

Gender Disparities in Active Duty Air Force Parents' Childcare Access: Pre-Pandemic Costs, Utilization, and Career Impacts

Erika L. King¹, Hla Y. Myint, Tawny R. Gardner, Morgan R. Mitchell, and Kristin A. Beitz

¹Army Medical Center of Excellence and University of Kentucky School of Social Work

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Abstract

Past reports indicate that enduring shortfalls in the DoD childcare system may be disproportionately affecting women, but details regarding gender effects are unknown. This exploratory study sought to uncover the military childcare system's pre-pandemic state by analyzing two Air Force survey datasets – the 2017 AF Community Feedback Tool and 2020 AF Childcare Survey – to examine gender gaps in active duty Air Force parents' childcare access, cost and utilization, and perceptions of childcare impacts on career progression and retention. Results reveal that women—particularly those in the lowest officer and enlisted ranks who have less time on station—report more difficulties accessing quality childcare than male counterparts, that those difficulties reduce with more time on station, but that gender gaps are enduring. While fathers reported no childcare costs and relying on spouses for childcare at higher rates, mothers reported childcare costs, relying on DoD childcare, status on DoD on waitlists, childcare-related career impacts, and childcare affecting retention decisions at higher rates. Policy recommendations that could improve childcare across the force are discussed.

Key words: Military, Childcare, Gender, Women, Retention

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The current pandemic has forced inadequate childcare systems into the limelight, as existing deficits were amplified amid school and daycare closures (Camera, 2020; Carson & Mattingly, 2020; Kalluri, Kelly & Arvin Garg, 2021). These concerns were unique for military members who experienced reduced access to informal childcare assistance they may have called upon in a crisis due to infection risks associated with travel, age, or underlying conditions as well as DoD travel restrictions. (Congress, 2020).

Prior to the pandemic, one study uncovered gender differences in military parents' unmet childcare needs, revealing that active duty Air Force (AF) new mothers had twice as many unmet childcare needs as active duty AF new fathers (King et al., 2020a). But few other studies have examined military childcare broadly, and no recently-published work has examined gender differences in military members' access to quality childcare, childcare costs, childcare resources, or how childcare has or will affect their careers and retention decisions. Further, although some studies have highlighted the disproportionate impact working mothers in the civilian sector have faced during the pandemic (Power, 2020; Sevilla & Smith, 2020), if and how gender gaps have changed in the military due to the pandemic are not yet known.

As a pre-pandemic understanding is needed to enable future study of the pandemic's effects and may be useful in measuring effects of policy changes, this paper sought to uncover the pre-pandemic state of military members' childcare by gender. Specifically, this paper examines gender differences in active duty Air Force parents' childcare access, cost, and utilization, as well as members' perceptions of how childcare has impacted their career progression and will impact their retention decision-making.

Why Military Childcare Matters

Historically, single men were preferred for U.S. military service, but permissions to be married and have children evolved, particularly during times of war, to allow men with families to be drafted and serve (King & DiNitto, 2019). Although military women were not permitted to be mothers throughout much of

U.S. history, the adjustment from the draft-and-release force to the All-Volunteer Force (AVF) in 1973 prompted women's increased military service and, eventually their expanded permissions to be pregnant and a parent while serving (King & DiNitto, 2019). Despite Department of Defense (DoD) efforts to develop and improve childcare programs since the adjustment to the AVF, women continue to depart the service at higher rates than their male peers at mid-career – the 4-10 year time in service point – when many contemplate starting a family (DiSilverio, 2004; King et al., 2020b). These retention disparities are likely in part due to military women's different family structures compared to their male peers. Specifically, significantly higher proportions of active duty servicewomen are single parents (12% versus 4% of men; Clever & Segal, 2013), and are in dual-military marriages (20% versus 4%) compared to servicemen (DACOWITS, 2017; DoD, 2020, Segal & Lane, 2016). These gender differences in family structures likely translate into servicewomen's different childcare needs compared to servicemen's.

DoD Childcare System History and Challenges

The Department of Defense designated childcare facilities as a government responsibility in 1978, and in 1981 Congress approved DoD funding to construct new facilities (General Accounting Office [GAO], 1982). As on-base childcare availability continued to lag, in 1999 Congress authorized a fee assistance program that enabled military members to apply for subsidies to offset the cost of government-approved off-base care (Hamarck, 2020). The DoD's childcare system has continued to evolve substantially since its inception, and now serves approximately 200,000 of 1.3 million eligible children, with annual funding exceeding one billion dollars (Hamarck, 2020).

Despite its growth, the DoD childcare system has continuously struggled to both measure and meet demand (Moini et al., 2007). A 2007 RAND report on this issue found that the DoD's metric for estimating childcare needs was inaccurate, that 10% of military families struggled with unmet childcare needs, and that 22% of families were unable to access their preferred childcare options (the most preferred option [54%] was DoD-provided care) (Moini et al., 2007). Furthermore, the report highlighted that problems finding childcare after the birth of a child and after a Permanent Change of Station (PCS) were most commonly reported by single and dual-military parents of preschool-aged children; that

problems finding childcare impacted members' readiness (ability to report for duty) and that, for 21% of respondents, childcare problems would likely drive them to leave the military (Mioni et al., 2007). In addition, the report uncovered that 21% of all parents reported utilizing a secondary child care arrangement in the week prior to completing the survey (meaning they required multiple supports/agencies to meet their childcare needs) compared to 48% of dual military parents. Further, while only seven percent of military fathers reported that they missed work due to child care issues, 37% of mothers reported missing work for the same reason (Mioni et al., 2007). These disparities highlight how military men's and women's differing family structures might impact their childcare system utilization, and how gaps in the system may disproportionately negatively affect women.

Five years after the RAND study, the Government Accountability Office (GAO, 2012) examined DoD childcare availability barriers. Their study again found that the DoD's formula for estimating childcare demand remained inaccurate and problematic, that on-base childcare availability was insufficient to meet demand, and that members utilizing off-base care subsidies still faced higher average costs than those receiving on base care (e.g., GAO, 2012).

Fourteen years have passed since RAND's study, and nearly ten years since the GAO's inquiry. Since those publications, considerable efforts have been made to improve military members' access to quality childcare. For example, in 2016 then-Defense Secretary Carter announced that CDC hours would be expanded from 12 to 14 hours minimally per day (DoD, 2016). Despite intended improvements, a 2020 study on new Air Force parents found that active duty AF mothers with children under one year of age reported twice as many unmet childcare needs as new active duty AF fathers (King et al, 2020a). Amplifying matters, as COVID-related shutdowns increased waitlist lengths and added more hurdles for DoD families searching for childcare, legislators submitted a bipartisan letter to then-Defense Secretary Esper in August 2020 highlighting ongoing military childcare needs and calling for action to address associated risks (Congress of the United States, 2020): "40% of our Active Duty forces may be in desperate need of childcare beginning this fall. Many of these families have reached out to us asking for support in navigating this complex problem." Although the letter focused on supporting military families

in general, it called out two family demographics disproportionately held by women: “Single military parents and dual military couples with children face added challenges given their essential roles at work and no additional help at home” (Congress of the United States, 2020).

In short, the DoD childcare system’s shortfalls have endured since the system’s inception despite efforts, have consistently struggled to meet needs of family structures disproportionately held by women, and have been amplified by pandemic-related changes. In order to better understand the state of military childcare systems’ pre-pandemic efficacy, effects and gender gaps, the authors conducted an exploratory study by analyzing two Air Force survey data sets to clarify gender gaps in active duty AF parents’ childcare access, cost and utilization, as well as their perceptions of if and how childcare has affected their career progression and their decision to continue military service. As childcare access can depend heavily on available resources – particularly knowledge of resources and adequate income to afford services (GAO, 2012), when possible variables were examined across time-on-station and rank groups.

Methods

The Air Force Community Feedback Tool (Department of the Air Force, 2017) was used to examine gender differences across rank groups in past year difficulties obtaining childcare. The 2017 Community Feedback Tool (CFT) was an online community needs assessment survey delivered via email invitation on behalf of the Assistant Vice Chief of Staff of the Air Force to all active duty, Guard and Reserve Air Force members and Air Force civilian employees between early August and early October 2017 (cite CFT). Survey participants clicked a link and entered a unique code to access their survey, which collected demographic information and information regarding community problems and needs, available supports, and respondents’ utilization and perspectives on available resources (Department of the Air Force, 2017).

Of the 88,592 total respondents, 41,246 were active duty Air Force members, representing a 13% active duty response rate. The subsample examined in this study included active duty members with at least one child aged 13 or younger living in the home at least half of the time who were either “new on

station” (reported less than six months’ time on station) or “established on station” (reported more than two years’ time on station) (N=24,551).

The five rank groups captured by the survey included: E1 to E4, E5 to E6, E7 to E9, O1 to O3, and O4 and above. Access to childcare was measured using a dichotomous variable based on respondents checking a box to indicate if “Availability of quality childcare (waiting list, hours, priorities, etc.)” was a problem for them in the last year (checked box = yes, I experienced childcare access problems; unchecked box = I did not experience childcare access problems). The percentages of men and women respondents who reported problems accessing childcare were compared in the total sample as well as across rank groups by new (<6 months) and established (>2 years) time-on-station.

Gender gaps in childcare access were calculated in the total sample as well as new and established time-on-station groups by first calculating the total and rank subgroups’ percentage of men and women reporting difficulties accessing childcare in the past year. Next, the differences in the percentages between men’s and women’s childcare access problems were calculated, and then the difference was divided by the lower gender group’s percentage.

The second dataset, the 2020 Air Force Childcare Survey, was developed prior to COVID-19-related shutdowns and aimed to gather information regarding respondents’ pre-pandemic childcare access, strategies and concerns. The survey was delivered via email in April 2020 to all military members with an official Air Force email address who were on regular active duty or on active orders with the Guard or Reserve at the time of survey dissemination and claimed at least one dependent child younger than 13 years old. The 24,917 respondents, represented a 19% response rate. The five rank groups captured by the AF Childcare survey were identical to the CFT except for the highest ranking officer group, which capped at O6: E1 to E4, E5 to E6, E7 to E9, O1 to O3, and O4 to O6. The survey did not collect time-on-station information.

Childcare costs were captured via a question soliciting the average amount respondents paid for childcare per child each month prior to the pandemic. Response options included: \$0; \$1-499, \$500-999, \$1000-1499, \$1500-2000, and >\$2000. Pearson chi squares were calculated on rank subgroups to

determine if statistically significant gender differences in parents' childcare costs were found across rank groups.

Childcare resource utilization was captured by asking respondents to check "all that apply" on a list of childcare resources, including DoD Child Development Center, DoD School Age Program, Family Child Care (FCC, including on and off base), Off Base Daycare Center, Off Base In-Home Care, Off Base School Age Program, Spouse/Partner, Parents/Relatives, Nanny or Au Pair, Other, or N/A – I did not need childcare. Pearson chi squares were calculated to test for statistically significant gender differences in parent's childcare resource utilization.

Wait list status and wait time was measured by asking respondents if they had a child on a DoD wait list immediately prior to the pandemic. If respondents answered yes, they were asked the length of time on the wait list (Less than one month, 1-2 months, 3-4 months, 5-6 months, 7-8 months, 9-10 months, 11-12 months, or Over one year). Pearson chi squares were calculated to test for statistically significant gender differences in wait list status and wait times.

Gender differences in career impacts were measured in two ways. First, respondents were asked "How has child care affected your career progression" with impact response options including: Very negative, Negative, Neither negative nor positive, Positive, Very positive and Too soon to tell. The two negative and positive response options were condensed to create one negative (negative/very negative) and one positive (positive/very positive) category. Second, participants were asked "How does child care influence your decision regarding remaining in the Air Force beyond your current enlistment or service commitment", with response options including: Strong influence to Leave, Influence to Leave, Not an Influence to Stay or Leave, Strong influence to stay, Influence to Stay, or N/A—Do Not Consider Childcare in this Decision. The two influence to leave and influence to stay options were condensed to create one influence to leave (strong/general influence to leave) and one influence to stay (strong/general influence to stay) category. Pearson chi squares were calculated to test for statistically significant gender differences in perceptions of childcare-related career impacts and in childcare influences on retention.

Results

Gender differences in childcare access problems by rank and time on station were computed using the 2017 CFT data. Table 1 highlights combined gender gaps in childcare as well as differing gender gaps across rank groups and as members settle into new stations. Over 20% of all respondents with children under 13 years old reported problems accessing quality childcare in the previous year. The proportion of women reporting lack of childcare access was nearly double the proportion of men (33% compared to 17%, representing a 95% gender gap).

Women across all ranks reported lack of childcare access at higher rates than men; however, the proportion of women without childcare was higher in women with less than six months' time on station (38%) than in women with more than two years' time on station (26%). This 12-point difference represents 31.6% better childcare access for women with established time on station compared to women new on station. Men with less than six months' time on station across all ranks also reported similar rates of childcare access problems (18%), but the gaps in their access did not improve to the same degree as women after two years' time on station (16%). This two-point difference represents 11.1% better childcare access for men with more than two years' time on station compared to men new on station.

After two years' time on station, mothers in the E1 to E4 rank group had the highest rate of unmet childcare needs (37%), while fathers in the O1 to O3 rank group had the highest rate of all male groups (23%), exceeding even rates of fathers with less than six months' time on station. For respondents with less than six months' time on station, the gender gap in childcare access was consistent across all ranks (113% average gap), meaning that the proportion of women reporting childcare access problems in the "new on station" group was 113% higher than the percentage of "new on station" men. In the established time on station group, the gender gap in childcare access shrunk 42%, as the proportion of women reporting childcare access problems was 66% higher than the proportion of men.

The remaining analyses were conducted using the Air Force Childcare Survey, which did not collect time on station information, but split rank groups in nearly the same manner as the 2017 CFT. Statistically significant gender differences in childcare costs were found in the total sample (N=26,024), with some unique findings in specific grade groups (see Table 2). In the total sample, the proportion of

men who reported incurring no childcare costs (32.8%) was significantly higher than that of women (16.3%), $\chi^2=795.20$, $p<.001$. In the E1 to E4 grade group, women reported significantly higher rates of paying \$1-\$499 dollars per month per child for care (46.5%) compared to men (37.5%), $\chi^2=15.68$, $p<.001$. In all other grade groupings (E5-E6, E7-E9, O1-O3 and O4 and above), a higher proportion of women reported paying \$500-\$999 each month per child for care compared to their male peers ($\chi^2=148.51$, 87.33, 52.65, 124.84 respectively with all $p<.001$).

Significant gender differences in types of childcare used were also uncovered (see Table 3). Women reported utilizing the DoD's Child Development Center (31.4%) and School Age Program (13.8%) at significantly higher rates than men (14.4% and 6.5% respectively), $\chi^2=1047.75$, $p<.001$ and $\chi^2=385.59$, $p<.001$. Men reported that their spouse or partner provided childcare at more than three times the rate (36.3%) of women (11.1%), $\chi^2=1843.26$. Men also reported that their children did not require care (10.9%) at significantly higher rates than women (3.3%), $\chi^2=21.97$, $p<.001$.

Examination of wait list status revealed that, of all respondents, 14.2% (n=3,695) reported that they were on a DoD childcare waitlist immediately prior to the pandemic. Analysis revealed gender differences and similarities in respondents' status on a DoD care waitlist and their wait times (see Table 4). The proportion of women who reported being on a waitlist (17.7%) was significantly higher than men (12.4%), $\chi^2=130.30$, $p<.001$. Despite a higher proportion of women on the waitlist, gender differences in wait times were less pronounced. The most frequently reported amount of time respondents indicated they waited on the list was over one year, with men reporting slightly higher rates of waiting longer than a year (22.8%) compared to women (18.7%), $\chi^2=8.90$, $p<.01$. The second most frequently reported waitlist time across the total sample was 3-4 months (17.9%).

Men and women respondents reported differing career and retention impacts related to childcare (See Table 5). Women reported that childcare affected their career progression in both negative (27.4%) and positive (11.5%) ways significantly more than men (20.0% positive; 6.7% negative), $\chi^2=158.12$, $p<.001$ and $\chi^2=152.23$, $p<.001$. Men reported that childcare neither negatively nor positively affected their career progression (60.0%) compared to women (49.9%), $\chi^2=210.41$, $p<.001$.

Regarding childcare's influence on respondents' retention decision-making, more than twice the proportion of men reported that they do not consider childcare in their career decision-making (35.6%) compared to women (15.7%), $\chi^2=958.21$, $p<.001$. Women most frequently indicated that childcare influenced them to *leave* the service after their current commitment (33.2%) – a rate significantly higher than men who indicated that childcare influenced them to leave the force (19.8%), $\chi^2=488.04$, $p<.001$. Women also indicated that childcare influenced them to stay in the military (20.5%) at significantly higher rates than men (13.6%), $\chi^2=180.98$, $p<.001$.

Discussion

The gender gap improvements with more time on station varied by rank groups, highlighting likely financial (affordable), resource (childcare options), and demand (work hours) differences. Additionally, the gender gap in childcare persisted most among the E1 to E4 and E5 to E6 groups (92% and 71% gaps in the “established on station” groups). Results may be attributable to some childcare options costing too much for lower ranking members to afford. While the gender gap shrunk from 111% for the E7-E9 group and O1-O3 group to 29% and 48% respectively, lesser reduction was felt for the O4+ group (115% to 58% gap). This lesser reduction may be attributable to higher-ranking women officers' differing family structures (dual military, single parent, dual income) increasing their childcare needs. Further, the shrinking gender gap in the O1 to O3 rank group appears mostly reflective of worsening childcare access rates for men (23% after two years' time on station) and persisting childcare access difficulties for women (34%). This persisting problem may be attributable to O1-O3 members' differing family structures (dual married or dual income) as well as their lesser incomes compared to the higher-ranking officer group.

Differences in both childcare preferences and available resources likely contributed to gender differences found in childcare utilization. As men relied considerably more on spouses and partners to provide care, their costs were considerably less. At the same time, women relied more heavily on DoD Child Development Center and School Aged Programs compared to men, likely contributing to women's higher representation on DoD waitlists. Alarming, more than 14% of all respondents were on a waitlist

immediately prior to the pandemic, and of those on the list, more than 21% were waiting for longer than a year. The proportion of men waiting longer than one year was 22% higher than the proportion of women, which may be attributable to current DoD waitlist prioritization procedures that place dual military and single parents ahead of couples with non-DoD-affiliated spouses (DoD Instruction 6060.02). In short, both men and women are struggling with insufficient DoD childcare access. Although DoD waitlist “goals” are not routinely reported, the Military Compensation and Retirement Modernization Commission (MCRMC, 2015) recommended that the DoD aim to provide childcare within 90 days of members’ needs. Based on this target, 80% of the respondents in this study who reported being on a DoD wait list had already exceeded the 90 day target, as only 20% reported they had been on the wait list for less than three months.

Given long childcare waits, and that families’ childcare needs cannot go unaddressed without safety and/or legal repercussions, at least some spouses and partners are likely providing care out of necessity (lack of available childcare) rather than preference. The need for military spouses to fill DoD’s service gaps is problematic for multiple reasons. First, previous studies have found that military wives are underemployed, involuntarily working part-time, working in positions they are overqualified for, and undercompensated for their work at higher rates than their civilian peers (Lim & Schulker, 2010; Meadows et al., 2015). Second, one of the most significant factors associated with married members’ retention intentions is their spouses’ support to continue their military careers (Huffman et al., 2013; King et al., 2020a; Rosen & Durand, 1995). Although a past study on military spouses found that insufficient childcare options caused or compounded employment challenges (Friedman et al., 2015) no research has examined if and how DoD childcare access affects military spouses’ support for their military members’ continued careers. Complicating this, research indicates that military husbands face earnings losses comparable to military wives (as compared to both genders’ civilian peers; Little & Hisnanick, 2007) but are more dissatisfied with their employment situations than military wives (Cooney, De Angelis, and Segal, 2011). These military spouse employment challenges and related gender differences highlight the

importance of examining the long-term effects of insufficient DoD childcare availability on building and retaining a diverse military force.

Gender differences in respondents' perceptions in how childcare has impacted their career progression and will impact their retention also highlight a need for further study and action. Higher rates of men in this study reported that childcare did not impact their career progression compared to women, while higher rates of women reported that childcare negatively and positively impacted their careers compared to men. Notably, the proportion of women reporting negative impact (27.4%) was 2.4 times higher than the proportion of women reporting positive impact (11.5%). Similar patterns were found in impacts on childcare's influence on retention intentions, as the proportion of men who reported that they do not consider childcare in their career decision-making was double that of women, while women most frequently (33.2%) responded that childcare influenced them to leave military service. Taken together, these findings highlight the more prevalent and more negative impact childcare has on active duty Air Force mothers' career progression and retention intentions compared to fathers.

In addition to childcare's impact on servicewomen's careers and retention, women's higher rates of childcare challenges may be affecting their health. A meta-analysis of civilian women's development of post-partum depression (PPD) identified childcare stress as a risk factor for PPD (Beck, 2001). Studies have found that active duty women experience PPD at higher rates (19+%; O'Boyle et al., 2005; Appolonio & Fingerhut, 2008) than civilian women (12%; Segre et al., 2007), and that childcare stress is correlated with active duty women's development of PPD (Appolonio & Fingerhut, 2008). Further research on effects of childcare and other DoD support service gaps may help clarify and mitigate not only active duty women's higher PPD rates, but also other differential health outcomes.

It is worth noting that women also indicated that childcare influenced them to stay in the military at significantly higher rates than men. This may be related to women's higher utilization of DoD childcare programs, enabled by single parents' and dual military couples' higher prioritization under the current wait list structure, as women are overrepresented in those prioritized groups. This finding further

highlights that stability and confidence in care can directly, favorably impact retention. Thus, expansion of childcare solutions could be an important enabler to DoD retention and talent management.

Limitations

While this exploratory study affords considerable new insights, some limitations should be noted. First, all analyses were conducted using cross-sectional data, and therefore cannot be used to determine causality. Second, the Childcare Survey invitations were sent only to military members who claimed a qualifying child. Because claiming dependents is limited to one dual military partner, results may not afford a full picture of dual couples' experiences and challenges. Third, the Air Force Survey Office, who disseminated both surveys used in this paper, is limited to sending to only specific official email addresses. This email address limitation may have resulted in fewer surveys disseminated to and returned by members serving in special duty assignments, such as those in educational programs, on joint service tours, or in atypical duty locations. Finally, although the 2020 Childcare Survey inquired about pre-pandemic childcare strategies and costs, the survey was disseminated during the early months of pandemic-related lockdowns, with the survey topic evident. Thus, individuals more impacted by or passionate about pandemic-related childcare may have responded. Still, the gender differences uncovered in the 2017 Community Feedback Tool results – a survey covering all community resources, distributed years before the pandemic – appear consistent with results from the Childcare Survey, bolstering confidence that results were not significantly skewed by potentially-biased response patterns.

Recommendations

Inadequate military childcare supports and policies must be thoughtfully addressed. As 21.6% of Air Force parents with less than six months' time on station report unmet childcare needs, additional policies and programs to improve childcare supports/access upon PCS are needed. DoD could reimburse travel expenses for friends or family members of military members to provide care during a PCS transition. This relatively small cost could help enhance readiness at the gaining unit and minimize family stress with PCS moves. Furthermore, as E1 to E6 and O1 to O3 members report the highest rates of childcare access problems, even after two years' time on station, policies beyond existing sliding scales

should be considered to more effectively offset costs of non-traditional and off-base childcare hours and needs, such as increasing current subsidies and enabling reimbursement of nannies, au pairs, and multiple childcare resources.

In addition, the current DoD childcare structure should be evaluated to determine if and how gaps affecting women might be improved. The finding that AF women face greater rates of unmet childcare needs is not surprising, as past GAO reports have highlighted that childcare access is most problematic for single parents and dual military couples (GAO, 2012), and past studies and DoD demographic reports highlight that women are over-represented in both of those groups (DoD, 2020; King et al., 2020a). But the finding that women's childcare access was 31.6% better at two years' time on station compared to less than six months' time on station points to several areas of further inquiry and policy consideration. First, women's childcare access improvements two years post-PCS highlights the degree to which many women (particularly those of higher ranks) are able to problem solve as they settle into new communities in order to fulfill their childcare needs. Second, improved childcare access with more time on station likely connects to previous findings around women's desire to homestead (meaning to remain on station longer). Specifically, past studies have found that 1. women's retention intentions are negatively impacted by frequent moves and 2. women consistently indicate that being allowed to "homestead" would improve their retention (Keller, et al., 2018; DiSilverio, 2004). If affordable, quality childcare access is meaningfully improved, women's decisions to leave or desires to homestead may be at least partially ameliorated.

In addition, the challenges regarding accessing care could be offset by implementing a broader subsidy or voucher program to enable more members' access to quality and secure childcare programs. In fact, over a decade ago the 10th Quadrennial Review of Military Compensation report recommended that the DoD implement a trial voucher program, that "could offer a number of improvements to the current system: financial assistance to families who currently receive no child care benefit, a benefit with more tangible value to service members, and greater choice for service members and their families" (DoD, 2008, 41).

Conclusion

Previous reports have consistently indicated that military members desire an affordable, high quality military childcare system, and while current DoD on-base programs are highly desired, they fall short of meeting all families' needs (MCRMC, 2015). But minimal attention has been paid to the DoD childcare system's differential effects on military women compared to men. Responsively, shortly before pandemic lockdowns in February 2020, Defense Secretary Esper announced a new policy to prioritize military members over civilians on DoD childcare wait lists. In addition, the FY20 NDAA authorized a pilot program to reimburse in home care costs for service members, \$158M for CDC construction and directed the DoD to take "remedial action" to shrink waitlists and ensure members' access to childcare (Hamarck, 2020, p. 31).

As efforts to improve the DoD childcare system have continued over thirty years, it is reasonable to question the speed and degree to which these new efforts will resolve persisting challenges, particularly for women. This study's findings around childcare services' impacts on military members' career progression and retention intentions highlight that investment into the military childcare system may ultimately save recruiting and training costs by retaining more military families. Developing policy solutions that address these findings could shrink the gender gap in childcare access, enabling the vision of former Secretary of Defense Esper: "Together, we will ensure our highly valued female Service members are not compelled unnecessarily to choose between family and career; we will bolster the long-term viability of the All-Volunteer Force; and we will meet the imperatives of the National Defense Strategy" (Esper, 2020).

References

- Appolonio, K. K., & Fingerhut, R. (2008). Postpartum depression in a military sample. *Military Medicine*, 173(11), 1085–1091 <https://doi.org/10.7205/MILMED.173.11.1085>
- Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research*, 50(5):275-285. <https://doi.org/10.1097/00006199-200109000-00004>. PMID: 11570712.
- Camera, L. (2020, September 1). The childcare crisis gets a moment in the sun. *US News*. <https://www.usnews.com/news/elections/articles/2020-09-01/coronavirus-highlights-the-problems-with-childcare-in-america>
- Carson, J. and Mattingly, M. (2020, August 24). COVID-19 didn't create a childcare crisis, but hastened and inflamed it. *Carsey Perspectives*. <https://carsey.unh.edu/publication/child-care-crisis-COVID-19>
- Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *Future Child*, 23(2), 13-39. <https://doi.org/10.1353/foc.2013.0018>
- Congress of the United States. (2020, Aug 6). Letter to The Honorable Mark T. Esper, Secretary, Department of Defense. https://waltz.house.gov/uploadedfiles/letter_dod-childcareformilitaryfamiliesfall_08062020.pdf
- Cooney, R., De Angelis, K., & Segal, M. W. (2011). Moving with the military: Race, class, and gender differences in the employment consequences of tied migration. *Race, Gender and Class*, 18(1–2). 360–384.
- Defense Advisory Committee on Women in the Services (DACOWITS). (2017). *Annual report*. Washington DC: U.S. Department of Defense.
- Department of Defense. (2008). *The Tenth Quadrennial Review of Military Compensation, Executive Summary*. https://militarypay.defense.gov/Portals/3/Documents/Reports/10th_QRMC_2008_Executive_Summary.pdf
- Department of Defense. (2016, June 9). *Secretary of Defense Ash Carter announces additional force of the future initiatives* [Press release].

<https://www.defense.gov/Newsroom/Releases/Release/Article/795361/secretary-of-defense-ash-carter-announces-additional-force-of-the-future-initia/>

Department of Defense. (2018). *2017 Demographics: Profile of the military community*.

<https://download.militaryonesource.mil/12038/MOS/Reports/2017-demographics-report.pdf>

Department of Defense. (2014). *Department of Defense instruction 6060.02: Child development*

programs. <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/606002p.pdf>

Department of the Air Force (2017). Community Feedback Tool 2017 [Computer file]. San Antonio, TX:

Air Force Medical Readiness Agency Mental Health Division [distributor].

DiSilverio, L. A. H. (2003). *Winning the retention wars: the Air Force, women officers, and the need for*

transformation. Air University. <https://doi.org/10.21236/ada424385>

Esper, M. (2020, Nov 3). *Career enhancement of pregnant U.S. service members: Memorandum for*

senior pentagon leadership, defense agency and DoD field activity directors (OSD007582-

20/CMD009339-20).

Friedman, E. M., Miller, L. L., & Evans, S. E. (2015). *Advancing the careers of military spouses: An*

assessment of education and employment goals and barriers facing military spouses eligible for

MyCAA.

https://www.rand.org/content/dam/rand/pubs/research_reports/RR700/RR784/RAND_RR784.pdf

General Accounting Office. (1982). *Military child care programs: Progress made, more needed*.

(GAO/FPCD-82-30).

Government Accountability Office. (2012). *Military child care: DoD is taking actions to address*

awareness and availability barriers (GAO-12-21), <https://www.gao.gov/products/GAO-12-21>

Hamarck, H. N. (2020). *Military child development program: Background and issues*. (Report #R45288).

Congressional Research Office: Washington DC.

Huffman, A. H., Casper, W., J., & Payne, S. C. (2010). *How does spouse career support relate to*

employee turnover? Work interfering with family and job satisfaction as mediator. *Journal of*

Organizational Behavior, 35(2). 194-212. <https://doi.org/10.1002/job.1862>

- Lim, N. & Schulke, D. (2010). *Measuring underemployment among military spouses*. RAND Corporation. <https://apps.dtic.mil/sti/pdfs/ADA515809.pdf>
- Little, R. D., & Hisnanick, J. J. (2007). The earnings of tied-migrant military husbands. *Armed Forces and Society*, 33(4), 547-570. <https://doi.org/10.1177/0095327X06298732>
- Kalluri, N., Kelly, C., & Garg, A. (2021). Child care during the COVID-19 pandemic: A bad situation made worse. *Pediatrics*, 147(3). <https://doi.org/10.1542/peds.2020-041525>
- Keller, K. M., Hall, K. C., Matthews, M., Payne, L. A., Saum-Manning, L., Yeung, D., Schulker, D., Zavislan, S., & Lim, N. (2018). *Addressing barriers to female officer retention in the Air Force* (No. RR-2073-AF). CA: RAND Corporation. https://www.rand.org/pubs/research_reports/RR2073.html
- King, E. L. & DiNitto, D. M. (2019). Historical policies affecting women's military and family roles. *International Journal of Sociology and Social Policy*, 39(5/6), 427-446. <https://doi.org/10.1108/IJSSP-01-2019-0010>
- King, E. L., Salas-Wright, C. P., Snowden, C. L. & DiNitto, D. M. (2020a). New evidence on retaining Air Force members with young children: Exploring work and personal factors by gender. *Military Behavioral Health*, 8(1), 86-95. <https://doi.org/10.1080/21635781.2019.1689874>
- King, E. L., Snowden, D. L., Salas-Wright, C. P., & DiNitto, D. M. (2020b). Retaining women Air Force officers: Work, family, career satisfaction and intentions. *Armed Forces and Society*, 46(4), 677-695. <https://doi.org/10.1177/0095327X19845024>
- Meadows, S. O., Griffin, B. A., Karney, B. R., & Pollak, J. (2015). Employment gaps between military spouses and matched civilians. *Armed Forces and Society*, 42(3), 542-561. <https://doi.org/10.1177/0095327X15607810>
- Military Compensation and Retirement Modernization Commission. (2015). *Final report*. https://www.hqafsa.org/uploads/3/8/9/1/38911523/jan_2015_final_mil_retirement_report.pdf
- Moini, J. S., Zellman, G. L., & Gates, S. M. (2007). Need for high-quality child care affects military readiness and retention. RB-9218-OSD. https://www.rand.org/pubs/research_briefs/RB9218.html

O'Boyle A. L., Magaan, E. F., Ricks, R. E., Doyle, M., Morrison, J. C. (2005). Depression screening in the Pregnant Soldier Wellness Program. *Southern Medical Journal*, 98(4) 416–418.

<https://doi.org/10.1097/01.SMJ.0000152759.37358.81>

Power, K. (2020). The COVID-19 pandemic has increased the care burden of women and families.

Sustainability: Science, Practice and Policy, 16(1), 67-73.

<https://10.1080/15487733.2020.1776561>

Rosen, L. N. & Durand, D. B. (1995). The family factor and retention among married soldiers deployed in operation desert storm. *Military Psychology*, 7(4), 221-234.

https://doi.org/10.1207/s15327876mp0704_1

Segal, M. W. & Lane, M. D. (2016). Conceptual model of military women's life events and wellbeing.

Military Medicine, 181, 12-19. <https://doi.10.7205/MILMED-D-15-00345>

Segre, L.S., O'Hara, M.W., Arndt, S., & Stewart, S. (2007). The prevalence of postpartum depression.

Social Psychiatry and Epidemiology, 42, 316–321. <https://doi.org/10.1007/s00127-007-0168-1>

Sevilla, A. & Smith, S. (2020). Baby steps: The gender division of childcare during the COVID-19 pandemic. *Oxford Review of Economic Policy*, 36(1), S169–S186.

<https://doi.org/10.1093/oxrep/graa027>

Table 1. Active Duty Air Force Members' Difficulties in the Past Year Accessing Quality Childcare for Children 13 Years and Younger: Differences by Gender, Pay Grade and Time on Station

		Total Sample %	% Men	% Women	% Difference	Gap %
Endorsed Access Difficulties		20.14 <i>N=24551</i>	17.12 <i>n=19996</i>	33.39 <i>n=4555</i>	16.27	95
New on Station - Less than 6 Months						
Pay Grade	Total %	Men %	Women %	% Diff	Gap %	
E1 to E4	21.65 <i>n=2882</i>	17.95 <i>n=2351</i>	38.04 <i>n=531</i>	20.09	112	
E5 to E6	21.68 <i>n=3017</i>	17.88 <i>n=2467</i>	38.73 <i>n=550</i>	20.85	117	
E7 to E-9	21.47 <i>n=3004</i>	17.87 <i>n=2457</i>	37.66 <i>n=547</i>	19.79	111	
O1 to O3	21.84 <i>n=2908</i>	18.15 <i>n=2375</i>	38.27 <i>n=533</i>	20.12	111	
O4+	21.38 <i>n=3083</i>	17.70 <i>n=2525</i>	37.99 <i>n=558</i>	20.29	115	
Total	21.6 <i>n=14894</i>	17.91 <i>n=12175</i>	38.14 <i>n=2719</i>	20.23	113	
Established on Station - More than 2 Years						
Pay Grade	Total %	Men %	Women %	% Diff	Gap%	
E1 to E4	24.39 <i>n=660</i>	19.23 <i>n=468</i>	36.98 <i>n=192</i>	17.75	92	
E5 to E6	19.09 <i>n=4778</i>	16.75 <i>n=3833</i>	28.57 <i>n=945</i>	11.82	71	
E7 to E-9	12.98 <i>n=2473</i>	12.36 <i>n=2047</i>	15.96 <i>n=426</i>	3.6	29	
O1 to O3	24.92 <i>n=606</i>	23.0 <i>n=500</i>	33.96 <i>n=106</i>	10.96	48	
O4+	16.05 <i>n=1140</i>	14.8 <i>n=973</i>	23.35 <i>n=167</i>	8.55	58	
Total	17.89 <i>n=9657</i>	15.91 <i>n=7821</i>	26.36 <i>n=1836</i>	10.45	66	

Table 2. Gender Differences in Active Duty AF Members' Childcare Cost: Pre-pandemic Monthly Cost Per Child

Pay Grade Grouping	Childcare Cost	Total Childcare Cost N=26024 (%)	Men Childcare Cost n=17274 (%)	Women Childcare Cost n=8750 (%)	Chi Square
E1 to E4 (7.3)	Grade Totals	1895	912 (48.1)	983 (51.9)	
	\$0	526 (27.8)	323 (35.4)	203 (20.7)	51.4364***
	\$1-499	799 (42.2)	342 (37.5)	457 (46.5)	15.6802***
	\$500-999	496 (26.2)	210 (23.0)	286 (29.1)	9.0155**
	\$1000-1499	55 (2.9)	27 (3.0)	28 (2.8)	0.0211
	\$1500-2000	11 (0.6)	8 (0.9)	3 (0.3)	0.1327
	>\$2000	8 (0.4)	2 (0.2)	6 (0.6)	0.2908
E5 to E6 (39.0)	Grade Totals	10160	6692 (65.9)	3468 (34.1)	
	\$0	2550 (25.1)	2041 (30.5)	509 (14.7)	304.1794***
	\$1-499	3326 (32.7)	2090 (31.2)	1236 (35.6)	20.164***
	\$500-999	3410 (33.6)	1971 (29.4)	1439 (41.5)	148.5133***
	\$1000-1499	653 (6.4)	422 (6.3)	231 (6.7)	0.4783
	\$1500-2000	127 (1.3)	91 (1.4)	36 (1.0)	1.916
	>\$2000	94 (0.9)	77 (1.2)	17 (0.5)	10.8692***
E7 to E-9 (25.3)	Grade Totals	6577	4511 (68.6)	2066 (31.4)	
	\$0	1743 (26.5)	1427 (31.6)	316 (15.3)	194.2016***
	\$1-499	2078 (31.6)	1372 (30.4)	706 (34.1)	9.2583**
	\$500-999	2101 (31.9)	1277 (28.3)	824 (39.9)	87.3325***
	\$1000-1499	474 (7.2)	301 (6.7)	173 (8.4)	6.1315*
	\$1500-2000	104 (1.6)	72 (1.6)	32 (1.5)	0.0203
	>\$2000	77 (1.2)	62 (1.4)	15 (0.7)	5.1485*
O1 to O3 (9.2)	Grade Totals	2404	1576 (65.6)	828 (34.4)	
	\$0	733 (30.5)	569 (36.1)	164 (19.8)	68.0255***
	\$1-499	572 (23.8)	389 (24.7)	183 (22.1)	1.9947
	\$500-999	813 (33.8)	453 (28.7)	360 (43.5)	52.6547***
	\$1000-1499	185 (7.7)	104 (6.6)	81 (9.8)	7.7453**
	\$1500-2000	48 (2.0)	26 (1.6)	22 (2.7)	2.8144
	>\$2000	53 (2.2)	35 (2.2)	18 (2.2)	0.0055
O4+ (19.2)	Grade Totals	4988	3583 (71.8)	1405 (28.2)	
	\$0	1531 (30.7)	1298 (36.2)	233 (16.6)	183.0587***
	\$1-499	1162 (23.3)	837 (23.4)	325 (23.1)	0.0295
	\$500-999	1410 (28.3)	853 (23.8)	557 (39.6)	124.839***
	\$1000-1499	467 (9.4)	307 (8.6)	160 (11.4)	9.4557**
	\$1500-2000	193 (3.9)	120 (3.3)	73 (5.2)	9.2521**
	>\$2000	225 (4.5)	168 (4.7)	57 (4.1)	0.9355
Total (100)	All Grades	26024	17274 (66.4)	8750 (33.6)	
	\$0	7083 (27.2)	5658 (32.8)	1425 (16.3)	795.1961***
	\$1-499	7937 (30.5)	5030 (29.1)	2907 (33.2)	46.1484***
	\$500-999	8230 (31.6)	4764 (27.6)	3466 (39.6)	388.872***
	\$1000-1499	1834 (7.0)	1161 (6.7)	673 (7.7)	8.3482**
	\$1500-2000	483 (1.9)	317 (1.8)	166 (1.9)	0.1226
	>\$2000	457 (1.8)	344 (2.0)	113 (1.3)	16.496***

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

Table 3. Gender Differences in Types of Childcare Used Immediately Prior to the Pandemic: Check All Applicable

	Total N=26024 (%)	Men n=17274 (%)	Women n=8750 (%)	Chi Square
DoD Child Development Center	5230 (20.1)	2483 (14.4)	2747 (31.4)	1047.7522***
DoD School Age Program	2326 (8.9)	1117 (6.5)	1209 (13.8)	385.585***
Family Child Care (FCC)	671 (2.6)	446 (2.6)	225 (2.6)	0.0025
Off Base Daycare Center	4342 (16.7)	2909 (16.8)	1433 (16.4)	0.8964
Off Base In-Home Care	1002 (3.9)	712 (4.1)	290 (3.3)	10.2303**
Off Base School Age Program	4508 (17.3)	3053 (17.7)	1455 (16.6)	4.4319*
Spouse/Partner	7247 (27.8)	6277 (36.3)	970 (11.1)	1843.2606***
Parents/Relatives	2236 (8.6)	1495 (8.7)	741 (8.5)	0.256
Nanny or Au Pair	809 (3.1)	475 (2.7)	334 (3.8)	21.9673***
Other	1387 (5.3)	890 (5.2)	497 (5.7)	3.206
N/A – I did not need childcare	2178 (8.4)	1889 (10.9)	289 (3.3)	21.9673***

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

Table 4. Gender Differences in DoD (CDC and SAP) Waiting List Status and Waiting Times Immediately Prior to Pandemic

	Total N=26024 (%)	Men n=17274 (%)	Women n=8750 (%)	Chi Square
Had a child on the wait list immediately prior to the pandemic	3695 (14.2)	2149 (12.4)	1546 (17.7)	130.3009***
Length of time on pre-pandemic wait list	n=3651	n=2120	n=1531	
Less than one month	256 (7.0)	133 (6.3)	123 (8.0)	4.2253*
1-2 months	485 (13.3)	291 (13.7)	194 (12.7)	0.8589
3-4 months	653 (17.9)	372 (17.5)	281 (18.4)	0.3941
5-6 months	577 (15.8)	310 (14.6)	267 (17.4)	5.3015**
7-8 months	414 (11.3)	251 (11.8)	163 (10.6)	1.2585
9-10 months	316 (8.7)	174 (8.2)	142 (9.3)	1.2812
11-12 months	179 (4.9)	105 (5.0)	74 (4.8)	0.0272
Over one year	771 (21.1)	484 (22.8)	287 (18.7)	8.9024**

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

Table 5. Gender Differences in Perceptions of Childcare’s Impact on Career Progression and on Retention Decision-making

Career and Retention Questions	Response Options	Total N (%)	Men n (%)	Women n (%)	Pearson Chi Square
“How has child care affected your career progression?”	Item responses	N=23023	n=15773	n=7250	
	Negative/Very Negative Impact	5144 (22.3)	3155 (20.0)	1989 (27.4)	158.1158***
	Neither Negative nor Positive	13097 (56.9)	9479 (60.0)	3618 (49.9)	210.4095***
	Positive/Very Positive Impact	1885 (8.2)	1053 (6.7)	832 (11.5)	152.2309***
	Too Soon to Determine	2897 (12.6)	2086 (13.2)	811 (11.2)	18.772***
“How does child care influence your decision regarding remaining in the Air Force beyond your current enlistment or service commitment?”	Item responses	N=23043	n=15785	n=7258	
	Strong/General Influence to Leave	5541 (24.0)	3130 (19.8)	2411 (33.2)	488.0426***
	Not an Influence to Stay or Leave	7107 (30.8)	4886 (31.0)	2221 (30.6)	0.29
	Strong/General Influence to Stay	3633 (15.8)	2143 (13.6)	1490 (20.5)	180.9841***
	N/A—Do Not Consider Childcare in this Decision	6762 (29.3)	5626 (35.6)	1136 (15.7)	958.2051***

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