$, $p = .038$ and $\beta = -.083$, $p = .026$, respectively). Youth who were more geographically isolated from other military families (i.e., living 30+ min from the military installation) also generally experienced lower self-efficacy than youth who resided closer to the military installation and the accompanying supports ($\beta = -.092$, $p = .004$). Only one risk factor was significantly associated with youth anxiety. Youth who experienced more than two school changes in the past 5 years had higher average anxiety scores ($\beta = .089$, $p = .020$). Thus, stressful components of the military-context surrounding youth and the availability of relationship provisions are related to the well-being of military youth, particularly as it relates to their depressive symptoms and sense of self-efficacy. Overall, the model fit the data well ($\chi^2/df = 1.509$, CFI = .982, RMSEA = .026) and explained a reasonable amount of the variation in the outcomes of interest (r-square statistics for depressive symptoms, anxiety, and self-efficacy were .151, .018, and .086, respectively).

Next, the model was examined separately for program participants and non-participants using a multi-group analysis. In comparing the difference in Chi square relative to the difference in degrees of freedom, we could not reject the null hypothesis [$\chi^2(30) = 41.938$, $p = .072$]. The test was marginally significant ($p < .10$), suggesting the existence of some group differences. Based on this marginally significant nested model comparison and the sensitivity of this test to sample size, individual path differences between groups were also examined. Pairwise comparisons of the t-values associated with the paths from relationship provisions and risk factors to youth outcomes indicated several statistically significant differences depending on group membership (i.e., model variance or moderation by program participation).

More specifically, two risk factors were associated with youth well-being for non-participants but not for program participants. For youth who did not participate in

Table 1 Univariate and bivariate statistics for study variables

	1	2	3	4	5	6	7	8	9	10
1. Relationship provisions	–									
2. Parental rank	−.07	–								
3. Multiple military parents	−.00	−.08	–							
4. School changes	−.01	−.03	.07	–						
5. ≥30 min from MI	−.02	−.01	.01	.01	–					
6. Deployment	−.04	.01	.03	.01	.00	–				
7. Living OCONUS	.03	−.08	−.05	.04	.03	.02	–			
8. Depressive symptoms	−.28**	.10*	.00	.01	.05	.02	.04	–		
9. Anxiety	−.03	.05	.02	.09*	−.01	.03	.02	.52**	–	
10. Self-efficacy	.35**	−.10*	−.05	.03	−.10**	.03	−.02	−.43***	.25**	–
Mean	79.87	.71	.08	.65	.08	.18	.44	14.47	14.06	28.83
SD	9.44	.45	.28	.48	.28	.39	.50	10.89	3.99	4.03
Skewness	−.84	−.92	3.00	−.62	2.99	1.63	.24	1.06	.35	−.32
Range	34–96	0–1	0–1	0–1	0–1	0–1	0–1	0–56	8–24	17–36

MI military installation, *OCONUS* Outside the Continental United States

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 2 Standardized parameter estimates for main effect paths

Main effects	β	*SE*	*p*
Relationship provisions → depressive symptoms	−.277	.041	***
Relationship provisions → anxiety	−.023	.016	.524
Relationship provisions → self-efficacy	.341	.015	***
Parental rank → depressive symptoms	.081	.939	.038
Parental rank → anxiety	.058	.358	.154
Parental rank → self-efficacy	−.083	.337	.026
Multiple military parents → depressive symptoms	.009	1.386	.811
Multiple military parents → anxiety	.016	.529	.674
Multiple military parents → self-efficacy	−.053	.499	.138
School changes → depressive symptoms	.012	.841	.747
School changes → anxiety	.089	.321	.020
School changes → self-efficacy	.035	.301	.391
≥30 min from MI → depressive symptoms	.040	1.375	.244
≥30 min from MI → anxiety	−.011	.523	.745
≥30 min from MI → self-efficacy	−.092	.491	.004
Deployment → depressive symptoms	.006	.993	.856
Deployment → anxiety	.039	.379	.291
Deployment → self-efficacy	.044	.356	.192
Living OCONUS → depressive symptoms	.084	.930	.049
Living OCONUS → anxiety	.029	.357	.517
Living OCONUS → self-efficacy	−.013	.340	.752

Moderating effects	Participants			Non-participants		
	β	*SE*	*p*	β	*SE*	*p*
Relationship provisions → depressive symptoms	−.272	.049	***	−.291	.071	***
Relationship provisions → anxiety	.010	.019	.818	−.096	.027	.129
Relationship provisions → self-efficacy	.354	.018	***	.335	.025	***
Parental rank → depressive symptoms	.093	1.123	.047	.047	1.700	.508
Parental rank → anxiety	.064	.431	.193	.027	.642	.709
Parental rank → self-efficacy	−.091	.412	.046	−.077	.588	.265
Multiple military parents → depressive symptoms	**−.041**	**1.608**	**.338**	**.138**	**2.678**	**.023**
Multiple military parents → anxiety	**−.038**	**.617**	**.400**	**.145**	**1.013**	**.021**
Multiple military parents → self-efficacy	−.044	.589	.291	−.081	.930	.172
School changes → depressive symptoms	−.018	1.019	.695	.055	1.462	.391
School changes → anxiety	.054	.391	.247	.147	.552	.026
School changes → self-efficacy	.028	.373	.527	.057	.507	.365
≥30 min from MI → depressive symptoms	.024	1.713	.577	.069	2.271	.263
≥30 min from MI → anxiety	.012	.657	.782	−.046	.859	.465
≥30 min from MI → self-efficacy	−.071	.628	.089	−.132	.788	.027
Deployment → depressive symptoms	**.071**	**1.199**	**.097**	**−.130**	**1.738**	**.038**
Deployment → anxiety	.053	.460	.231	.006	.657	.927
Deployment → self-efficacy	**−.016**	**−.171**	**.697**	**.172**	**.603**	**.005**
Living OCONUS → depressive symptoms	.083	.928	.053	−.031	1.427	.624
Living OCONUS → anxiety	.024	.356	.587	−.019	.540	.773
Living OCONUS → self-efficacy	−.014	.340	.730	−.096	.495	.119

MI military installation, *OCONUS* Outside the Continental United States

Relationships that varied across CYSS groups are in bold; *** $p < .001$

extracurricular programs, having multiple military parents was associated with experiencing depressive symptoms and anxiety ($\beta = .138$, $p = .023$ and $\beta = .145$, $p = .021$ respectively). However, for program participants there was no statistically significant association between these stressors (parental deployment and having multiple military parents) and youth well-being—indicating that the programs acted as a buffer for the stressful impact of having multiple military parents. Contrary to our expectations, compared to youth who did not have a parent currently deployed, non-participating youth with a deployed parent reported more positive outcomes ($\beta = -.130$, $p = .038$ for depressive symptoms and $\beta = .172$, $p = .005$ for self-efficacy), whereas parental deployment was not related to youth outcomes for program participants.

Discussion

Military-sponsored programs for youth, such as those in our sample, often include extracurricular activities that provide a fun, social, component and afford youth the opportunity to make and maintain relationships (Lucier-Greer et al. 2014a). As highlighted in our study, participation in military programs likely matter for the well-being of military youth in early adolescence. Because of the transitory nature of military families and the possibility for residential instability among military families (Lester and Flake 2013), interventions and activities that provide social support for military youth can promote feelings of stability, which may lead to positive outcomes. The integration of programs and services geared towards young people has been shown to facilitate more supportive relationships and foster greater youth well-being (Huebner and Mancini 2005; Lucier-Greer et al. 2014b). However, the buffering effects of these programs on youth outcomes have not previously been clearly established, particularly for military adolescents.

The present study examined contextual factors of the lifestyle and culture of adolescents ages 11–14 living in military families and their associations (i.e., correlations) with certain dimensions of youth well-being. Examining the relationships simultaneously allowed us to test simultaneous associations between relationship provisions, military-related risk factors, and youth well-being. Additionally, our incorporation of a multi-group analysis was a strength of this study as it afforded us the ability to consider the moderating or buffering function of CYSS military program participation on the associations among external and internal contextual factors and youth well-being outcomes. The influence of military risk factors on youth well-being has often been examined using a deficit perspective, in which the military family context is considered to be a risk factor in itself for poorer youth outcomes. In the current study, these "risk factors" were considered within larger context, in which we examined the association between military factors and youth well-being. Additionally, the immense amount of resilience and support that is frequently seen in military families was also taken into account, by considering relationship provisions as a positive factor within the external context as well as program participation as a beneficial buffer against the influence of stress.

This study conceptualized the stress of these youth as occurring in the external and internal context of their military family as informed by principles of the contextual model of family stress (Boss 2002). Similar to other findings (Easterbrooks et al. 2013; Lucier-Greer et al. 2014a), the youth in this study generally experienced high feelings of self-efficacy and low levels of depressive symptoms and anxiety. It is important to note that the model explained substantially more variation in self-efficacy and depressive symptoms than anxiety symptoms. Understanding the overall well-being of military youth is beneficial for research and programs working with this population. Although the general conception tends to be that military families experience high levels of both internal and external stress and maladjustment (Lester and Flake 2013), numerous recent studies indicate that this is not the norm (Card et al. 2011; Easterbrooks et al. 2013; Lucier-Greer et al. 2014a; Oshri et al. 2015). Consistent with the contextual model of family stress, these results support the idea that adolescent well-being is associated with both internal and external familial contextual factors.

Our findings have important implications for practitioners working with the military population. Encouraging attachment, guidance, communication, and positive involvement in the parent-adolescent relationship as well as in relationships with peers and with other community members may influence feelings of comfort, happiness, safety, and parent dependability, though this relationship cannot be definitively established by this study because of our cross-sectional design. Adolescents with these characteristics are more likely to perceive that they can handle difficult situations or transitions (Bandura 2001). Additionally, youth who are less isolated have more opportunities for relationship provisions. However, not all informal networks have a positive influence on youth. Thus, practitioners who engage with military youth and families may benefit from expanding traditional interventions to include programming that targets family communication, initiating and strengthening positive peer relationships, and provision of social support networks to youth. Additionally, implementation of healthy relationship education for military youth may be considered as a way to teach and encourage healthy relationship skills (communication, conflict

management) in peer, familial, and romantic relationships. Development of these skills helps to define and encourage positive connections within both informal (i.e., positive peer relationships) and formal (i.e., military programming) networks. Parents may also increase opportunities for connection by encouraging youth to participate in military-sponsored programming, gathering information about programs near their installation, talking about program participation with their youth, and providing transportation if needed.

Our findings suggest the combination of multiple complexities as a particular vulnerability. Non-participant youth with multiple military parents were more likely to report higher levels of depressive symptoms and anxiety compared with participating youth. Contrary to our expectations, youth who were not involved in programs but who had a parent deployed reported less depression and scored high on self-efficacy compared to youth who were involved in programs. Although this finding was not expected, it may be that the effects of participation in military-sponsored programs are context-dependent. For example, for military youth with a long-term stressor, such as having multiple military parents, the positive impact of program participation may be more evident than for youth facing relatively short-term, or acute, stressors, such as parental deployment.

Limitations and Future Directions

While the current study provides valuable insight into the impact of program participation for military youth, as with any study, these findings should be considered in the context of the study limitations that warrant further attention in future research. First, in contrast to a treatment study, the cross-sectional nature of the study limited our ability to determine a temporal relationship between the variables. Because we are unable to infer causality, and due to the complexity of military family life, including frequent relocations and deployments, future studies using longitudinal designs could examine the transient and fluctuating role of family factors, program participation, and youth outcomes over time. Additionally, all of the data were adolescent self-report and all participants volunteered to participate in the study. Caution is also warranted when interpreting the current study's statistically significant associations due to the large study sample size (over 700 adolescents). While increased statistical sensitivity is a positive characteristic of large samples, even small associations, which may lack practical significance, can become statistically significant. Of note, due to unequal group sizes, the results from youth participating in CYSS programs contribute more to the overall model results than the results of the non-CYSS program participants. That is, the results of the CYSS program participants carry more "weight" in the overall model.

It is also important to note that the participants in this study may be involved in other formal community contexts such as participation in school activities or places of worship. Therefore, they may have also had access to formalized support in the way of non-military sponsored programming, which may also have impacted their reports of well-being. Future research would benefit from examining the unique and collective influence that formal and informal support received (or perceived) from others (e.g., school, parents, extended family, peers) may have on military youth outcomes. It is possible that adolescents who are not involved in military sponsored programming compensate with involvement in other activity sources.

Despite its limitations, this study contributes to the literature on military youth well-being during early adolescence in its examination of associations among military contextual factors, support provisions, military sponsored programming, and youth emotional outcomes. Our findings reinforce the connected influence of relationship provisions and youth functioning. The findings also highlight the possible implications of encouraging and providing a supportive and nurturing environment for military youth, both in the way of formal programming and informally in the way of relationship provisions. Participation in CYSS programs was found to be a unique positive influence for youth who experience military-related family stressors, indicating that programs matter to military youth. Participation in military-sponsored programs was especially relevant for youth in early adolescence who experience certain military-related stressors such as having multiple military parents, highlighting the complexities of multiple stressors. However, these programs do not occur in a vacuum. Relationship provisions from other sources such as informal networks or other formal supports also play a role in the well-being of military youth. Examination of military family life through a contextual family stress model (Boss 2002) lens allowed us to gain insight on how the military family context and culture, which may present unique stressors, also provides much needed support to military youth through external factors.

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