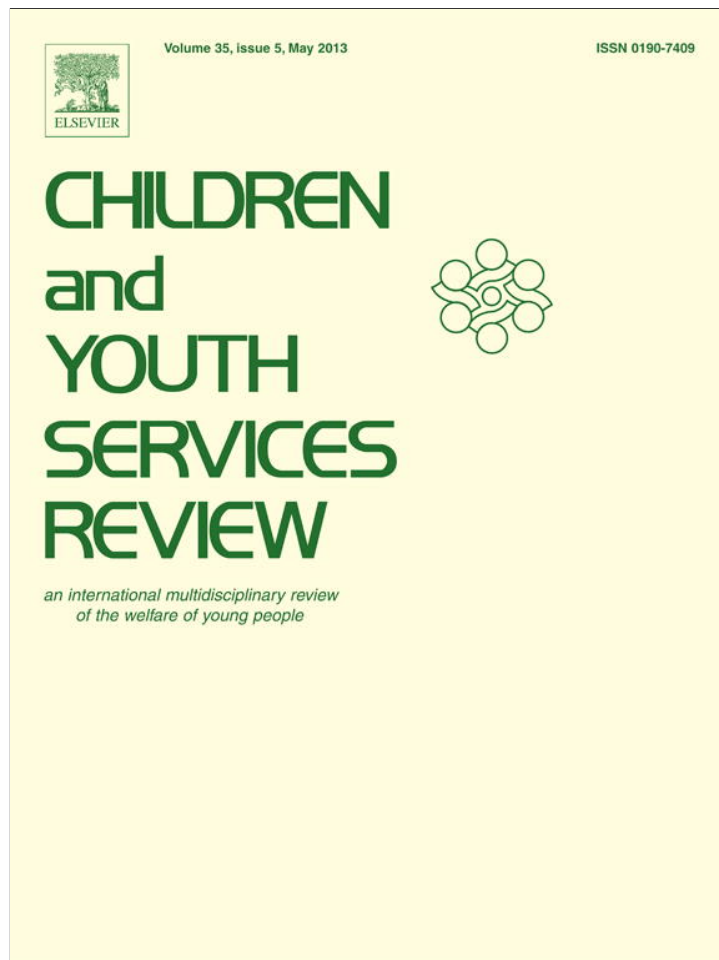


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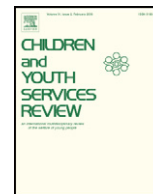
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Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

Sources of parenting support in early fatherhood: Perspectives of United States Air Force members ☆, ☆ ☆

Shawna J. Lee ^{a,b,*}, Tova B. Neugut ^{a,1}, Katherine L. Rosenblum ^{c,2}, Richard M. Tolman ^{a,3}, Wendy J. Travis ^{d,4}, Margaret H. Walker ^{d,5}^a University of Michigan, School of Social Work, 1080 South University Avenue, Ann Arbor, MI 48109, United States^b University of Michigan, Research Center for Group Dynamics, Institute for Social Research, 426 Thompson Street, Ann Arbor, MI 48109, United States^c University of Michigan, Department of Psychiatry & Depression Center, 4250 Plymouth Road, Ann Arbor, MI 48109, United States^d Air Force Medical Operations Agency, AFMOA/SGHW, 3515 S. General McMullen Drive, San Antonio, TX 78226, United States

ARTICLE INFO

Article history:

Received 8 November 2012

Received in revised form 22 February 2013

Accepted 22 February 2013

Available online 1 March 2013

Keywords:

Father

Men

Military

Technology

Pregnancy

ABSTRACT

We conducted semi-structured focus groups with men in the United States Air Force ($N = 39$) to examine fathers' access to parenting information during the transition to parenthood, and to determine methods for engaging fathers in intervention. Results of content analysis highlight fathers' motivation to develop and maintain positive relationships with their partners and children despite substantial challenges, including multiple deployments, family moves, and demanding work responsibilities. Fathers emphasize the importance of information in facilitating the transition to parenthood, especially in the key domains of effective co-parenting and communication, children's developmental milestones, and appropriate use of discipline. Results underscore that men tend to rely more on informal sources of parenting information (e.g., spouse/partner, family members, friends) than on formal sources of information (e.g., pediatricians, social workers).

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1. Introduction

Nearly two million children have at least one parent who is an active member of the U.S. military. Of the total service force, 44% of members ($n = 991,329$) have children, and more than one third (37%) have children 5 years old or younger. Within the United States Air Force (USAF), approximately 80% of active duty personnel are male and 44% have

children (U.S. Department of Defense, 2011). Active duty USAF members are parents to 283,341 children, of whom 119,797 are 5 years old or younger. These demographic statistics suggest that young children are the group most likely to be affected by the challenges their parents face in balancing the dual responsibilities of military service and parenting.

The responsibilities of military service can complicate the development of father-child attachment. Extended deployments that occur during the child's critical developmental periods are likely to disrupt the formation of attachment bonds (Willerton, Schwarz, Wadsworth, & Oglesby, 2011). In addition to deployment, active duty military families move an average of every two to three years to new postings within the United States or overseas (Croan, Levine, & Blankinship, 1992). During these frequent moves, parents might be separated from their families due to short-term or duty-related training responsibilities. The family role of the absent parent can be unclear to children, and young children in particular are often confused about the absent parent's role. Studies have shown child behavior problems escalate during reintegration when family roles are being re-established (Barker & Berry, 2009; Card et al., 2011; Chartrand, Frank, White, & Shope, 2008).

Even without the challenges of deployment, training, and duty responsibilities that take fathers out of the home, men often find the transition to fatherhood and parenting young children a stressful period (Hawkins, Blanchard, Baldwin, & Fawcett, 2008); therefore, the transition to fatherhood may be a time when fathers need more information and support regarding their changing role. For example, qualitative

Abbreviations: FAP, Family Advocacy Program; US, United States; USAF, United States Air Force.

☆ The authors would like to thank the fathers who participated in this study and Janelle Staviski who assisted with content coding the focus group transcripts.

☆☆ Funding: This research was funded by a grant from the U.S. Department of Agriculture to Lee (PI), Neugut, Rosenblum, & Tolman.

* Corresponding author at: University of Michigan, School of Social Work, 1080 South University Avenue, Ann Arbor, MI 48109, United States. Tel.: +1 734 763 6565; fax: +1 734 763 3372.

E-mail addresses: shawnal@umich.edu (S.J. Lee), tneugut@umich.edu (T.B. Neugut), katier@med.umich.edu (K.L. Rosenblum), rtolman@umich.edu (R.M. Tolman), wendy.travis@us.af.mil (W.J. Travis), margaret.walker@us.af.mil (M.H. Walker).

¹ Tel.: +1 734 647 3872.

² Tel.: +1 734 763 0231.

³ Tel.: +1 734 764 5333.

⁴ Tel.: +1 210 395 9106.

⁵ Tel.: +1 210 395 9135.

studies with first-time fathers in the United States and Sweden have reported that men expressed strong desire for more information across pregnancy and early parenthood, especially information about potential changes in their relationship with their romantic partner during this time (Deave & Johnson, 2008; Fagerskoild, 2008). However, most family support and parenting programs are targeted to mothers (Kaminski, Valle, Filene, & Boyle, 2008).

The lack of parenting services for fathers has multiple explanations, including the failure of parenting programs to engage men, the lack of content in parenting interventions tailored to an audience of fathers, and less motivation among fathers than mothers to participate in parenting programs (Cornille, Barlow, & Cleveland, 2005; Duggan et al., 2004; Fagan & Iglesias, 1999; Lee, Yelick, Brisebois, & Banks, 2011; O'Donnell, Johnson, D'Aunno, & Thornton, 2005; Raikes, Summers, & Roggman, 2005). Although limited data are available on the U.S. military per se, the research literature on parenting and family intervention has often described fathers as "ghosts" or invisible (Coley, 2001; O'Donnell et al., 2005; Smith, 2003; Thoeness et al., 2011). This gap supports the need for research to understand and address fathers more generally, and specifically fathers who are in the U.S. military and whose military service responsibilities might pose unique challenges in the transition to parenthood.

Building on efforts to promote family resiliency within the USAF population, the USAF Family Advocacy Program (FAP) was developed in 1985 to prevent and treat family violence and child maltreatment (Mollerstrom, Patchner, & Milner, 1995). Whereas family problems can hinder job performance, strong parent-child and intimate partner relationships are a source of resilience and enhanced job performance for service members (Mental Health Advisory Team 6, 2009; Park, 2011; Shinseki, 2003). The FAP is designed to support USAF personnel by providing services that promote the health and well-being of Air Force families, and strengthening the capacity of Air Force members to concentrate on and carry out their assigned duties. The focus groups described in this article were initiated by FAP personnel to learn more about (a) paternal sources of parenting support and information, particularly during pregnancy and early parenthood; types of parenting support and information that fathers had or had not received but would like to receive; and fathers' perceptions of whether technology-based approaches are feasible and acceptable methods of reaching USAF fathers in their daily contexts.

2. Method

2.1. Study procedures

To accomplish the study aim of focusing on men's transition to fatherhood and parenting young children, we conducted multiple focus groups in July 2012 with male participants ($N = 39$; focus groups ranged from three to eight participants). All participants were active duty service members of the USAF and currently stationed at a large base in the Southern United States. Given our interest in the fathers' transition to parenting and their early parenting experiences, our questions focused on parenting young children from birth to 3 years old, but child age was not a criterion for study inclusion. The fathers in our sample ranged from expectant fathers to fathers of adult children; however, 68% of respondents had at least one child 3 years old or younger (see Table 1). Fathers of older children were asked to recall their early parenting experiences. To be inclusive of all family configurations, *fathering* was defined broadly to include men parenting biological children and stepchildren, regardless of whether the children were residential (living with the father full-time or part-time) or nonresidential children for whom the father played a parenting role. However, as seen from the description of the participants presented in Table 1, only one father did not live with any children full- or part-time. Most fathers were living with at least some of their children full-time (79.5%), and a few fathers were

Table 1
Focus group participant demographic and household characteristics ($N = 39$).

Age (mean)	32
# of children (mean)	2.31
	%
1	25.6%
2	48.7%
3	5.1%
4	10.3%
5	10.3%
Currently live with children?	
No	2.6%
Yes, full-time	79.5%
Yes, part-time	10.3%
Yes, full-time & part-time	7.7%
Currently live with stepchildren or children from previous relationship?	
Yes	21%
No	79%
Are you the primary caregiver to any children?	
Yes	72%
No	26%
How old are the children that live with you?	
<3 years old (most common response)	68%
Relationship status?	
Single, never married	0%
Living with partner	0%
Married	87%
Separated	5%
Divorced	8%
Currently live with spouse/partner who is active duty?	
Yes	26%
No	74%
Race/ethnicity	
Latino/Hispanic American	26%
Black/African American	13%
White American	59%
Multiracial or biracial	3%
Annual household income (in dollars)	
10,000–29,999	3%
30,000–39,999	23.1%
40,000–49,999	15.4%
50,000–59,999	15.4%
>60,000	43.6%
Highest level of education	
Some college	17.9%
Associate's degree	46.2%
College degree or higher	33.3%

living with children part-time (10.3%) or both full-time and part-time, presumably in blended family situations (7.7%).

Participants completed a brief set of demographic questions (Table 1). The average age of participants was 32 years, and a majority of the sample had two children (48.7%). A relatively large proportion had four or more children (20.6%). The sample was racially/ethnically diverse, with 59% of participants self-identifying as White, 26% Latino/Hispanic American, 13% Black or African American, and 3% multiracial or biracial. Notably, 26% of focus group participants indicated that they lived with a spouse or partner who was also active duty military.

Compared with the USAF overall, our sample reported a similar educational level with 33.3% of participants reporting they had obtained a college degree or higher as compared with 40.3% of the USAF population that had an associate's degree or higher (W. Travis, personal communication data, February 13, 2012). Therefore, we had reason to believe that our convenience sample was generally representative of men in the USAF with respect to education level. However, when comparing other demographic characteristics of our sample to the overall USAF active duty population, we found only 11.5% active duty USAF were in dual military marriages, suggesting that we had a disproportionately large sample of dual military couples in our sample (W. Travis, personal communication, February 13, 2012).

2.2. Study procedures

Participants were recruited for focus groups using a convenience sampling procedure via mass e-mail sent by FAP personnel, with attached recruitment flyers. The e-mail message noted that participation was voluntary, and neither the e-mail nor the flyer offered direct incentives for participation. Food and beverages were provided at the focus groups.

At each of the focus groups, the lead researcher introduced the purpose of the study, answered participants' questions, and provided participants with an information sheet stating the goals and procedures of the focus group. This information sheet included that participation was voluntary and provided contact information for the lead researcher. Focus group discussions lasted approximately 60 min. All focus group discussions were audio recorded and transcribed verbatim. The local USAF officials approved the focus groups and the University of Michigan Institutional Review Board approved all materials and procedures.

Focus group discussions were organized around questions regarding parenting. Specifically, discussion topics included (a) sources of parenting information that the men received or used (e.g., family, pediatricians, male mentors), particularly during pregnancy and early parenthood (when their child was younger than 3 years); (b) whether fathers had access to or were aware of parenting resources in their community; (c) what types of parenting information fathers would like to receive or would find useful during their child's early years; (d) what types of resources would be helpful in their combined roles as fathers and USAF members; and (e) whether fathers perceived technology-based approaches as viable methods for reaching and supporting USAF fathers in their daily contexts. Facilitators ensured accuracy of the data by frequently asking participants to clarify statements and by asking follow-up probes throughout the discussions.

All participants completed a brief demographic survey and technology-use assessment. A key goal of the focus groups was to obtain information regarding how often USAF fathers used different forms of technology (e.g., smartphones, iPad, text messaging) and to discern fathers' perceptions regarding the usefulness of technology-based approaches to deliver parenting information to new fathers. Participants completed the short survey assessing their use of technology (see Table 2 for results); surveys were completed anonymously and no participant identifying data were collected.

2.3. Data analysis plan

This cross-sectional study used a qualitative methodology with data collected in a semi-structured focus group format. This approach enabled an open-ended examination of the perspectives and opinions of fathers regarding their parenting experiences. Moreover, this method was appropriate because the goals of this study were exploratory and the results were not intended to be generalizable.

Transcripts were manually content coded. This form of open-coding chunks data into smaller segments and attaches a descriptor to the segments (Leech & Onwuegbuzie, 2008). To establish content codes, three members of the research team (the first two authors of this article and one research assistant) independently read each transcript multiple times to distinguish recurrent themes and to establish reliable codes (Thomas, 2006). Themes were established by reviewing transcripts of the group discussions to determine content that was repeated at multiple points in the discussions, and to identify consistency in the comments as well as points on which focus group participants expressed divergent opinions. Next, the researchers met and compared their codes to establish consistency in the common themes. The three members of the research team reached consensus on the codes and then extracted quotes from the transcripts that related to those common themes. Major themes were organized to correspond with the order of the questions during the focus groups.

Table 2
Phone and Technology Usage by Focus Group Participants (N = 39).

	%
<i>What percentage of focus group participants...</i>	
Have a cell phone	97%
Have a smartphone	87%
Have an iPod Touch	31%
Have an iPad	46%
Use a cell phone/smartphone for text messaging	97%
Have used a cell phone/smartphone to access Internet	97%
Have used a cell phone/smartphone to watch a video	92%
Have used a smartphone "app"	95%
Have a Twitter account	15%
Have a Skype account	77%
Have a Facebook account	72%
Think text messaging or smartphone technology would be an effective way for men to receive parenting information	87%
How many times per day you use your phone to send text messages	
0	5%
1–10	36%
11–20	39%
21–30	8%
30+	13%
How many times per day you use your phone to access the Internet	
0	15%
1–10	59%
11–20	15%
21–30	10%
How many apps you have on your smartphone	
0	13%
1–10	31%
11–20	23%
21–30	15%
30+	15%

3. Results

3.1. Common resources for parenting information

Our first question asked fathers to reflect on common resources for parenting information:

People obtain parenting information from a variety of sources, including their spouse/partner, parents, friends, aunts and uncles, siblings, or professionals such as doctors, nurses, child care providers, and chaplains. Where or from whom did you get information or advice about parenting and how to take care of children?

This question was followed by a series of probes asking about the men's sources of information during pregnancy, what kinds of parenting information they received from these sources, their current sources for parenting information or advice, and what sources they thought other fathers in the Air Force used to get parenting information. We were particularly interested in the period encompassing pregnancy and the transition to parenthood but, as might be expected with the open-ended nature of focus groups, the participants answered these questions from a variety of perspectives and, to a limited extent, also discussed their experiences as parents of children older than 3 years.

Content analyses suggested that the most common source of parenting information used by participants was family members, particularly their parents and the parents of spouses or partners; the men also frequently sought information from other informal sources such as friends and co-workers. Generally, focus group participants tended to rely on informal sources of information, but only those sources they deemed to be trustworthy and reliable. For example, although parents were mentioned in every focus group as a source of information, several participants indicated that they purposefully did not seek their parents' advice because these participants had experienced troubled childhoods or abusive backgrounds. Given this history, these men sought to take a

different approach in their own parenting. Thus, an important issue related to seeking parenting advice was the credibility of the source.

In several focus groups, men indicated they would ascribe greater credibility to information obtained from other military members, stating a preference for receiving information from other service members with similar experiences and who had a better understanding of the challenges of parenting in the USAF context. The following quote exemplifies the participants' awareness that the stresses of family separation and reintegration create a burden that is shared by the entire family, as well as the belief that civilians do not understand many aspects of parenting in the military context.

You come back and you have all these accolades and “Here's your ribbon,” and “Here's your medal, good job”... but you know, that spouse that stayed home and those kids that stayed home, nobody's patting them on the back. Nobody's pinning a medal on them... There's a lot of aspects of that [others can't relate to].

We followed-up questions about information sources with additional probes to ascertain what sources of “expert” advice the fathers viewed as useful and credible. Participants commonly mentioned pediatricians, books, and websites such as babycenter.com and webmd.com. Participants reported these sources of information were especially useful in the initial stages of parenting when questions emerged about feeding, sleeping, and other routines. However, as illustrated by the following quote, they sometimes chose not to use available expert resources if those resources were perceived as exceedingly dense or presented in ways that prevented the information from being easily accessed.

We get that [parenting] information really shoved down our throats when we're deploying or when we're doing whatever type of annual training, but it's usually like just in packets and packets of stuff. You don't want to read through it. It's – [I] think [we might be more likely to read it] if it's more, maybe to the point. Because a lot of it is just so much information [that] no one wants to read through it at that moment. You just throw the paper to the side.

Follow-up comments suggested that some participants were unlikely to read an entire book or even a pamphlet, and instead tended to rely on their spouse or partner to point out relevant passages and sections. This approach seemed appropriate to these fathers because the most frequently mentioned parenting books, such as *What to Expect When You're Expecting*, were geared to the mothers' experience and did not provide specific advice for fathers.

3.2. Access to parenting resources in the community

We were also interested in understanding fathers' access to parenting resources in the local community. We asked a series of questions, including “Are you participating in any parenting classes or programs now, or have you participated in any parenting classes? If so, which ones?” “What do you like or dislike about parenting classes?” and “Are you aware of any parenting resources available at your base or in your local community that are specifically for fathers?”

Two key issues emerged during the focus group discussions of the extent to which fathers took advantage of community-based parenting resources. First, fathers largely agreed that too few father-specific resources were available in the community. However, as illustrated in the following quotes provided by two men, several of the fathers mentioned they were uncomfortable with the notion of asking for help:

“I don't know about you guys, but I find it very difficult to ask for help.”

We don't really want to ask someone for help because we feel like we should know how to do this already. This is my child, I'm going to raise my child the way I want to and the way that I feel is right.

But at the same time, it's almost a form of self-denial where you don't want to admit that you don't have all the answers. So it's hard to ask someone, “What do you do in this situation?”

Perhaps due to both of these factors (i.e., the general lack of availability of father-focused resources and the reluctance to seek advice or help), few fathers had experience with a father-specific parenting class. Moreover, participants in one focus group mentioned that being in an all-female or mostly female environment for new parenting programs was not necessarily helpful to them as fathers.

3.3. Parenting information especially helpful to fathers

A central goal of the focus groups was to gain information regarding the types of parenting resources new fathers perceived as helpful and interesting. We probed focus group participants at multiple points to gain their perspective on this question. One goal was to understand the content that this group of fathers regarded as useful, and a second goal was to understand how this information should be tailored to fathers' (as opposed to mothers') parenting experiences. The older and more experienced fathers among the group were asked to reflect on their experiences and need for information during the time their spouse or partner was pregnant and their early years of parenting. Below, we highlight three common subthemes that emerged across focus groups: enhancing co-parenting and communication, children's developmental milestones, and use of discipline.

3.3.1. Co-parenting and communication

I think in the realm of expectant fathers, something that I went through with my wife was, “I'm just along for the ride.” You know? She uses the words, “We are pregnant.” But all she's really doing is trying to make me feel like I'm involved. And I did the things that I thought a good husband and expectant father was supposed to. I went to the Lamaze classes. I tried to be supportive. I tried to do the backrub thing. But ultimately, I was just along for the ride. Just being there and being supportive, there's got to be something more than just driving her to get that midnight shake that she wants so desperately bad.

A common theme across multiple focus groups was the distinct nature of fathers' experiences, especially during pregnancy and immediately after childbirth; the differences in mothers' and fathers' experiences had the potential to create a sense of being removed or even alienated, which in turn, could lead to distance between mothers and fathers. Nearly all fathers in these groups expressed a strong desire not only to support their partners during pregnancy and beyond but also to receive guidance about how to best to provide such support. In fact, when participants were asked what type of information would be most helpful to fathers during pregnancy, often the first response – and always the most frequent response – was information regarding how to co-parent and strategies for supporting their partners. Fathers also mentioned wishing they had more information on women's physical and emotional changes during pregnancy, had better preparation for doctor's visits, and had more knowledge about the birthing experience.

Fathers also discussed their difficulties with connecting to their babies when they are not primary caregivers or providing most of the active parenting, particularly in infancy. Several fathers specifically identified breastfeeding as posing a challenge to the development of father-infant attachment because breastfeeding meant the mother was the primary source of comfort and sustenance for her child, and therefore, these fathers found it difficult to find a way to connect to their new baby. Based on such comments, it appears that creating opportunities and means for fathers to connect with the baby, particularly in the context of breastfeeding, might be a topic especially salient for fathers of newborns.

3.3.2. Developmental milestones

New parents must outlay a great deal of energy in the early months of a child's life, and it is common for parents to feel exhausted and challenged as well as happy to have a new baby. However, the negative feelings can be exacerbated when new parents do not know what to expect at different stages of their baby's development. For example, newborns exhibit a wide range of normal crying, and difficulty soothing a crying baby is likely to be more challenging for a father who does not know that many healthy babies have at least one fussy period during the day or that crying typically peaks at around 6 weeks of age (St. James-Roberts & Halil, 1991).

I think guys, men in particular, we want to solve the problem. That's the way we are designed. We are designed to hear a problem and solve it. The message needs to be sent and it needs to be received that sometimes it doesn't matter what you do, you cannot fix the problem.

The father quoted above articulated the frustration that is common to new parents who have tried all of the suggestions in the parenting books and who have done everything "right," but cannot seem to fix the problem when their baby is crying, fussing, or not sleeping well. The implication is that fathers (and mothers) are in need of information regarding their child's developmental milestones, that is, information that helps fathers understand what to expect of babies and children at different ages. Further, it might be crucial to provide messages that normalize the frustrations of parenting so that fathers feel more efficacious in their parenting role.

In addition to information on milestones, fathers wanted information regarding specific activities, games, and other strategies for engaging with babies and children in ways that are developmentally appropriate; their aim was to use such information to engage more effectively with their child and make the most of their precious, often limited, time with their child. In the words of one father, he wanted suggestions for "How do you make 30 min into something that's gonna be significant for a 20-month-old that isn't gonna see you for the next 12 h."

3.3.3. Discipline

Focus group participants identified parenting concerns, such as coping with a child with challenging behavior, that were likely to be more important as children transition into toddlerhood. In particular, fathers were interested in appropriate means of discipline for children across the age spectrum. Fathers discussed having a limited repertoire of strategies for managing children's behavior.

In addition, fathers noted that discipline issues of establishing and communicating clear and appropriate expectations for children as well as dealing with child misbehavior when it occurred were heightened when a father returned home after an extended period away from his family. The difficulty of re-integrating the father into the family is particularly salient if the child has undergone a significant developmental transition during the father's absence, such as when a baby grows into a toddler. Multiple participants in the focus groups reported extended deployments that meant they were absent from the home for much of their child's early life; these participants described their own and their child's difficulty in adjusting when the father returned home.

3.4. USAF-specific parenting resources

Fathers acknowledged parenting challenges relevant to their active duty status, and identified valued resources designed for USAF parents. Not surprisingly, a common theme in the discussions of USAF parenting resources was the desire for and importance of information relevant to deployment and subsequent family reintegration.

I mean honestly for me – and a lot of people I've talked to – the leaving, leaving is hard. But it's coming back – those first 3 or 4 months, 'cause you want to get back and get right back into it and try to make up for that time – and a lot of times kids don't work like that.

In addition to issues of deployment and reintegration, participants identified other military responsibilities that affected their families in important ways. These service-related factors included assignment to a new location that demanded a move for the family, and assignment to a new work schedule that altered a fathers' ability to be present in the home at certain times, and thus required changes in family routines. Over the course of childhood, children of military families might have to adjust to multiple moves; participants indicated strong interest in resources providing guidance on how best to prepare children for moves, and information' on how to best support their spouses and children throughout the transition to a new home.

Going from school to school, so how they adapt from going to three and four elementaries... and then going to two and three high schools, how do they adapt? And how as a father do you help with that process to help your spouse or lack thereof?

Fathers who had used USAF-specific resources rated those resources favorably. The most frequently mentioned resource was the Air Force New Parent Support Program, which is a Department of Defense-funded home visiting program for expectant and new parents. The home visitors provide tailored intervention services to Air Force families at-risk for child maltreatment. Another favorably rated resource was a community-education outreach effort called *Bundles for Babies*, which provides information and gifts to expectant parents. *Bundles for Babies* is sponsored by the Air Force Airman and Family Readiness Center. The information provided to new parents through this outreach program addresses the financial considerations of adding a new baby to the family, as well as general prenatal and neonatal health topics such as exercise during pregnancy, accessing health care for the baby, and preventing shaken baby syndrome. In addition, several fathers mentioned the Nurse's Medical Advice Hotline, sponsored by the Uniformed Services Health Care Program, as a favored source of medical information. Finally, fathers noted that they appreciated receiving information on child development and parenting techniques provided by child development experts at the on-base child care centers. Notably, all of the USAF-specific programs discussed in this article are available to all Air Force parents and are available at most USAF installations worldwide.

3.5. Perceptions of technology-based parenting information

We concluded the focus group discussions with questions regarding the use of technology to provide parenting information to USAF fathers. Table 2 summarizes focus group participants' phone and technology usage. Among our sample, 87% of participants indicated they had a smartphone, and nearly all the fathers reported using a mobile phone device to send and receive text messages, access the Internet, and watch videos.

Our analysis of the focus group content (see Section 3.1) revealed that many fathers have obtained parenting information through websites, and to a lesser extent, through the use of smartphone applications (i.e., *apps*). Specific websites mentioned in the focus groups included webmd.com, babycenter.com, babycity.com, a Red Cross app that provides medical advice, Sprout online (an extension of the PBS Kids Sprout cable channel), and message boards that provide reviews of baby products. As expected, some fathers were more enthusiastic than others about the appeal of technology for delivering parenting information. However, the majority of focus group participants (87%) indicated that they thought text messaging or smartphone technology was an effective way for USAF fathers to receive parenting information.

The focus group participants who reported they did not regularly use mobile phone devices to obtain parenting information suggested that they would find information delivered by e-mail to be helpful. Moreover, these participants indicated they were more likely to read parenting e-mails if the message were tailored to their needs as fathers and active duty military members. Overall, responses from this group of fathers were consistent in expressing their desire to receive parenting information by text message, through an app or website, as well as having the option of receiving the information as an e-mail message. It is important to note that some fathers said they preferred reading e-mail to searching the Internet for information.

4. Discussion

Proactive efforts informed by a risk and resilience perspective and intended to strengthen the family are not well described in the literature. A recent review of the research on programs to support military children and families determined that, "Programs for military children and families often focus on the prevention or reduction of problems. It is just as important to recognize their assets and to promote them" (Park, 2011, p. 65). A goal of the current study was to understand how to build on the strengths of fathers serving in the USAF to promote positive father engagement during pregnancy and the transition to parenthood.

4.1. Using a mentorship model to deliver parenting information to fathers

Fathers seemed eager to access and participate in father-focused resources and services, but were aware of relatively few resources available to them on-base or in the local community. Some participants noted they were reluctant to ask for parenting advice, and felt they should be able to answer these important questions themselves. Participants' comments demonstrated an unmet need for parenting information tailored to the distinct needs and experiences of fathers; specifically, fathers who must balance the responsibilities of military service with the demands of parenting. Participants expressed a strong interest in being able to access relevant parenting information through non-stigmatizing avenues and without being made to feel that they were using resources intended for mothers or violating social conventions and gender norms by seeking support.

Participants consistently reported a high level of trust in information provided by their fellow USAF members, and indicated that they hold USAF resources for families in high esteem. This high regard and trust in USAF-related resources suggests that new fathers among the USAF population would be particularly receptive to a parenting intervention using a mentorship model. In this model, other USAF fathers who perhaps have more parenting experience, but share the common bond of being members of the U.S. military, would deliver parenting information and advice. Participants also expressed a high regard for existing USAF resources; therefore, any new intervention should promote the existing resources by offering information and referrals. Recognizing that young fathers were likely to find dense, generic parenting information off-putting, new resources for USAF fathers should present relevant, tailored information as clearly and concisely as possible. For example, when fathers are directed to websites, books, or other large resources, the directions should include links to specific Web pages or detailed instructions about where to find specific content of interest.

4.2. Normalizing the frustrations of parenting

Fathers participating in the focus groups eloquently described the challenges of early parenthood. Many of the more experienced fathers suggested that during the early stages of parenthood, they would have found it helpful to be reassured that persistent difficulty in comforting their infant or establishing a sleep schedule did not necessarily mean they were doing something "wrong." Thus, information that clearly reassures and communicates to new fathers that "all babies are different," "all

babies can be fussy sometimes," and "the concerns and challenges you are experiencing are experienced by all new parents" might help fathers to feel more competent in their role.

Discussion within the focus groups demonstrated that USAF fathers are likely to benefit from a combination of tailored parenting information and support in developing patience and the capacity to tolerate frustration. Normalizing the everyday frustrations that all new parents experience could be achieved by providing fathers with sufficient information regarding their child's developmental milestones; what to anticipate with key challenges such as baby's eating, crying, and sleeping; and strategies for addressing challenging behaviors. Participants noted that new fathers tended to be particularly uncomfortable with tolerating frustrating situations; therefore, fathers should be made aware that the strategies they learn might not be immediately or consistently effective.

4.3. Technology

The majority of men in this sample reported high levels of technology use, including text messaging and use of smartphones, iPads, and iPods. Nearly all respondents had used an app on a smartphone. The accessibility and convenience of technology-based resources and intervention might be valuable assets with USAF fathers because this group shows high uptake and comfort with technology and has substantial demands on their time. Practical considerations such as time conflicts with men's work schedules often pose a barrier to engaging men in parenting interventions (Duggan et al., 2004; O'Donnell et al., 2005). Thus, the flexibility afforded by technology-based resources appears well suited to engaging new fathers, particularly those who are active duty military. The use of technology presents an important avenue for future research on how best to engage fathers in parenting services.

Several technology-based approaches used with mothers have shown promise in promoting positive parenting with at-risk populations, including approaches using advances in computer technology (Ondersma, Grekin, & Svikis, 2011; Ondersma, Svikis, & Schuster, 2007; Ondersma, Winhusen, & Lewis, 2010), Web-based training (Feil et al., 2008; Thraen, Frasier, Cochella, Yaffe, & Goede, 2008), and cell phone technology (Bigelow, Carta, & Lefever, 2008). Notably, technology-based approaches have not only received high acceptability ratings among participants (Bigelow et al., 2008; Ondersma, Chase, Svikis, & Schuster, 2005) but also have increased positive-parenting behaviors (Baggett et al., 2010) and reduced maternal parenting risk factors (Ondersma et al., 2007, 2011). The *text4baby* is one initiative that has recognized the enormous potential of technology-based interventions to positively influence parenting behaviors. This initiative uses text messaging to communicate with new mothers regarding their child's development throughout pregnancy and the first year of life. Despite the success of this initiative, no similar text-based efforts have targeted fathers.

The New Fathers Network (Hudson, Campbell-Grossman, Fleck, Elek, & Shipman, 2003) offers one example of a promising Internet-based intervention to support men's transition to fatherhood. Consisting of three components, the New Fathers Network includes (a) a library of references on child development, infant care, infant health, and typical concerns of new fathers; (b) discussion forums; and (c) e-mail access to advanced practice nurses (APN). Fathers who participated in the New Fathers Network reported higher levels of parenting satisfaction and self-efficacy than a comparison group (Hudson et al., 2003). Among USAF fathers, the appeal of a technology-based intervention for new fathers could be enhanced through additional tailoring and highlighting of key material.

An advantage of technology-based resources is the ease with which these resources can be adapted to incorporate personalization, tailoring, multi-media options, interactivity, reliability, convenience, anonymity, and user empowerment (Ahern, Kreslake, & Phalen, 2006; Christensen, Griffiths, & Evans, 2002; Griffiths, Lindenmeyer, Powell, Lowe, & Thorogood, 2006; Korp, 2006; Mitchell, Vella-Brodick, & Klein, 2010; Ritterband et al., 2003). This capacity for modification further underscores the relevance of technological resources for USAF fathers, who are most

interested in receiving parenting information specifically tailored to the needs and challenges of fathers who are serving in the military.

4.4. Study limitations

This study was intentionally limited to semi-structured focus groups conducted with a convenience sample of male USAF service members selected from one base in the Southern United States. Our convenience sample of fathers is not representative of all active duty fathers in the USAF. As compared with either general military or USAF demographic statistics, our sample was older and more than twice as likely to be in a dual military family in which both spouses are active duty members. Therefore, the generalizability of the study findings is limited by the sampling procedure. With this limitation in mind, this descriptive study must be considered as preliminary, exploratory research intended to examine the experiences and perspectives of a small number of fathers serving in the USAF.

5. Conclusion

This study underscores the resilience and coping abilities of many USAF families, and highlights the motivation of these male Air Force service members to develop and maintain positive, supportive relationships with their partners and their children. Family assets, combined with men's motivation to be great parents, can provide the basis for a parenting intervention that recognizes and builds on the strengths of USAF fathers. The results of this study can be used to inform future intervention efforts. Our findings suggest that intervention in several domains can facilitate the transition to parenthood for military fathers. Participants were most interested in the domains of knowledge of effective co-parenting and communication, children's developmental milestones, and appropriate use of discipline. The results of this study also suggest that, given their frequently changing work schedules and the possibility of deployments and other work-related absences from the family, technology-based resources may be especially important for fathers in the U.S. military. Based on our convenience sample of fathers, which had high levels of smartphone use and use of other forms of technology, it is possible that many men, and in particular young fathers who are serving in the USAF, would take advantage of technology-based parenting resources, if available. In sum, prevention resources targeting the distinct experiences, needs, and interests of military fathers have the potential to enhance the well-being of children, mothers, and fathers themselves.

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